MEETING MATERIALS

June 22, 2020

&

June 23, 2020

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MEETING	S MATRIX
WASTE &	FACILITIES MANAGEMENT COMMITTEE
1.	To consider the Minutes of the sixty fourth (64 th) meeting of the Committee held on January 28, 2020
2.	To consider and act upon a resolution recommending approval of the Waste and Facilities Management Committee Charter.
3.	To receive a status report on West Valley Site Management Program activities
4.	To receive a status report on nuclear coordination activities
GOVERNA	ANCE COMMITTEE
1.	To consider the Minutes of the sixty fourth (29 th) meeting of the Committee held on June 26, 2019
2.	To consider and act upon a resolution recommending approval of the Governance Committee Charter.
3.	To consider and act upon a resolution recommending approval of the compensation schedule
4.	To consider and act upon a motion to enter into private session for the purpose of reviewing the results of the Annual Confidential Board Member Performance Evaluation.
5.	To consider and act upon a resolution recommending approval of the Annual Confidential Board Member Performance Evaluation Report
AUDIT & 1	FINANCE COMMITTEE
1.	To consider the Minutes of the one hundred forty third (143 rd) meeting of the Committee held on April 28, 2020
2.	To consider and act upon a resolution recommending approval of the Annual Investment Report of the Authority and the "Investment Guidelines, Operative Policy and Instructions (June 2020)."
3.	To consider and act upon a resolution recommending approval of the Annual Investment Report for the NYSERDA OPEB (Other Post-Employment Benefits) Trust for the year ended March 31, 2020 and the "Investment Policy Statement for the NYSERDA OPEB Trust (June 2020)"

	4. To receive the Financial Statements of the Authority and NY Green Bank for year 2019-2020.				
	5.	To consider and act upon a motion to enter into executive session for the purpose of reviewing the financial condition of the Authority			
	6.	To consider and act upon a resolution recommending approval of the Financial Statements of the Authority and NY Green Bank for fiscal year 2019-2020			
	7.	To consider and act upon a resolution recommending approval of the appointment of the Authority's independent auditors for fiscal year 2020-2021			
	8.	To consider and act upon a resolution recommending approval of an annual bond sales report.			
	9.	To consider and act upon a resolution recommending approval of the Audit and Finance Committee Charter			
PROG	RAI	M PLANNING COMMITTEE			
	1.	To consider and act upon the Minutes of the 109th meeting of the Program Planning Committee held on January 28, 2020.			
	2.	To consider and act upon a resolution recommending approval of the Program Planning Committee Charter.			
	3.	To receive an update on future directions for clean energy programs			
BOAR	D				
I.		DISCUSSION AGENDA			
	1.	To receive a report from the President and CEO.			
		. To receive a report from the rresident and CEO.			
	2.	To consider and act upon a resolution appointing Commissioner Marie Therese Dominguez to the Program Planning Committee.			
	3.	To receive information from the Governance Committee:			
		a. To consider and act upon a motion to enter into private session for the purpose of reviewing the results of the Annual Confidential Board Member Performance Evaluation; and			
		b. To consider and act upon a resolution approving the Annual Confidential Board Member Performance Evaluation Report.			
	4.	To receive a report from the Waste and Facilities Management Committee			
	5.	To receive information from the Audit and Finance Committee:			

		a.	To consider and act upon a resolution approving the Financial Statements of the Authority and NY Green Bank for fiscal year 2019-2020			
	6.	6. To receive a report from the Program Planning Committee				
II.		CONSENT AGENDA				
	1.	To consider and act upon resolutions approving:				
		a.	a compensation schedule;			
		b.	the Annual Investment Report of the Authority and the Investment Guidelines, Operative Policy and Instructions (June 2020);			
		c.	the Annual Investment Report for the NYSERDA OPEB (Other Post- Employment Benefits) Trust for the year ended March 31, 2020 and the Investment Policy Statement For the NYSERDA OPEB Trust (June 2020);			
		d.	the appointment of the Authority's independent auditors for fiscal year 2020-2021;			
		e. an annual bond sales report;				
	f. Charters for each of the Authority's Committees;		Charters for each of the Authority's Committees;			
			the Operations and Accomplishments, and Mission Statement and Measurements Annual Report;			
		h.	the Annual Report on Acquisition and Disposition of Real and Personal Property, the Real Property Acquisition Policy Guidelines (June 2020), and the Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2020);			
		i.	the Annual Report on Contracts and the Procurement and Program Contract Guidelines, Operative Policy and Instructions (June 2020);			
		j.	the periodic contracts report; and			
		k.	the annual report on the implementation of the Authority's prompt payment policy.			

Board Meeting – Meeting Matrix

Each meeting:

- Review and approve the Periodic Contracts Reports
- Receive a Report on NY Green Bank Status
- Receive a Report from an Authority Program or Initiative

January Meeting

- Review and approve the next fiscal year budget: from Program Planning Committee and Waste and Facilities Management Committee
- Review and approve RGGI Operating Plan/Amendments
- Review and approve the Strategic Outlook: from Program Planning

April Meeting

- Review and approve the Conflict of Interest Policy: from Governance Committee
- Review the schedule for the Independent Audit of the NYSERDA and NY Green Bank financial statements: from Audit and Finance Committee
- Review and approve
 - o Board Member Evaluation Report: from Governance Committee
 - o Committee Charter Amendment recommendations: from Committees
- Reappoint Members to Committees as terms expire

June Meeting

- Review and approve:
 - o Annual Financial Reports: from Audit and Finance Committee
 - Annual Investment Report and Guidelines
 - Annual OPEB Trust Investment Report and Policy Statement
 - Annual Independent Audit of NYSERDA and NY Green Bank financial statements
 - Annual Bond Sales Report
 - Appointment of Independent Auditors for next fiscal year: from Audit and Finance Committee
 - o Annual Procurement Report and Guidelines
 - Annual Report on Disposition of Real and Personal Property and Review of the Guidelines
 - o Real Property Acquisition Guidelines
 - o Prompt Pay Annual Report
 - Operations and Accomplishments and Mission Statement and Measurements Annual Report
 - o Compensation Schedule: from Governance Committee
 - Code of Conduct

October Meeting

Review as needed:

• Items presented by committees or management for review and approval

Audit and Finance Committee - Meeting Matrix

Review at each meeting:

 Recent Internal Audit Activity, subject to the issuance of audit reports by Internal Audit*

April Meeting

- Review and recommend for approval the Schedule for the Independent Audit of the NYSERDA and Green Bank financial statements
- Review and approve the Annual Internal Audit Report*
- Review and approve the Annual Internal Audit Plan*
- Review and recommend for approval the Committee Charter

June Meeting:

- Review and recommend for approval the Annual Investment Report and Guidelines
- Review and recommend for approval the Annual OPEB Trust Investment Report and Policy Statement
- Review and recommend for approval the Annual Independent Audit of NYSERDA and NY Green Bank financial statements
- Review and recommend for approval the Appointment of Independent Auditors for next fiscal year
- Review and recommend for approval the Annual Bond Sales Report

- Audits by external reviewers including the New York State Comptroller*
- Review and recommend for approval any proposed bond or other debt issuances
- Review and recommend for approval the amendments to the Internal Control Manual

^{*}These items are reviewed and approved solely by the Audit and Finance Committee and are not presented to the full Board

Governance Committee - Meeting Matrix

January Meeting

• Cancelled if no specific agenda items

April Meeting:

- Review results and make recommendations to modifications to the Selfassessment form
- Review and recommend for approval the Authority's Conflict of Interest Policy
- Review and recommend for approval the Committee Charter

June Meeting:

- Review and recommend for approval the Compensation Schedule Review and recommend for approval the Board Member Evaluation Report
- Review and recommend for approval the mission statement
- Review and recommend for approval the code of conduct/ethics

September Meeting:

• Cancelled if no specific agenda items

- Guidance from Authorities Budget Office
- Member Qualifications
- Review and recommend for approval compensation / salary increases for officers
- Review and recommend for approval the NYSERDA Employee Code of Conduct
- Review and recommend for approval any specific language for Compensation, Ethics, and Whistleblower policies as needed

Program Planning Committee - Meeting Matrix

January Meeting:

- Review and recommend for approval the next fiscal year budget
- Review and recommend for approval the Strategic Outlook

April Meeting:

• Review and recommend for approval the Committee Charter

June Meeting:

• Discretionary program review

September Meeting

- Cross State Air Pollution Rule ("CSAPR", formerly CAIR) Program Plan/Amendments
- Authority programs' performance metrics periodic reporting
- New or ongoing program initiatives periodic presentations

Waste and Facilities Management Committee – Meeting Matrix

Review at each meeting:

• Status of West Valley Nuclear Service Center activities

January Meeting

• Review and recommend for approval the next fiscal year budget

April Meeting:

• Review and recommend for approval the Committee Charter

September Meeting:

- Status of nuclear coordination activities
- STEP-related items



RICHARD L. KAUFFMAN Governor Chair

ALICIA BARTON President and CEO

NOTICE OF MEETING AND AGENDA

June 8, 2020

TO THE MEMBERS OF THE WASTE AND FACILITIES MANAGEMENT COMMITTEE:

PLEASE TAKE NOTICE that the sixty-fifth (65th) meeting of the WASTE AND FACILITIES MANAGEMENT COMMITTEE of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (the "Authority") will be held via video conference, on Monday, June 22, 2020, commencing at 11:30 a.m., for the following purposes:

- 1. To consider the Minutes of the sixty-fourth (64th) meeting of the Committee held on January 28, 2020.
- 2. To consider and act upon a resolution recommending approval of the Waste and Facilities Management Committee Charter.
- 3. To receive a status report on West Valley Site Management Program activities.
- 4. To receive a status report on nuclear coordination activities.
- 5. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting via the video conference which can be accessed at https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

> Janice A. Dean Secretary to the Waste and Facilities **Management Committee**

> > **New York City**

1359 Broadway

(F) 518-862-1091

(F) 716-842-0156

WASTE AND FACILITIES MANAGEMENT COMMITTEE CHARTER

Established September 21, 1987

Purposes

Pursuant to Article V, Section 6 of the Authority's By-laws, the purposes of the Waste and Facilities Management Committee are to: review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination; to review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets; to provide guidance to the Authority's officers and employees in the preparation of the plans and in preparation of such annual program budgets; and to consider such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee.

Powers of the Committee

The Committee will:

- review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination;
- review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets;
- provide guidance to the Authority's officers and employees in the preparation of the plans and in preparation of such annual program budgets;
- consider such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee;
- meet with and seek assistance from Authority staff as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six members, who shall be elected from among the Members of the Authority other than the Chair. A majority of these committee members shall be other than Members of the Authority who serve ex-officio. In addition, the membership of the Committee shall include the Chair of the Authority, who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination; (b) the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets; and (c) such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee;

Review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for

<u>radioactive waste policy and nuclear coordination</u>. The Committee will:

- receive and review reports from the Authority's officers and staff regarding the program and plans;
- recommend such revisions to the program and plans as the Committee deems necessary.

Review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets. The Committee will:

- review drafts of the annual spending plan and the annual operating budget with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs;
- recommend such revisions to these documents as the Members deem necessary;
- review any proposed revisions by the Officers to the operating budget with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs.

<u>Consider such other matters related to the Authority's programs within its jurisdiction as the officers of the Authority may refer to the Committee</u>. The Committee will:

• receive reports on any other matters with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs as the officers of the Authority may refer to the Committee and make such recommendations on such matters as the Members deem necessary.

Resolution N	No.

RESOLVED, that the Authority's Waste and Facilities Management Committee Charter as presented to the Members for consideration at this meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, is recommended for adoption and approval by the Board.



West Valley Site Management Program Update

West Valley Site Status - COVID-19

West Valley Demonstration Project

- WVDP remains safe and secure.
- Work activities are being ramped up slowly in accordance with State and federal directives and guidance.
- Focus is on low-risk work needed to prepare for a broader work resumption and on testing new work protocols.
- Most office staff (DOE, CHBWV and other contractors) are continuing to telework.
- NYSERDA's WVDP walkover inspections continue at least once per week.

State-Licensed Disposal Area

- SDA remains safe and secure.
- Essential on-site work continued throughout NY Pause and is continuing today.
- Field work includes monitoring, inspections, and maintenance activities.
- NYSERDA staff continue to telework and conduct on-site support of field activities.

West Valley Solar Facility

- On-site work began in early March and was halted on April 1.
- Work resumed in June with lifting of NY Pause in WNY for construction activities.



West Valley Site Status – Work Activities

West Valley Demonstration Project

- DOE issued a 39-month extension to the CHBWV demolition contract in April.
- Extension is valued at \$243M through June 2023. Work includes:
 - Decontamination and deactivation activities to prepare the Main Plant Process Building for demolition;
 - Demolition and off-site disposal of the Main Plant Process Building;
 - Decontamination and deactivation of the below-ground portions of the Main Plant Process Building;
 - 39 months of safe site operations.

State-Licensed Disposal Area

- SDA remains safe and in compliance with all regulatory requirements.
- Trench 14 infiltration investigation was completed in February.
- Infiltration investigation report and remedy action recommendation will be submitted to EPA and NYSDEC this month.
- Design of the remedy action and preparation of the construction schedule is underway.

West Valley Solar Facility

- Ground clearing and preparation began in early March.
- Next phase of work is awaiting US Army Corps Water Quality Permits for wetland areas.



NUCLEAR COORDINATION ACTIVITIES ORAL REPORT



Governor

RICHARD L. KAUFFMAN Chair ALICIA BARTON
President and CEO

NOTICE OF MEETING AND AGENDA

June 9, 2020

TO THE MEMBERS OF THE GOVERNANCE COMMITTEE:

PLEASE TAKE NOTICE that the thirtieth (30th) meeting of the GOVERNANCE COMMITTEE of the New York State Energy Research and Development Authority ("Authority") will be held via video conference, on Monday, June 22, 2020, commencing at 12:30 p.m., for the following purposes:

- 1. To consider the Minutes of the 29th meeting held on June 26, 2019.
- 2. To consider and act upon a resolution recommending approval of the Governance Committee Charter.
- 3. To consider and act upon a resolution recommending approval of the compensation schedule.
- 4. To consider and act upon a motion to enter into private session for the purpose of reviewing the results of the Annual Confidential Board Member Performance Evaluation.
- 5. To consider and act upon a resolution recommending approval of the Annual Confidential Board Member Performance Evaluation Report.
- 6. To transact such other business as may properly come before the meeting.

Members of the public may attend the meeting via the video conference which can be accessed at https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

Sara L. LeCain

Secretary to the Governance Committee

Sara J. LeC:

(F) 518-862-1091

GOVERNANCE COMMITTEE CHARTER

Established April 3, 2006

Purposes

Pursuant to Article V, Section 7 of the Authority's By-laws, the purposes of the Committee are to: keep the Members informed of current best practices of corporate governance, review and advise on corporate governance trends, update the Authority's corporate governance principles, as necessary, and advise appointing authorities on the skills and qualifications required of Members.

Powers of the Committee

The Committee will:

- develop qualifications applicable to Members;
- meet with and obtain advice and assistance from Authority staff, including inhouse counsel, and any other persons having special competencies, including legal, accounting or other consultants as the Committee deems necessary to fulfill its responsibilities;
- retain, at the Authority's expense, such outside counsel, experts and other advisors as the Committee may deem appropriate, as approved by the Members;
- conduct or authorize investigations into any matters within its scope of responsibility; and
- seek any assistance it requires from Authority employees.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be established as set forth in and pursuant to Article V, Section 7 of the Authority's By-laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members. The Committee shall consist of not less than three independent Members who shall constitute a majority on the Committee and who shall possess the necessary skills to understand the duties and function of the Committee, provided, however, that in the event that there are less than three independent Members, the Members may appoint non-independent Members,

provided that the independent Members constitute a majority of the Members of the Committee. In addition, the membership of the Committee shall include the Chair of the Authority who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

To the extent practicable, Committee members should be familiar with matters pertaining to governance, as it relates to public authorities and comparable corporations.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

The Committee will meet at least annually to discuss the developments in the area of good governance principles and practices, including enactment of legislation that may affect governance.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) identifying individuals qualified to become Members of the Authority, consistent with the qualifications established in its enabling statute and any other established criteria; (b) developing, reviewing, monitoring, and re-evaluating the Authority's governance principles and practices and, when appropriate, recommending changes to such principles and practices; (c) reviewing ethics standards and whistle blower protections; (d) developing and recommending performance criteria and an evaluation process to be used in

evaluating the Board's functioning as a whole and coordinating and overseeing such evaluation; and (e) performing such other functions as may be assigned.

Identifying Member Qualifications. The Committee will:

- consistent with the Authority's governance principles and the statutory requirements for Members, evaluate the needs of the Board to determine the qualifications of individuals suited to enhance the composition of the Board;
- assist in attracting candidates who meet Member qualifications and review the qualifications of persons identified to the Committee as prospective members of the various Authority committees and of the Board, as requested; and
- develop and provide recommendations regarding Member education, including but not limited to, new Member orientation and training to be obtained from State-approved or other trainers.

Governance Principles and Practices. The Committee will:

- develop, review, monitor, and re-evaluate no less than annually, and recommend such changes to governance principles and practices including those that address transparency, independence, accountability, fiduciary responsibilities, and management oversight, as it deems appropriate; and
- monitor compliance with the governance principles and practices.

Ethics Standards and Whistle Blower Protection. The Committee will:

- develop, review on a regular basis, and update as necessary the Authority's Code of Conduct and written policies regarding conflicts of interest, such code and policies to be no less stringent than the laws, rules, regulations, and policies applicable to State officers and employees;
- review and make recommendations as appropriate on revisions to the Authorities By-laws regarding the conduct of Board business; and
- periodically review and make recommendations, if necessary, on revisions to the Authority's written policies regarding the protection of whistle blowers.

Other Responsibilities. The Committee will:

• review compensation and related policies and procedures;

- review and recommend for approval such governance-related reports, guidelines, policies, procedures, assessments, and reports as may be required; and
- perform such other functions as may be assigned to it from time to time.

Resolution N	No.

RESOLVED, that the Authority's Governance Committee Charter as presented to the Members for consideration at this June 22, 2020 meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, is recommended for adoption and approval by the Board.

NYSERDA Compensation Schedule as of March 31, 2020 Pursuant to Public Authorities Law Section 2800

Compensation So	chedule as of Mar	ch 31, 2020 Pursuant to Public Authorities Law Section 2800		Total Compensation*
Name			Annual Salary	Year Ended
<u>Last</u>	<u>First</u>	<u>Title</u>	March 31, 2020	March 31, 2020
Adkins	David	Chief Information Officer	\$160,650	\$163,240
Allen	Kara	Sr Advisor	\$114,652	\$117,456
Baldyga	Todd	Director	\$170,030	\$173,235
Barton	Alicia	President and CEO	\$190,585	\$190,447
Bembia	Paul	Director	\$170,030	\$174,891
Berman	Joseph	Sr Advisor, Market Development	\$135,252	\$135,050
Borowiec	Joseph	Program Manager	\$138,763	\$141,379
Brown	Matthew	Program Manager	\$138,763	\$143,665
Burkhard	Ellen	Sr Advisor	\$129,398	\$131,842
Carey	Kevin	Director	\$138,192	\$133,838
Chappoz	Loic	Program Manager	\$135,959	\$138,721
Chaves	Laura	Asst Director	\$125,629	\$127,997
Chick	Mary	Director	\$165,218	\$164,897
Ciampa	Francis	Program Manager	\$131,207	\$131,108
Clark	Alistair	Director of NY Green Bank	\$158,100	\$0
Coll	Christopher	Director	\$142,926	\$145,099
Corcoran	Christopher	Program Manager	\$138,763	\$145,189
Costello	Peter	General Counsel	\$175,980	\$174,329
Coup	James	Asst Director	\$154,253	\$160,403
Crudele	Fred	Program Manager	\$119,851	\$120,972
Dean	Emily	Director	\$171,589	\$163,115
Dean	Janice	Deputy Counsel	\$154,253	\$159,127
DeRocker	Abbey	Program Manager	\$136,910	\$136,944
DiDomenico	Corinne	Asst Director	\$150,000	\$63,582
DiRamio	Michael	Asst Director	\$155,000	\$0
Doling	Jason	Asst Director	\$150,072	\$152,715
Drogin	Lindsay	Director of NY Green Bank	\$162,192	\$5,084
Egbert	Scott	Program Manager	\$138,332	\$138,125
Engel-Fowles	Victoria	Program Manager	\$138,763	\$143,079
Erle	Kim	Managing Director of NY Green Bank	\$184,000	\$41,029
Fagan	Michael	Director of Finance, Green Bank	\$162,192	\$167,923
Ferranti	Adele	Program Manager	\$138,763	\$143,648
Frank	Bradley	Program Manager	\$125,607	\$128,419
Frank	Gregory	Asst Director	\$138,763	\$143,079
Fusco	Karen	Program Manager	\$115,454	\$115,160
Geel	Laura	Program Manager	\$133,299	\$126,081
Glanton	Cheryl	Director	\$166,825	\$166,404
Gordon	Donovan	Director	\$152,393	\$153,329
Griffin	Alfred	President of the New York Green Bank	\$208,577	\$216,458
Hale	John	Sr Advisor for Energy Efficiency Markets	\$181,057	\$188,960
Hale	Kevin	Director	\$169,278	\$169,250
Hall	Christopher	Sr Advisor	\$136,910	\$136,644
Hammer	Hillel	Sr Advisor	\$142,800	\$141,802
Harmon	Victoria	Sr Advisor	\$168,986	\$171,884
Harris	Doreen	Vice President	\$173,400	\$177,123
Harris	Colin	Director of NY Green Bank	\$162,685	\$165,415
Hodges	Sven	Director Legal and Regulatory Aff, Green Bank	\$162,192	\$164,923
Joel	Max	Program Manager	\$138,763	\$147,719
Joseph	Janet	Sr VP Strategy & Market Dev	\$186,241	\$186,101
Joshi	Rohit	Director	\$170,030	\$173,108
Kaatz	Glen	Director	\$154,253	\$159,127
Kasson-Muzio	Amy	Program Manager	\$121,544	\$121,308
Keane	Peter	Deputy Counsel	\$154,253	\$157,161
Kessler	Andrew	Managing Director of NY Green Bank	\$183,677	\$186,374
Lampman	Gregory	Program Manager	\$138,763	\$143,379
Leach	Bradford	Program Manager	\$127,500	\$127,421
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Lee	Brian	Managing Director, Risk & Compliance	\$184,540	\$192,417
Lepeniotis	Stefanos	Program Manager	\$138,763	\$141,327
Levy	Dana	Program Manager	\$138,763	\$143,084
Lochner	John	Vice President	\$173,400	\$126,254
MacDonald	Katherine	Asst Director	\$132,000	\$11,425
MacPherson	Wendy	Program Manager	\$138,763	\$143,080
Mahar	Peter	Controller & Asst Treasurer	\$154,253	\$162,052
Majumdar	Zigurts	Sr Advisor	\$125,000	\$18,269
Marcotte	Jaime	Program Manager	\$138,762	\$142,630
Mas	Carl	Director	\$162,004	\$161,591
McCartin	Amy	Director of NY Green Bank	\$170,030	\$116,648
McKeon Jr.	Robert	Web Manager	\$113,225	\$116,747
Meissner	Jennifer	Director	\$170,030	\$175,191
Mellon	Andrea	Program Manager	\$138,763	\$143,079
Moore	Jason	Managing Director, Investment & Portfolio Mgt	\$177,000	\$175,328
Moriarta	Courtney	Director	\$142,800	\$142,692
Moyer	Susan	Director	\$154,253	\$159,052
Muller	Katherine	Vice President	\$173,400	\$177,743
O'Connor	Christopher	Program Manager	\$130,194	\$129,959
Olmsted	Peter	Chief of Staff	\$133,459	\$110,221
O'Shei	Patrick	Director	\$171,589	\$176,467
Peck	Mary	Director of Internal Audit	\$150,055	\$149,831
Peterson	Alyse	Sr Advisor	\$129,398	\$131,552
Pitkin	Jeffrey	Treas & Internal Contr Officer	\$180,987	\$180,856
Porubcan	Ashley	Program Manager	\$122,463	\$83,650
Rabito	Donna	Director	\$154,253	\$159,051
Rambacher	Sarah	Program Manager	\$124,540	\$127,248
Reed	Michael	Program Manager	\$127,436	\$130,137
Richards	Priscilla	Program Manager	\$138,763	\$143,079
Ruder	Adam	Asst Director	\$137,720	\$134,803
Sandbank	David	Vice President	\$173,400	\$177,982
Scherer	Erich	Sr Advisor	\$138,640	\$144,696
Schryer	Kimberlie	Program Manager	\$138,762	\$141,377
Shimazu	Michael	Sr Advisor for Business Growth and Innovation	\$154,253	\$154,136
Smith	Scott	Program Manager	\$138,763	\$143,079
Thornton	Claudette	Asst Director	\$119,345	\$119,114
Tito	Bradford	Program Manager	\$138,763	\$142,640
Treanor	Brian	Asst Controller	\$138,763	\$143,079
Trybulski	Stanley	Director	\$147,177	\$152,917
Tyler	Kelly	Director	\$170,030	\$153,119
Ulmer	Vanessa	Sr Advisor	\$138,763	\$142,210
Vestal	Matthew	Sr Advisor	\$109,956	\$109,074
Williams	John	Vice President	\$175,980	\$179,926

^{*} For some employees, total Compensation includes performance-based lump sum payments and payments under State fringe benefit plans not included in annual salary. Pursuant to NYSERDA's personnel policies, all employees whose salaries are at the maximum of their Management/Confidential salary grade range are eligible to receive an annual performance-based lump sum payment, awarded as a percentage of salary from a fixed pool of funds budgeted and approved for such funds. For some employees, compensation was lower than annual salary reflecting salary adjustments which became effective during the year or reflect compensation payments for less than a full year.

Vitae for NYSERDA Employees Included on the Compensation Schedule

Alicia Barton

Alicia Barton was appointed as NYSERDA's President and CEO in June 26, 2017. In this position, she oversees all programs and activities of NYSERDA. Prior to joining NYSERDA, Ms. Barton held public and private sector leadership roles advancing clean energy projects and companies for over a decade including serving as co-chair of the Energy and Cleantech Practice at Foley Hoag, LLP, chief of operations of the Global Utility business unit at SunEdison and chief executive officer of the Massachusetts Clean Energy Center (MassCEC), a publicly supported agency that funds and accelerates the development of the clean energy sector. Prior to serving as CEO of MassCEC, Ms. Barton was the Deputy Commissioner for Policy and Planning for the Massachusetts Department of Environmental Protection (MassDEP); Assistant Secretary for Environmental Review and Director of the Massachusetts Environmental Policy Act (MEPA) office; and Deputy General Counsel at the Executive Office of Energy and Environmental Affairs (EEA). Ms. Barton currently serves on boards of several organizations, including Greentown Labs, the Environmental League of Massachusetts, Efficiency Forward, and the Advisory Board for the New England Women in Energy and Environment (NEWIEE). She holds a bachelor's degree in Natural Resources from The Ohio State University and a juris doctor degree from Boston College Law School.

Janet Joseph

Janet Joseph is Senior Vice President for Strategy and Market Development. Ms. Joseph leads NYSERDA's Market Development activities, designing and implementing interventions that accelerate the scale and penetration of on-site, behind-the-meter energy efficiency and clean energy solutions in the commercial, industrial, government, multifamily, and single-family residential sectors. Janet has held a variety of technical and policy positions at NYSERDA over the past 27 years. She has spearheaded initiatives to develop renewable power in New York, build a cleantech start up industry, and identify greenhouse gas reduction strategies that provide benefits for New Yorkers. Prior to joining NYSERDA, Janet was a research scientist at Battelle Pacific Northwest Laboratories. Janet has also worked as an environmental consultant for Booz-Allen and Hamilton in Washington, D.C. Janet Joseph is on the Boards of the Northeast Energy Efficient Partnerships, Northeast Clean Energy Council Institute, and RPI Center for Future Energy Systems. Janet received the 2015 Public Service Excellence Award from the State Academy for Public Administration and was voted one of the top ten Clean Tech leaders in New York in 2013. Janet has a Master's degree in Environmental Chemistry from the University of Maryland.

Jeffrey Pitkin

Jeffrey Pitkin was appointed treasurer of NYSERDA and has held this position since 2001. In this position, Mr. Pitkin is responsible for ensuring the timeliness and accuracy of internal and external financial reporting; supporting organizational transparency, accountability, and stewardship; and ensuring effective policies and practices for personnel, information technology, information security, contract management, operational transformation and LEAN, and facility management to support NYSERDA's objectives. He is also responsible for prudently investing NYSERDA's funds and for issuing bonds on behalf of New York State's investor-owned utilities to finance costs eligible for tax-exempt bond financing. Mr. Pitkin is also the Board-appointed internal control

officer, assisting NYSERDA's management to maintain effective policies and procedures to ensure orderly and efficient operations to meet organizational objectives; prevent fraud, waste and abuse; ensure adherence to laws, regulations and contractual agreements; and maintain reliable financial and management reporting. Mr. Pitkin served as NYSERDA's controller and assistant treasurer from 1991 to 2001. Prior to joining NYSERDA, he was controller for Trans World Music Corporation and was a senior accountant for Ernst & Young. Mr. Pitkin was previously a certified public accountant and received a bachelor's degree in accounting from Siena College in New York.

Peter Costello

Peter Costello serves as General Counsel and Secretary of the New York State Energy Research and Development Authority (NYSERDA). Mr. Costello was appointed Acting General Counsel at the end of June 2019. In October 2019, Mr. Costello was named NYSERDA's General Counsel and appointed Secretary to the Authority in January 2020. Mr. Costello serves as the chief legal officer for the Authority, and is responsible for the overall direction and supervision of NYSERDA's legal department and all legal matters concerning the Authority, including advice and counsel on laws, rules, and regulations governing clean energy development and operations of the Authority. As a member of NYSERDA's executive team, he also participates in formulating and implementing strategy and policy for the Authority. Mr. Costello joined NYSERDA in February 2009, working in the Authority's Counsel's Office for more than five years. He focused primarily on supporting NYSERDA's research and development programs, and real estate matters, including the development of the Saratoga Technology + Energy Park ("STEP"). Following its formation, he was assigned to provide legal support to NY Green Bank and participate as a member of its senior management team. In January 2015, Mr. Costello was appointed as Managing Director for Legal and Regulatory Affairs for NY Green Bank, where he served until his appointment as General Counsel of the Authority. At NY Green Bank, Mr. Costello's responsibilities included providing legal advice and counsel with respect to strategic initiatives, operations, transactions, regulatory issues, and general corporate affairs, as well as managing NY Green Bank's internal legal team and its relationships with outside counsel firms. Before joining NYSERDA, Mr. Costello worked in a transactional capacity at a number of private law firms, including LeBoeuf, Lamb, Greene & MacRae LLP, and its spin-off Lowe, Fell & Skogg, LLC, where he became a partner. In private practice, Mr. Costello focused on various corporate and real estate matters, including merger, acquisition and disposition; financing; land use and development; leasing; entity formation, management and operation; and technology transfer and software licensing. He also served as responsible outside counsel for one of the U.S.'s Big Three auto manufacturer's regional real estate and dealership development operations, including mergers and acquisitions; network planning; site control; and incentive programs. Mr. Costello has a Bachelor of Arts from McGill University and a Juris Doctor from the University of Colorado School of Law.

David Adkins

David Adkins is the Chief Information Officer (CIO) at NYSERDA. He is responsible for managing the Authority's Information Technology, Data Governance/Architecture and Web Operations units and is responsible for implementing and maintaining technology systems. Prior to joining NYSERDA in 2018, Mr. Adkins oversaw End User Services for NYS Information Technology Services, supporting over 120,000 end-users across the executive branch agencies. Prior to State service, he was the Chief Technology Officer (CTO) for the New York State Bar Association. He was also the Director of Information Technology for the New York State United

Teachers (NYSUT). He currently teaches undergraduate and graduate courses in Information Technology and Cybersecurity. Mr. Adkins received a Bachelor of Science in Telecommunications from Syracuse University and a Master of Business Administration and Doctorate in Information Science from the University at Albany.

Kara Allen

Kara Allen is Senior Advisor for Policy and Regulatory Affairs at NYSERDA. In this role, she leads the development of the New York State Energy Plan and Biennial Report. She advises on New York's participation in the Regional Greenhouse Gas Initiative and Transportation and Climate Initiative and manages adaptation research projects to analyze the impacts of climate change to New York's bulk electric system and New York City's low-income multifamily housing. She serves as a member of the New York City Climate Adaptation Task Force Energy Working Group, the State Hazard Mitigation Planning Team, and the Governor's Environmental Justice and Just Transition Working Group. Kara came to NYSERDA from Governor Andrew M. Cuomo's office where she served as Assistant Secretary of Energy. As the Assistant Secretary, she oversaw the operations of NYSERDA, the Department of Public Service, and the power authorities of New York and Long Island. Prior to moving to New York, Kara was the Executive Director of the Sustainable Energy and Environment Coalition (SEEC), a coalition of House members dedicated to advancing policies pertaining to clean energy innovation and job creation, environmental protection, and global climate change. During her time in Washington, D.C., she also served as Assistant Director for Vanderbilt University's Office of Federal Relations, where she focused on general science and higher education policy. Before that, she worked for Rep. Jim Cooper (TN-05), handling energy and environmental issues. She currently serves on the board of Solar One and the Brooklyn Community Board 6's Parks / Recreation / Environmental Protection Committee. She is also a Truman National Security Project Political Partner. A native to Silver Spring, Maryland, she holds an M.S. in Environmental Science and Policy from Johns Hopkins University and a B.S. from Vanderbilt University in Political Science and U.S. History.

Todd Baldyga

Todd Baldyga is Director for Industrial and Agriculture in Market Development. He is responsible for managing a team of staff and consultants to address energy efficiency and process improvements in the industrial, agriculture and data center markets. During his career at NYSERDA, Todd has been involved in the creation and implementation of many technical and financial energy efficiency programs totaling over \$500 million to support the commercial, institutional, municipal and industrial sectors. Todd led a team to implement over \$100 million of clean energy projects under the American Recovery and Reinvest Act. Prior to joining NYSERDA, Todd was employed by Massachusetts Electric Company for 10 years and held various positions and responsibilities as a distribution power engineer. Todd has a B.S. in Electrical Engineering from Western New England College.

Paul Bembia

Paul J. Bembia is the Director of the West Valley Site Management Program at the Western New York Nuclear Service Center in Cattaraugus County. As Director, Paul is responsible for planning, implementing, and overseeing NYSERDA's activities at the Center, which include the safe and compliant management of the State Licensed Disposal Area and Retained Premises, and

representing NYSERDA and New York State's interests in the West Valley Demonstration Project. Paul joined NYSERDA in 1990, and has held a variety of technical and management positions at NYSERDA over the past 27 years, including Project Manager, Senior Project manager, Program Manager and Program Director. Prior to joining NYSERDA, Paul was a staff geologist at Ecology and Environment, Inc., and a staff geochemist for the U.S. Nuclear Regulatory Commission in Washington, D.C. Paul has a Master's degree in Geological Sciences from SUNY Binghamton, and a Bachelor's degree in Geology from SUNY Fredonia.

Joseph Berman

Joseph Berman is the Senior Advisor of Market Development for NYSERDA. Appointed to his current role in 2018, Mr. Berman is responsible for advising across all elements of the Market Development portfolio, with a core focus in the Commercial and Industrial program space. An accomplished coalition builder with extensive experience in developing and guiding high-value relationships among industry, government and the NGO community, Mr. Berman has been tasked with spearheading NYSERDA's efforts to identify and secure strategic market partnerships across both the private and public sectors to facilitate rapid, efficient, and cost effective deployment of program resources. Mr. Berman is a multiple award-winning, innovative, national sustainability expert with over a decade of corporate experience leading initiatives that enhance brand identity, save operational cost, improve organizational efficiency, eliminate waste, mitigate risk, and reduce environmental impacts. Prior to his tenure at NYSERDA, Mr. Berman was the Sustainability and Corporate Responsibility Senior Consultant and Technical Expert for Arcadis, and in that capacity led sustainability efforts for the company in North America and oversaw a community of practice of 250 professional area experts across a broad spectrum of environmental disciplines. In the 7 years before his role at Arcadis, Mr. Berman built and directed the sustainability and corporate social responsibility platform for Price Chopper Supermarkets. During that time Mr. Berman, a LEED AP BD&C since 2009, successfully project administered over 1 million sq.ft. of 3rd party certified commercial green building construction and envisioned and oversaw the buildout of one of the largest privately held, interstate electric vehicle charging station ecosystems in the North East of the United States. In 2004 Mr. Berman graduated with a Bachelor of Arts Independent Major in the Art, History, and Culture of Ancient Eurasia from the University of Massachusetts at Boston, and in 2006 he graduated with a Master of Arts in the Archaeology of the Eastern Mediterranean and Middle East from University College London, Institute of Archaeology.

Joseph Borowiec

Joseph Borowiec is the Program Manager and Team Lead for Advanced Buildings at NYSERDA, and has been with NYSERDA for 16 years. Joe is responsible for leading a team focused on making investments in innovations that improve the efficiency and resiliency of existing and new buildings in NYS, and enable smart buildings to actively manage energy use and interact with the power grid. Joe is a member of the Association of Energy Engineers, Illuminating Engineering Society of North America, and serves on the Gas Technology Institute Public Interest Advisory Committee. Prior to joining NYSERDA, Joe was employed for 21 years as a research engineer at General Electric's Global Research Center. Joe holds a BS in Electrical Engineering, a MS in Computer Science, and an MBA in International Management from Union College. He has 21 United States Patents.

Matthew C. Brown

Matt is a Program Manager in the New Construction Team at NYSERDA. In this role, he supervises a team that delivers market transforming and incentive programs across all sectors. At NYSERDA, Matt previously managed a business process improvement team, commercial incentives and services group and led programs that provided \$100 million of funding for clean energy projects funded via ARRA, including energy efficiency, renewable energy and clean fleet projects. Matt has also created and led multiple market transformation programs and efforts during his time at NYSERDA. This has included a K-12 schools sector specific effort that achieved an average energy efficiency improvement of 22% over a six year period, Commissioning and Retro-Commissioning program, benchmarking, plug load reduction effort, and several other technology specific initiatives. Matt received a BA from St. Lawrence University and has a Master's in Public Policy from Rockefeller College.

Ellen Burkhard

Dr. Ellen Burkhard is a Senior Advisor for the New York State Energy Research and Development Authority's Environmental Research Program. Ellen manages projects that evaluate energy efficiency, emissions, and the resulting air quality and health effects due to energy production, storage, transport, and use. Ellen works with universities and research institutions focused on long-range transport of pollutants from upwind sources; localized airquality effects of high-emitting sources; photochemical and atmospheric processing of pollutants; pollutant trends analysis during periods of emissions changes due to implementation of energy policies, environmental regulation, or changing markets; and cardiovascular and pulmonary effects from air pollution exposure. Ellen earned a Ph.D. in Environmental Health and Toxicology from the SUNY Albany School of Public Health.

Kevin Carey

Kevin Carey is Director of Governmental Affairs at NYSERDA. In this role Kevin is responsible for developing, implementing, and managing NYSERDA's government affairs strategies, activities, and policies involving matters of state, federal and local government, specifically including issues related to legislation and regulation.

Kevin has been with NYSERDA since June 2009. In this capacity, he has played a leading role in the coordination and development of NYSERDA's legislative initiatives and engagement, working with program teams, the Executive Chamber, other agencies, and stakeholders. Kevin has an in-depth background and expertise in governmental matters, and a diverse 30+ year career in both the public and private sector. For over ten years he worked in the Fixed Income Securities Market where he focused on marketing, trading, and evaluating municipal bonds. Kevin served as Assistant Commissioner for Public/Private Partnership at the NYS Office of Parks, Recreation and Historic Preservation while also serving as the Executive Director of the Natural Heritage Trust, a public benefit corporation. In this role he spearheaded efforts, working with public and private partners, to establish Nature Centers, new State Park facilities, recreational programs and coordinated fund raising initiatives. Kevin was recognized with a New York State Parks Distinguished Service Award during his tenure at NYS Parks. Kevin earned a Bachelor of Arts Degree in Economics from Le Moyne College, Syracuse N.Y.

Loic Chappoz

Loic Chappoz is the Program Manger for the Multifamily team at NYSERDA, a team charged with implementing strategies and interventions that overcome market barriers, animate the market, encourage private capital and investment, and accelerate the scale and penetration of clean energy and energy efficiency in the multifamily buildings through New York. Loic joined the NYSERDA Multifamily team in 2014. Prior to joining NYSERDA, he worked as an independent consultant on energy efficiency policies in France, as a fuel efficiency specialist in the airline industry, and as a commercial pilot for ten years. Loic Chappoz holds a Master of International Affairs in Energy and Environmental Policy from the Sciences Paris School of International Affairs.

Laura Chaves

Laura Chaves is Assistant Director of Human Resources and is responsible for managing and/or implementing various HR functions which include; employment, compensation, performance management, diversity management, HRIS/HRMS, and human resource policies and procedures. Prior to joining NYSERDA in April 2008, Laura served as Human Resource Manager for MapInfo and worked in various HR roles at Microsoft and Genetics Institute. Laura holds a B.S. in Human Resource Management from the University of Massachusetts at Boston.

Mary Chick

Mary Chick is the Director of Market Insights, where she and her team ensure NYSERDA's programs and strategies are rooted in actionable insights about the economics and decision making of customers, partners and markets where NYSERDA operates. Market research and analytics is foundational to NYSERDA's work to inform and develop strategies that overcome market barriers, and animate the market to increase the scale and adoption of clean energy. Prior to joining NYSERDA in 2009 as a Senior Marketing Project Manager, Mary spent more than 20 years in various senior level positions at DDB Worldwide Communications, Inc. where her focus was building strong brands, managing cross-functional teams, and using market research to guide and implement integrated marketing programs. Mary earned a Bachelor's degree in Business Administration, with concentrations in Marketing and Statistics, from Bowling Green State University.

Frank Ciampa

Frank is responsible for managing oversight for a strategic planning team that seeks to qualify and initiate policy interventions to promote clean energy market development in New York State. This includes the analysis of energy issues like climate change, energy infrastructure, costs and economic development in the context of statewide policy. As leader of the Policy Development team, Frank provides operational oversight for projects to understand dynamics of New York's clean energy economy, quantify the state's GHG emissions inventory, participate in carbon and air pollution markets (e.g., RGGI and CSAPR), as well as regulatory proceedings intended to rethink electric and nat. gas utility business models for the "utility of the future". Together, these topics (and many more) are all contributing to progress on the State's ambitious goals for 2030 to reduce GHG emissions by 40% from 1990 levels, increase renewables to have them contribute 50% of electric generation, and decrease energy consumption in buildings by 600 trillion BTUs. Frank has over 10 years of experience in energy policy, clean technologies, and corporate sustainability. Before joining NYSERDA, Frank worked in the private sector as Manager, Sustainability Policy Development with KEO International Consultants in Abu Dhabi. Prior to his

expat posting, he worked in Boston for Clean Asset Partners Corporation and MSCI, Inc. Throughout his career, Frank's key responsibilities have focused on regulatory impact assessments, stakeholder engagement, quality assessment programs, market analysis, regulatory review, data collection, gap analysis, forecasting, and implementing custom go-to-market strategies for sustainability services. Frank earned his Bachelor's degree in Earth and Environmental Sciences from University of Rochester, and his Master's degree in Sustainability and Environmental Management from Harvard University.

Alistair Clark

Alistair Clark is a Vice President at NY Green Bank, where he supports the origination, evaluation, and execution of scalable clean energy and efficiency project investments across New York State. Prior to joining NY Green Bank, Mr. Clark worked as an associate within Jones Lang LaSalle's Investment Banking/Debt Capital Markets team where he provided underwriting, market research, and materials production support for commercial real estate debt transactions including debt financings, loan sales, and loan restructurings. He participated in the advisory and closure of billions of dollars worth of performing and nonperforming commercial loan dispositions across all property types while working in every phase of the deal process. He also worked for a Korea-based private equity and advisory firm focused on the clean energy space. During his MBA, he worked in London with Taylor-DeJongh, a private merchant bank specializing in energy and infrastructure project finance advisory. Before business school, he worked at Goldman Sachs Asset Management and also spent time in Hong Kong as a mergers and acquisitions intern for Quam Capital, a specialty finance firm focused on China. Mr. Clark was named one of the world's "Top 99 Under 33 Foreign Policy Leaders" by The Diplomatic Courier and Young Professionals in Foreign Policy. He was also an adjunct professor at Marymount Manhattan College. Mr. Clark holds a bachelor's degree in economics and political science from Vanderbilt University, a master's degree in international political economy and development from Fordham University, and a Master of Business Administration degree from IE Business School in Spain.

Christopher Coll

Chris is a Program Manager and the Team Lead for the Low-to Moderate-Income group at NYSERDA, which is responsible for developing strategies, proposing policy, and coordinating across all sector areas within NYSERDA and various New York State organizations to streamline and improve the effectiveness of the delivery of clean energy services to low-to moderate-income households. Chris holds a bachelor of arts degree in political science from SUNY New Paltz in addition to a master of arts degree in public affairs and policy from the Rockefeller College of Public Affairs and Policy at the State University of New York at Albany.

Chris Corcoran

Chris Corcoran is the Program Manager and Team Lead for the Products program, a team charged with implementing strategies and interventions that accelerate the adoption of emerging or underutilized energy-relevant products. The Products team develops strategies to optimize energy benefits from new and replacement purchase decisions based on an understanding of market readiness as well as NYSERDA's potential to accelerate adoption from targeted and temporary support while leveraging opportunities across the full portfolio of NYSERDA programs to achieve goals. Chris joined NYSERDA in 2014, working with the Commercial team focusing on Demand Management and Existing Facilities programs. Prior to joining NYSERDA, he worked for PG&E

as an Expert Product Manager for the Commercial Segment and Program Manager for Lighting. Chris earned a Bachelor's degree in Political Science and Rhetoric from University of California, Berkeley, and an MBA from University of California, Davis.

Dave Coup

Dave Coup is an Assistant Director for Modeling and Analytics in the Energy and Environmental Analysis (EEA) group. Dave is responsible for energy, environmental and economic modeling and forecasting activities that support statewide energy planning and policy analysis. During the past thirteen years, Dave played a major role in the development and implementation of numerous aspects of the Regional Greenhouse Gas Initiative ("RGGI") including auction design research, electricity system modeling, macroeconomic modeling, and program planning related to the use of New York's allowance auction proceeds. He also coordinated two important studies <u>for</u> New York's Off-shore Wind Master Plan. Dave has also represented end-use customers on various committees of the New York Independent System Operator and participated in the development of components of the 2015 New York State Energy Plan, including a section on fostering the growth of the Clean Energy Economy in New York. Prior to joining EEA he worked in NYSERDA's Research and Development group and spent eleven years working for General Electric. He holds a B.S. in industrial and systems engineering from The Ohio State University and a Master's degree in environmental management and policy from Rensselaer Polytechnic Institute.

David Crudele

Dave Crudele is Program Manager for Smart Grid Systems & Distributed Energy Integration. In this role, Dave leads a team focused on making investments in technology to modernize the electric grid with the goal of making the New York State electric grid cleaner, more reliable, and more affordable. Dave is the co-chair of the New York State Interconnection Technical Working Group which brings together power engineering experts from New York utilities and distributed energy project developers to create consensus solutions to the technical challenges of integrating distributed energy resources with the electric grid. Dave also lead the NY Prize Community Microgrid Program which is identifying and addressing the challenges of building energy efficient and resilient microgrids in New York. Before joining NYSERDA, Dave performed electric grid research and development and consulting with Nova Energy Specialists and the Electric Power Research Institute (EPRI).

Emily Dean

Emily Dean is Director of Market Development. In this role, she leads the development and implementation of energy efficiency programs and initiatives across the residential, low moderate income, local government & communities, industrial, agricultural, and workforce development sectors. Before joining NYSERDA in July 2016, Ms. Dean was the Deputy Assistant Commissioner for Energy Management at the New York City Department of Citywide Administrative Services. In this role, she served as the City's lead in developing strategies and programs to reduce City government operations' carbon footprint and oversaw the energy efficiency capital program for the City's 4,000+ buildings. Prior to her appointment as Deputy Assistant Commissioner, Ms. Dean led the City's solar and clean distributed generation programs. Ms. Dean earned her Bachelor of Arts in Urban Design from New York University and her Master of Public Administration with a focus on Environmental Policy from Columbia University. She

serves on the Board of the Building Energy Exchange and is a Certified Energy Manager by the Association of Energy Engineers.

Janice Dean

Janice Dean is Deputy Counsel at the New York State Energy Research and Development Authority (NYSERDA), where she advises clean energy programs and handles litigation and investigations. She is also counsel to the West Valley Nuclear Service Center, the site of the nation's only privately-operated spent fuel reprocessing facility, as it undergoes decommissioning. In that role, she guides legal compliance at the site with federal and state environmental laws, the U.S. Nuclear Regulatory Commission Part 50 operating license, and state licensing and permitting requirements. Janice is a member of the Board of Advisors of the New York City Environmental Law Leadership Institute, and has presented and written on issues including climate change and the State Environmental Quality Review Act, environmental issues in bankruptcy, and the State as a citizen actor. Janice was recognized by two New York attorneys general for her contributions to environmental law in New York State, by the American Bar Association as a Distinguished Environmental Advocate, and received the 2019 Robinson Award from the Elisabeth Haub School of Law. She is a graduate of the University of California, Berkeley, and the Elisabeth Haub School of Law at Pace University.

Abbey DeRocker

Abbey DeRocker is Program Manager for the Large-Scale Renewables team and is responsible for executing multifaceted programs which serve to aid in the development and effective operation of large-scale renewable resources to satisfy New York's renewable energy and environmental goals. Ms. DeRocker's primary focus is to run the Renewable Energy Standard (RES) procurements, administer the large-scale renewable agreement portfolio resulting from RES and prior procurements, develop and implement processes leading to increased penetration of largescale renewable resources in New York, and improve the total value proposition of these resources. Prior to joining NYSERDA in 2016, Ms. DeRocker served as Manager of Risk Analytics and Manager of Enterprise Risk Management with Southern California Edison where she led the implementation of three major initiatives including the Enterprise Risk Management program, Greenhouse Gas Trading, and Acid Rain Program Trading. In these roles, she led power purchase and renewable attribute agreement negotiation, involving various technologies including conventional and renewable power, demand response, energy efficiency, distributed generation, and energy storage. Prior to moving to Los Angeles, Ms. DeRocker served as the Manager of the Valuation Review Group for the Commodities division of Morgan Stanley in Purchase, New York. In her last role, she presented the Global Valuation results to the Commodities business unit and Institutional Securities Group Management and led the North American Electricity, North American Natural Gas, Emissions and Global Oil Liquids valuation teams. Ms. DeRocker holds a Bachelor of Arts degree in economics with a concentration in environmental science from Bates College.

Corinne DiDomenico

Corinne DiDomenico joined NYSERDA as Assistant Director of Large-Scale Renewables focusing on cross cutting policy development activities, Clean Energy Standard implementation, programmatic reporting, and oversees the New York Generation Attribute Tracking System. She supports the policy and market development activities, and the design and implementing interventions that accelerate the scale and penetration of large-scale renewables in New York.

Prior to joining NYSERDA, she managed the long-term contracting procurements for clean energy for National Grid, leading the strategic execution of a \$16 billion portfolio that included over 2,000 MW of clean energy; including offshore wind, land-based wind, hydro, solar, and anaerobic digestion. From 2005 to 2009, she held various positions in Power Engineering, Generating Plant Operations (Steam and Gas Turbine), and Maintenance Services. Corinne received a Bachelor of Science in Civil Engineering from Drexel University and a Master of Business Administration from CUNY Baruch.

Michael DiRamio

As Assistant Director of Energy Affordability and Equity, Michael DiRamio co-directs strategy, policy and engagement related to low-income and disadvantaged communities across the Authority in support of energy justice and affordable, clean energy solutions for all New Yorkers. Prior to joining NYSERDA, Michael was a manager in the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy focused on interagency and crossoffice collaboration with state and local governments on clean energy solutions for low income communities. Prior to joining DOE, Michael worked in the private sector where he managed low-income and market rate utility energy efficiency programs in the Midwest and advised the U.S. Environmental Protection Agency and Department of Labor, and the State of Michigan, on major energy efficiency and renewable energy policy initiatives and investments. He also advised national philanthropies on social impact investments, co-founded and led community nonprofit organizations, and worked for over 10 years to advance environmental sustainability and economic justice for residents in the Detroit area. Michael began his career working on energy and environmental issues at a major architecture and planning firm in Boston. He earned an M.S. in environmental policy from the University of Michigan and a B.A. in government from Wesleyan University.

Jason Doling

Jason Doling is Program Manager for Energy Storage focused on removing stall points that prevent storage deployment, particularly in grid storage applications. Objectives include flattening peak demand, enabling flexible renewable generation resources, increasing electric system utilization and resiliency, and reducing greenhouse gas emissions. At NYSERDA, Jason helped establish the New York Battery and Energy Storage Technology Consortium (NY-BEST) which now numbers more than 150 members, and plays a key role in advancing energy storage technologies. Prior to joining NYSERDA in 2009, Jason was with NYSTAR, the New York State Foundation for Science, Technology and Innovation which focuses on innovation-based economic development where he served as Director of Business Development. Jason began his career at PricewaterhouseCoopers and holds a BS from the University at Albany, SUNY.

Lindsay Drogin

Lindsay Drogin is the Director of Investment Administration and Portfolio Support at NY Green Bank where she concentrates on the execution of new business and the monitoring of the existing portfolio. Prior to joining NY Green Bank, Ms. Drogin served as an investment banker with FINRA Series 79 & 63 licenses at a major international bank where she focused on the origination and execution of high yield and structured finance transactions across industries including the infrastructure and energy sectors while maintaining a portfolio of leveraged loans. During the four years before joining NY Green Bank, Ms. Drogin also devoted her energies to extensively mentor early stage companies in various cleantech verticals such as

waste, water and clean energy and encouraged the development of programs that serve such companies. Ms. Drogin earned a Master of Business Administration degree in Finance from New York University's Stern School of Business, a bachelor's degree in Economics from Queens College of the City University of New York and a Professional Certificate in Energy Finance from New York University where she discovered a passion for clean energy and sustainable infrastructure.

Scott Egbert

Scott Egbert joined NYSERDA in June 2017 as Program Manager, Renewable Optimization and Energy Storage Innovation. Mr. Egbert is responsible for managing NYSERDA's investment portfolio in Renewable, DER, and Energy Storage Technology and Business Innovation. Mr. Egbert has over 20 years of experience in executive management, product delivery, product engineering, and business development. Previously, Mr. Egbert served as Manager, Business Development at GE Fuel Cells, Manager, New Product Development at GE Energy Storage, Managing Director, Plug Power Energy India, and Director of Engineering and Development at Plug Power Inc. Mr. Egbert holds a Bachelor of Science degree in Electrical Engineering from New Jersey Institute of Technology.

Victoria Engel-Fowles

Victoria Engel-Fowles is the Program Manager for the Market Characterization and Evaluation team. In her role, Victoria oversees all aspects of NYSERDA's program evaluation work and, with her team, engages with internal and external stakeholders to develop and implement multi-year market, impact and strategy evaluation plans to provide actionable insights to NYSERDA teams, credible outcome measurements, and cost-effective, high-value deliverables. In particular, her team is responsible for assessing and quantifying both direct and indirect energy impacts of initiatives. Victoria joined NYSERDA in 2001; prior to becoming Program Manager, she focused on market evaluation where she worked to build evaluation strategy for a variety of programs and portfolios. Victoria has a BA in Environmental Studies and Anthropology from St. Lawrence University and a MBA from the College of Saint Rose.

Kim Erle

Kim Leinwand Erle is Managing Director at NY Green Bank, a division of NYSERDA. In this role, Ms. Erle oversees Strategy, Impact & Investor Relations. Prior to joining NY Green Bank in December 2019, Ms. Erle worked as an independent strategy consultant providing thought leadership to senior executives in business strategy and organizational change. Previously, Ms. Erle was a Portfolio Manager of Deutsche Bank's RREEF Retrofit Partners fund, seeking to deploy investor capital in deep energy retrofit projects for commercial, MUSH and multi-family property owners. As Chief Operating Officer of Trajectory Asset Management, Ms. Erle was responsible for business development, investor relations and firm governance. Ms. Erle was a Partner at Mitchell Madison Group, a global consultancy, where she was a leader in the Financial Institutions practice. Ms. Erle earned a Bachelor of Science in Operations Research & Industrial Engineering from Cornell University, a Master of Business Administration from Columbia Business School and a Master of Arts in Economics from Johns Hopkins University's Paul H. Nitze School of Advanced International Studies. She serves on the External Advisory Board for the Cornell Atkinson Center for Sustainability.

Michael Fagan

Michael Fagan is the Director of Finance on the NY Green Bank's Operations and Finance team. Michael oversees all aspects of financial and operational activities across the organization with particular responsibility for fund accounting and administration, audit, and financial reporting. Prior to joining NY Green Bank, Michael was a Controller and Principal Financial Officer at Man Group, with oversight and direct responsibility for financial reporting, regulatory, and fully integrated middle office support. His focus was on credit, direct lending, and emerging markets funds. Michael holds a bachelor's degree in accountancy from Providence College and is Certified Public Accountant licensed in the State of New York.

Adele Ferranti

Adele Ferranti is currently the Team Lead for NYSERDA's workforce development and training initiatives targeting existing and emerging workers in all sectors. Workforce development and training activities address energy efficiency, building science, renewable energy and emerging and advanced technologies as well as initiatives to develop career pathways for low and moderate-income residents. Prior to her current position, she was a Senior Project Manager in NYSERDA's R&D group for over 15 years where she started NYSERDA's photovoltaic (PV) and wind training programs and NYSERDA's PV incentive program. Adele has a B.S. in Biology from SUNY Geneseo, M.S. in Environmental Science from SUNY School of Environmental Science and Forestry, and a M.P.A. from the Maxwell School of Citizenship and Public Affairs, Syracuse University.

Bradley Frank

Brad Frank is a Program Manager within the West Valley Site Management Program. Brad is responsible for oversight of the West Valley Demonstration Project (WVDP) and acts as NYSERDA's lead for End-State planning. Prior to joining NYSERDA, Brad was a supervisor with the prime contractor at the West Valley Demonstration Project, and an operations superintendent for Kinder Morgan Inc. He also has served as an active duty Army officer, and is currently serving as a Major in the Army National Guard. Brad received his MBA from St. Bonaventure University, a Bachelor's of Science from the United States Military Academy at West Point, and a Certificate in Strategy and Policy Development from the U.S. Army War College.

Gregory Frank

Gregory Frank is the Assistant Director of Contract Management. He provides back-up responsibilities for the Director of Contract Management and supervises Contract Management staff. Greg is the lead Contract team member for NYSERDA's, Multifamily Performance Program, West Valley Site Management Program, Saratoga Technology + Energy Park, and the NY Green Bank. He is also responsible for providing functional support of the procurement modules within NYSERDA's financial and contract database system. Greg has been at NYSERDA for over 18 years. Prior to joining NYSERDA, Greg was a project manager at Professional Service Industries, Inc., an engineering, consulting and testing firm. Greg has an A.A.S. in Business Marketing and Management from Sage Junior College of Albany and a B.S. in Natural Resources Management and Engineering from the University of Connecticut.

Karen Fusco

Karen Fusco is the Team Lead and Program Manager for the Consumer Services and Events Management (CSEM) team at NYSERDA. As part of the Corporate Communications and Marketing group, Karen's team is responsible for planning and executing conferences, meetings, events, exhibits, sponsorships, and public speaking opportunities as key strategic components of NYSERDA's outreach efforts. The CSEM team also manages NYSERDA's consumer hotline contract. Karen has been with NYSERDA for more than 10 years and is completing her Bachelor degree in environmental studies at SUNY Empire. Prior to joining NYSERDA in 2009, Karen was an Account Manager for a produce broker for 14 years.

Laura Geel

Laura Geel is a Program Manager for the Single Family Residential group. In this role, she provides leadership to NYSERDA's Residential team that delivers market transformation and incentive programs to the one-to-four family residential sector, which includes the Home Performance with ENERGY STAR Program and low income EmPower NY Program. Market transformation activities seek to grow the infrastructure of residential energy efficiency service providers and increase consumer awareness and demand for energy efficiency services. The programs work with contractors, manufacturers, retailers, home inspectors, realtors, community-based organizations, low-income advocates, and other stakeholders in the residential sector. Laura has experience in the residential new construction market in a previous role at NYSERDA. Laura holds a Bachelor of Science in Business & Organizational Management, with a focus on Social Responsibility from Russell Sage College and a Master of Business Administration with a concentration of Business Strategy from Sage Graduate School.

Cheryl Glanton

Cheryl Glanton is the Director of Contract Management. She provides leadership to NYSERDA's contracts team in managing the Authority's contracting and procurement. This includes ensuring the development and compliance with contracting policies and procedures consistent with regulations and NYSERDA policies. Cheryl has been at NYSERDA for over 5 years. Prior to assuming this role, she was a Senior Project Manager for the Process, Power, and FlexTech program which addresses energy efficiency and productivity for industrial, water/wastewater, agricultural, data center, and combined heat and power facilities. Prior to joining NYSERDA, Cheryl was a manager at General Electric. Cheryl has a BSME from Worcester Polytechnic Institute and a MBA from Case Western Reserve University.

Donovan Gordon

Donovan Gordon is Director of Clean Heating & Cooling for NYSERDA. He leads New York State's efforts to develop markets that support clean, high-efficiency, renewable thermal systems, including solar cooling, heating and hot water; air and ground source heat pumps, biomass heating systems, and thermal storage. He is charged with conceptualizing, driving and implementing a portfolio of products to encourage and enable customers and partners to invest in low-carbon/renewable cooling and heating systems and also with advancing New York's progress toward self-sustained markets. Donovan is a Leadership in Energy and Environmental Design (LEED) accredited Green Associate, and an International Ground Source Heat Pump Association (IGSHPA) accredited Geothermal Installer. He received a bachelor's degree in Business

Management from St. Francis College and a Master in Business Administration from NYU, Stern School of Business.

Alfred Griffin

Alfred Griffin is President of NY Green Bank and brings 25 years of experience in banking and finance to the organization. He is an industry leader in developing innovative solutions in support of the financing of renewable energy generation and energy efficiency projects. In his role with NY Green Bank, Alfred is responsible for the overall strategy and staffing of the organization, and for overseeing partnerships with private sector market participants and capital providers to address market barriers that will accelerate deployment of clean energy / sustainable infrastructure. Prior to joining NY Green Bank, Alfred specialized in structured finance with roles in corporate and investment banking, capital markets and risk management at Citigroup Global Markets Inc. Specific roles included Alternative Energy Banking where Alfred was responsible for the design, marketing and execution of structured solutions within the evolving market segment. Before joining Citi in 1997, Alfred held positions at Edward D. Jones & Co. and Smith Barney Inc. Alfred is a graduate of the University of North Carolina at Chapel Hill where he earned his BA and MBA degrees. He is a Chartered Financial Analyst.

Greg Hale

Greg Hale joined NYSERDA in February, 2018 as Senior Advisor for Energy Efficiency Markets and Finance. Greg is overseeing the Authority's work to create a policy roadmap to achieve zero net energy buildings and communities throughout the state, which includes strategic co-leadership of the innovative RetrofitNY initiative. Greg also provides oversight of NYS policy efforts related to energy efficiency financing, including an ongoing role as strategic advisor to NY Green Bank. Prior to joining NYSERDA, Greg served in Governor Cuomo's administration as Senior Advisor to the Chairman of Energy & Finance, where he focused on the development and execution of the Governor's signature energy policy–Reforming the Energy Vision (REV) and was responsible for overseeing the establishment of the \$1 billion NY Green Bank. Greg was also the lead author of NY's 2015 State Energy Plan, and led an inter-agency working group developing clean energy solutions for the low to moderate income sector. Prior to joining the Governor's Office, Mr. Hale was the Director of Efficiency Finance at Natural Resources Defense Council's Center for Market Innovation. Prior to NRDC, Greg spent 17 years in the real estate industry, first as a real estate lawyer at Skadden, Arps, et al., and then as co-owner and general counsel of Cirque Property L.C., a real estate investment company based in Salt Lake City, Utah. Greg is a founding board member of the New York City Energy Efficiency Corporation, where he currently chairs the HR & Governance committee, and he served on the steering committee of the PACENow Coalition. Greg is a graduate of Dartmouth College and The University of Michigan Law School.

Kevin Hale

Kevin currently serves as the Director of Utility Affairs and Strategic Partnerships where he's responsible for strategy execution and program development under the Clean Energy Fund and the State's Reforming the Energy Vision policy approach to energy. In his previous role at NYSERDA, Kevin was the Director of Corporate Strategy and Planning where his responsibilities included leading the Authority's strategic planning efforts, organizational change management, and developing corporate processes and systems for ongoing optimization of NYSERDA's portfolio of programs. Kevin has been with NYSERDA since 2005 and has contributed to the

design and execution of New York's Renewable Portfolio Standard ("RPS"), the Regional Greenhouse Gas Initiative ("RGGI"), and the New York Green Bank. Prior to NYSERDA, Kevin held senior positions at Science Applications International Corporation ("SAIC"), Johnson Controls, and Enron Energy Services. He holds an MBA from SUNY Albany and a B.S. in Business Management from SUNY Plattsburgh.

Christopher Hall

Chris manages NYSERDA's coverage and participation in the New York State Independent System Operator's (NYISO's) shared governance process. Chris generates a monthly report to management that summarizes important issues and trends in the wholesale electricity market, and leads a monthly NYISO team meeting to discuss noteworthy developments at the NYISO from the prior month. As directed, Chris also produces and/or manages work related to macroeconomic and electricity system modeling, and contributes to analyses on various other technical issues. Chris has worked for NYSERDA from 2000 through April 2011, and again from January 2013 to the present. In the interim, Chris worked for the Long Island Power Authority as "Manager of Power Markets Policy" from May 2011 through December 2012. In this role, Chris represented and advocated for the LIPA's interests in regional transmission organizations (RTOs) with an emphasis on the NYISO wholesale electricity market. Chris has a B.A. in Mathematics from the State University of New York at Potsdam and an M.B.A. with a concentration in management from Clarkson University.

Hillel Hammer

Hillel Hammer is a Senior Advisor for Energy and Environmental Analysis and supports analysis and development of New York State's energy and greenhouse gas policies, plans, and regulatory agenda, and related NYSERDA programs and environmental research. His responsibilities include the Greenhouse Gas Inventory and analysis of the air quality health benefits of decarbonization policies, input to the New York State Energy Plan, technical support for coordination with the Transportation Climate Initiative and other transportation initiatives, and technical support of decarbonization policy development and evaluation. Prior to joining NYSERDA, Hillel was an environmental consultant specializing in climate change and air quality, focused on supporting various government agencies in the New York region in developing policy and regulatory efforts, as well as project development support and various private sector analysis work related to energy, climate change, and air quality. Hillel also worked previously as a researcher at the Berkeley National Laboratory on air quality and climate studies.

Victoria Harmon

Victoria Harmon is the Senior Advisor to Richard Kauffman, the Chairman of Energy and Finance for New York. Ms. Harmon is responsible for developing, managing and implementing communications strategy for the state's energy policy initiatives, including Governor Andrew Cuomo's groundbreaking strategy, Reforming the Energy Vision, or REV and nation-leading mandate for 50 percent of New York's electricity to come from renewable energy by 2030. Working closely with the State's senior energy leadership team, other agencies in state government and Governor Andrew Cuomo's executive communications officers, Ms. Harmon also manages and coordinates communications strategy with agency press officers in the Department of Public Service, New York Power Authority, New York State Energy and Research Development Authority, Long Island Power Authority, and the New York Green Bank.

Prior to this role, Ms. Harmon was a Managing Director for Credit Suisse, based in New York, responsible for Private Banking and Asset Management in the Americas while also serving as Co-Head of Investment Banking Corporate Communications globally. Prior to joining Credit Suisse in 1999, Ms. Harmon worked for Salomon Smith Barney in the Corporate Communications department in both their New York and Hong Kong offices. Prior to working in financial services, she worked for the US Trade Representative, Mickey Kantor, in the Executive Office of the of the United States and for NBC News in Washington Ms. Harmon holds a JD from Georgetown University Law Center and a B.A. in Political Science from the University of California, Berkeley.

Doreen Harris

Doreen Harris is the Directors of Large-Scale Renewables at NYSERDA where she oversees the strategic development of utility-scale renewable resources to achieve the State's nation-leading Clean Energy Standard mandate. In this role, Ms. Harris manages a portfolio of New York investments in large-scale renewables totaling over \$2.5 billion and oversees annual solicitations to continue to build this portfolio. Ms. Harris also directs a statewide strategic effort to spur the responsible and cost-effective development of New York's Offshore Wind resource. In addition, she leads associated policy and market development activities, designing and implementing interventions that accelerate the scale and penetration of large scale renewables in New York, including ongoing oversight of the New York Generation Attribute Tracking System. Prior to joining NYSERDA, Ms. Harris worked in the private sector in several energy and engineering consulting roles. Ms. Harris received a Bachelor of Science in Chemical Engineering from the University of Rochester and a Master of Business Administration from the University at Albany.

Colin Harris

Mr. Harris supports the full range of day-to-day operational activities across the organization including financial planning and analysis, budgeting, reporting, strategy development and implementation, as well as risk and compliance. Mr. Harris has been a consultant to various litigants concerning fraud, operational risk and due diligence practices in the hedge fund industry. He has also served as Vice President of Business Development for the Sumitomo Mitsui Banking Corporation and the Carbon Disclosure Project (CDP). Previously, Mr. Harris worked in Environmental Markets with J.P. Morgan's Global Commodities team executing sales and marketing strategies in carbon and REC markets within North America. He also consulted with the Oliver Wyman Group in their corporate and institutional banking practice specializing in hedge fund litigation and advisory, energy risk and operational risk management projects. Mr. Harris graduated from Cornell University with a Master of Business Administration in Capital Markets and Asset Management and a Bachelor of Science in Applied Economics and Management

Sven Hodges

Sven Hodges provides legal advice and counsel to NY Green Bank with respect to strategy, transactions, regulatory issues, and general corporate affairs. Prior to joining NY Green Bank, Mr. Hodges served as Assistant Chief Counsel and Attorney-Advisor to the Loan Programs Office of the U.S. Department of Energy. In that capacity, he provided transactional and programmatic advice on project and corporate financings for clean energy, advanced transportation, and other sustainable infrastructure projects under the Title XVII loan guarantee

program and the Advanced Technology Vehicle Manufacturing loan program. From January 2015 through June 2016, he served on the White House Council on Environmental Quality as Deputy Associate Director for Clean Energy Finance. In that capacity, he worked to advance a variety of policy initiatives relating to clean energy finance (including federal tax credits, green bonds, and green banks), clean energy technologies (including offshore wind and energy storage), and corporate sustainability. Prior to joining the federal government, Mr. Hodges worked as in-house counsel at GE Energy Financial Services and as an associate in the Global Projects Group of Paul Hastings LLP in New York. Mr. Hodges holds a bachelor's degree from Harvard College, a master's degree from the London School of Economics, and a juris doctor degree from the Columbia Law School.

Max Joel

Max Joel is a Program Manager with the NY-Sun Initiative at the New York State Energy Research & Development Authority (NYSERDA). The NY-Sun Initiative aims to increase the number of solar electric systems across New York State by stimulating the marketplace, so that costs associated with installing solar electric systems for residents and businesses are reduced. Previously, Max was the Director of Community Solar Initiatives at Solar One, a nonprofit organization in New York City, and the Capital Projects Coordinator at the Queens Botanical Garden. Max holds a BA in Urban Studies from Columbia University and a master's degree in Environmental Management from the Yale School of Forestry & Environmental Studies.

John Joshi

John Joshi joined NYSERDA as the Director of Financing Solutions and brings 25 years of experience in investment management and structured finance to NYSERDA. In his role at NYSDERA John is developing strategies as part of the Clean Energy Fund for mobilizing private capital and market-based financing solutions to support scaled investments in clean energy across sectors and technology areas. This role is important to support the Governor's energy agenda and the strategy for scaling clean energy by engaging private capital financing solutions. John will focus on technologies where financing solutions have been underutilized or underdeveloped. In his prior experience John has developed innovative financing structures and managed multibillion-dollar investment portfolios in various asset classes. John has extensive experience in solar & renewable energy capital markets solutions, structured products, hedge funds, & risk management, most recently as Head of Capital Markets for PLANT. While working for Smart Energy Solutions LLC, John advised the White House policy staff, the Senate Finance staffers and the Secretary of Energy on effective solutions for increased capital for the solar sector, including active participation in the Solar Access Public Capital (SAPC) initiative.

Glen Kaatz

Glen Kaatz is the Director of Information Technology. Currently he is responsible for all facets of Information Technology operations including the data center, desktop hardware and software support and enterprise software development. He has been with NYSERDA since 2006. Prior to joining NYSERDA he was an enterprise architect for the New York Independent System Operator. Glen received a B.S. degree in Computer Science from Siena College.

Amy Kasson-Muzio

Amy Kasson-Muzio is the Quality Assurance and Standards Program Manager at NYSERDA. Amy is responsible for driving Quality Assurance strategies that promote consumer and investor confidence necessary to scale investment in the State's clean energy economy. She also oversees quality oversight for the NY-SUN, Multifamily Performance Plan, Home Performance with ENERGY STAR® (HPwES), EmPower NY, the Low-rise Residential New Construction Program, Clean Heating and Cooling Programs including Ground Source and Air Source Heat Pumps, Solar Thermal Programs as well as Pellet Stove and BioMass Boilers. Amy joined NYSERDA in 2017, bringing over 20 years of Quality Assurance experience with public organizations, General Electric and Regeneron, where she focused on developing, maintaining and lead continuous improvements to the Quality Management System. Amy holds a Bachelor of Science degree in Environmental Studies from the State University of New York at Albany.

Peter Keane

Peter Keane is NYSERDA's Deputy Counsel, and focuses on renewable energy matters, research and development, and regulatory affairs. Peter's responsibilities include providing legal advice and counsel to NYSERDA with respect to the System Benefits Charge, Renewable Portfolio Standard Main and Customer-Sited Tiers, Energy Efficiency Portfolio Standard, Regional Greenhouse Gas Initiative, NY-Sun, New York Generation Attribute Tracking System, Clean Air Interstate Rule, and Performance Management programs. Prior to joining NYSERDA in 2001, he practiced energy law with the firms of LeBoeuf, Lamb, Greene & MacRae LLP and Couch White, LLP. Mr. Keane is a 1997 magna cum laude graduate of Albany Law School.

Andrew Kessler

Andrew Kessler is a Managing Director at the NY Green Bank, a Division of NYSERDA. Mr. Kessler oversees investments and portfolio management for NY Green Bank. Over a 25-year career, Mr. Kessler has developed extensive experience in corporate and project finance and advisory as well as operational management, corporate development, and project development. Prior to joining NY Green Bank, Mr. Kessler founded and led the Biogas, Waste & Recycling Advisory group at the Danish Trade Council based in Washington, D.C. He also served as Co-Head of the Danish Trade Council's North America Energy & Environment Group. In 2010, Mr. Kessler founded Turning Earth, an integrated organics recycling company focused on converting organic waste streams into biogas and other beneficial resources. Prior to launching Turning Earth, Mr. Kessler spent 15 years as an investment banker holding senior positions as a corporate finance and mergers & acquisitions professional at various firms including HSBC, Waller Capital, Morgan Stanley, and Duff & Phelps. He has executed equity, debt, and M&A transactions across a diverse set of sectors and markets and has served in numerous corporate governance leadership roles. Mr. Kessler has written and lectured on waste, recycling, biogas, and related renewable energy topics and regularly speaks at industry forums and conferences. He served on the Board of Directors of the U.S. Composting Council from 2010 to 2012 and was elected to its Executive Committee as Vice President and Treasurer, respectively. Mr. Kessler earned a bachelor's degree in Economics from the University of Virginia and a Master of Business Administration at New York University's Stern School of Business.

Gregory Lampman

Gregory Lampman is the Program Manager for the Environmental Research Program at the New York State Energy Research and Development Authority (NYSERDA). Greg's work focuses on development and maintenance of a portfolio of scientific research that provides objective information to help address immediate and long-term, energy-related environmental challenges across New York State. Working closely with staff and other scientists, Greg also endeavors to convey this information to appropriate policy makers and seeks to understand their information needs. The program supports: air quality and related health research; acidic and mercury deposition monitoring and assessments; research into the State's vulnerability to climate change to help develop mitigation and adaptation strategies; assessments and research into of the environmental effects of renewable energy development; biomass combustion efficiency and emissions assessments. Greg is also part of the Offshore Wind Team, leading the environmental aspects of the work seeking to advance responsible and cost-effective development of offshore wind energy. Greg joined NYSERDA in 2000 and has a background in biogeochemistry, energy efficiency in buildings and water/wastewater treatment systems, and energy efficient design and construction. Greg has an Associate's degree in Environmental Science and earned his Bachelor and Master degrees in Biology with at concentration in biogeochemistry from the State University of New York College at Brockport.

Brad Leach

Brad Leach is Program Manager, Data and Markets in Energy and Environmental Analysis. In this role, he supervises a team that operates programs related to energy assurance/emergency preparedness, oversight of state petroleum infrastructure, nuclear programs including the closure of Indian Point and the related decommissioning process. Prior to joining NYSERDA in November, he consulted for four years with Connecticut-based Energy Advisory Services. In this role he worked with multiple clients on U.S. and international energy projects. Prior to that he was Executive Director, Energy Research and Product Development at CME Group where he was responsible for the development of natural gas, electricity, environmental emissions, and nuclear contracts. Brad holds a Bachelor's degree in Political Science from Columbia University.

Brian Lee

Brian Lee is a senior finance executive with extensive experience in transaction structuring, business development and regulatory compliance. As Managing Director of Risk & Compliance, Mr. Lee is responsible for the day-to-day analysis and management of NY Green Bank's key business risks (enterprise and investment) including related reporting and compliance across the organization and the investment portfolio. Among other responsibilities, together with the investment team, he evaluates and monitors the inherent risks in the investment portfolio, ensuring alignment with NY Green Bank's business plan, investment strategy and risk appetite. Prior to joining NY Green Bank, Mr. Lee held various senior roles at Lloyds Banking Group, North America. As Senior Vice President of Strategy & Performance, he was tasked to improve performance across key customer relationship and product areas. He led a team that proposed and received approval to build a debt capital markets business in North America, and he was instrumental to the planning, establishment and successful development of Lloyds' new broker-dealer, Lloyds Securities Inc. He later served as its Chief Compliance Officer, leading a team responsible for all aspects of compliance. Prior to joining Lloyds, Mr. Lee worked at Manresa Partners, a boutique investment advisory firm seeking principal investment opportunities. He also

worked at Citigroup, designing and implementing structured transactions for its largest corporate clients. He was instrumental in proposing and developing a portfolio totaling \$350 million of equity investments in renewable energy power projects. Mr. Lee holds a Master of Business Administration degree from The Tuck School of Business at Dartmouth and a Bachelor of Science degree in Chemical Engineering from Princeton University.

Stefanos Lepeniotis

Stefanos Lepeniotis is the Program Manager of Statistics and Analytics within the Performance Management Group. Stefanos is responsible for statistical and analytical support of all different teams at NYSERDA. Stefanos is working with many project/program managers on the Test-Measure-Adjust strategies of their initiatives. He is also providing support to many teams using external data purchased by NYSERDA to understand market share and different segmentations of the markets (Commercial, Residential, etc.). Stefanos joined NYSERDA in 2016 working with the Performance Management team. Prior to joining NYSERDA he worked for Hoechst- Celanese Corp. as a research Statistician and then for JPMorgan Chase Bank, GE Money, Citigroup at their Decision Science Departments. He also worked for M&T Bank managing an off-shore group of analysts in all banking products. Stefanos has published more than 20 papers in the field of statistics as author and co-author, and has presented at many National and International Conferences. Stefanos earned a Bachelor's degree in Economics and Statistics from Athens School of Economics, a Master's degree in Statistics from RUTGERS University in New Jersey, and a Master's degree in Computer Science from the New Jersey Institute of Technology.

Dana Levy

Dr. Dana Levy is the Program Manager for On-site Power Production at NYSERDA where he directs a ten-member team. Dana contributes via his diverse perspectives gained from roles in academic laboratory research, engineering consulting, and factory operation and management. The On-site Power Production Program has an annual budget of approximately \$30 million (which is roughly 6% of NYSERDA's overall budget), and focuses on end-use customer acquisition of electric generating systems consisting of Distributed Generation-Combined Heat and Power (DG-CHP), anaerobic digester gas (ADG)-to-electricity, fuel cells, and on-site wind. Prior to joining NYSERDA in 1999, he served as Environmental Coordinator at the Army's Watervliet Arsenal and as an environmental engineering consultant to industry and government. Dana earned his Doctorate and M.S. degrees in Environmental Engineering from Rensselaer Polytechnic Institute, a B.S. degree in Chemical Engineering from the University of Massachusetts; and is a licensed Professional Engineer and a recipient of the U.S. Clean Heat and Power Association Combined Heat and Power Champion Award and the Northeast Clean Heat and Power Initiative CHP Champion Award.

John Lochner

John Lochner is the Vice President for Innovation. In this role, John provides oversight of NYSERDA's Innovation department including departmental strategy, operations, program development, execution, and performance management. John's previous experience includes investing, management consulting, investment banking, time as an executive at a distributed renewable energy start-up, and advisory work for environmental organizations including the Natural Resources Defense Council and The Nature Conservancy. John holds an M.B.A from The

Wharton School at the University of Pennsylvania, an M.A. from Harvard University, and a B.A. from Duke University.

Katherine McDonald

Katie joined NYSERDA in February 2020 where she serves as the Assistant Director of Technology to Market supporting and launching programs that can help the state of New York address ambitious climate and energy goals through innovation and entrepreneurship. Katie comes to NYSERDA from Greentown Labs, the largest cleantech incubator in the United States, where she was Senior Director of Strategic Partnerships responsible for corporate partnerships and industry accelerator programs. At Greentown, Katie designed and scaled the 'Greentown Launch' model for corporate / startup partnership development and ran first- of- a- kind programs in energy storage, hydrogen, solar materials, circular economy, and distributed energy resources. Before Greentown Labs, Katie served as Executive Director of Cleantech Open Northeast, the region's premier cleantech business accelerator. Under Katie's leadership, the accelerator saw recordbreaking application numbers, a 100% recommendation rate from startups, and the first national prize in the Northeast chapter's history. In 2016, Katie also represented Cleantech Open at the White House for World Water Day. Katie has worked for organizations including the World Bank, 350.org, and Amherst College to build innovation programs, organize communities, and drive climate impact. Katie sits on the Board of 501CTHREE, a first of a kind non-profit dedicated to catalyzing social and entrepreneurial action on climate.

Wendy MacPherson

Wendy MacPherson is a Program Manager for the Clean Heating and Cooling Team which promotes clean technology solutions for residential and commercial buildings through air source heat pumps, ground source heat pumps, solar heating and cooling and high-efficiency, low-emissions biomass heating systems. Prior to joining NYSERDA in 2009, Ms. MacPherson worked at Saint-Gobain for 23 years, in the High-Performance Materials businesses. She has a breadth of experience in manufacturing, including project and product management of large industrial product lines. Ms. MacPherson has a B.S. Industrial Engineering from Rensselaer Polytechnic Institute in Rensselaer, NY and an MBA from Union College in Schenectady, NY.

Peter Mahar

Peter Mahar is Controller and Assistant Treasurer and oversees the daily operations of the Finance Unit. This includes assisting the Treasurer in the development of NYSERDA's annual budget, preparation of quarterly and annual financial statements, monitoring the internal control structure over financial reporting, and ensuring the accuracy of NYSERDA's financial transactions including receipts, disbursements, income, and expenses. Peter is a member of NYSERDA's Management team and sits on many working groups. Peter has been with NYSERDA since 2000 and has been in his current position for the last seventeen years. Prior to joining NYSERDA, Peter was a Senior Auditor at the New York State Office of the State Comptroller Bureau of Municipal Affairs. Peter has also worked as a staff accountant for a Certified Public Accounting firm based out of Albany New York. Peter is a Certified Public Accountant and received a Bachelor of Science in Accounting from Utica College of Syracuse University.

Zigurts Majumdar

Ziggy Majumdar joined NYSERDA as Senior Advisor in 2020 in the Innovation Business Unit and is a member of the Advanced Buildings Team. Ziggy's responsibilities include managing projects and developing investment plans to support novel approaches that can reduce GHG emissions, improve quality of life, catalyze economic growth, and inform climate policy. Ziggy is developing new programs to improve utilization of natural working lands, biomaterials, and waste streams, and in healthy, intelligent buildings. Prior to NYSERDA, Ziggy was Director of Development at The Lighting Research Center at RPI, founded and ran his own company for over 3 years and worked for over 6 years at Booz Allen Hamilton, in Washington, DC, where he helping initiate and manage over 10 R&D programs, ranging from \$20M - \$120M per program, for US government clients such as ARPA-E, DARPA and DHS. Ziggy was a postdoctoral fellow at the National Institutes of Health in Bethesda, MD, has 3 patents and over 10 peer-reviewed scientific publications. Ziggy has a Ph.D. in physics from the University of Illinois at Urbana-Champaign and B.A. in physics from the University of Pennsylvania.

Jaime Marcotte

Jaime Marcotte is a Program Manager on the Commercial Team in Market Development. Jaime is a member of the management team for NYSERDA's FlexTech and Tech Services, REV Campus Challenge, P-12, Real Time Energy Management, Remote Energy Management, and Commercial Tenant initiatives. Jaime has a Bachelor's of Science in Civil Engineering, Masters of Business Administration and Masters of Science in Environmental Manufacturing Management from Clarkson University.

Carl Mas

Carl Mas is Director of Energy and Environmental Analysis and has responsibility for directing analysis in support of policy and program planning for NYSERDA as well as the oversight of NYSERDA's environmental research portfolio. The energy planning support includes responsibility over the Authority's efforts with respect to the Regional Greenhouse Gas Initiative and the New York State Energy Plan. Carl also oversees the state's fuels market intelligence and data collection activities, energy emergency planning, nuclear coordination program, and energy price forecasting and systems modeling. The environmental research activities include the provision of energy-related environmental accountability through analysis of long-term monitoring records and modeling as well as the evaluation of the effectiveness of energy-related environmental protection strategies to support regulatory processes. Before rejoining NYSERDA, Carl was a Manager working at Columbia University's Earth Institute, principally in charge of the Sustainable Develop Solutions Network Deep Decarbonization Pathways Project, which consisted of 15 country research teams composed of over 30 leading research institutions from countries representing 70% global greenhouse gas emissions. Carl also previously held the position of Senior Project Manager in NYSERDA's Energy Analysis group, where he managed projects and served as a policy and program advisor in the areas of renewable energy, climate change mitigation, environmental impacts of energy systems, and alternative transportation fuels. Carl also worked as a researcher at two U.S. Department of Energy National Laboratories: Sandia National Laboratory and the National Renewable Energy Laboratory; as an energy systems analyst and team leader for a start-up fuel cell company; and as a consultant for a not-for-profit international development organization focused on renewable energy policy development and market growth.

Carl received a dual Masters in Science from the University of California, Berkeley, in Mechanical Engineering and Energy & Resources.

Amy McCartin

No longer employed at the Authority.

Robert McKeon Jr.

Robert McKeon joined NYSERDA in 2009 as Web Marketing Project Manager, and in 2015 became Project Manager in the Web Operations group, responsible for the design, maintenance, and reliability of NYSERDA websites, including (but not limited to) nyserda.ny.gov, nysun.ny.gov, energyplan.ny.gov, greenbank.ny.gov, as well as other contractor administered websites. Robert works with Corporate Marketing, NYSERDA IT, and contracted technical and design resources to deliver branded content and messaging, functionality, and guidance on web related projects for NYSERDA. Prior to joining NYSERDA, Robert was Web Architect at New York Financial Management System (NYFMS) on a project team implementing an enterprise financial and supply chain management system (PeopleSoft) for all New York State agencies. Prior to NYFMS, Robert was Web Content Director at Excelsior College, working with Marketing and IT in designing a dynamic website that aided the College in exceeding enrollment goals while winning industry "Best of the Web" awards. Prior to Excelsior College, Robert was Senior Multimedia Designer at On2 Technologies (a Google company) where he created proof-of-concept multimedia demonstrations for Fortune 500 companies featuring On2's premier video codec, VP6. Prior to joining On2 Technologies, Robert was Multimedia Graphics Manager at Hearst Corporation's Times Union newspaper in Albany, NY, where he managed production of timesunion.com, leveraging and re-purposing newspaper content into the online medium while winning multiple industry journalism awards. Robert simultaneously earned both an A.A.S. degree from SUNY FIT in Advertising Design and a B.S. degree in Studio Art from SUNY Oneonta.

Jennifer Meissner

Jennifer Meissner serves as Director of Performance Management. In this role, Jennifer is responsible for measuring and evaluating NYSERDA program performance for development and provision of data and resources to support market analytics and intervention design. Jennifer is a member of the Board of Directors of the International Energy Program Evaluation Conference (IEPEC) and has held advisory and committee roles for other state, regional and national energy program measurement and evaluation organizations. Jennifer has 19 years of experience in clean energy technology, program and market evaluation and has also been involved in NYSERDA's corporate strategic planning and state energy planning activities. Her experience prior to joining NYSERDA focused on corporate environmental and sustainability strategy, including consulting. She holds a B.S. in Environmental Studies from the University of Vermont and a M.S. in Environmental Management and Policy from Rensselaer Polytechnic Institute. Jennifer is also a Certified Measurement & Verification Professional by the Association of Energy Engineers.

Andrea Mellon

Andrea Mellon is a Program Manager for the West Valley Site Management Program. Andrea is responsible for maintaining the State-Licensed Disposal Area and Retained Premises of the Western New York Nuclear Service Center in a safe manner and in compliance with all applicable

regulations, and providing management oversight to staff. Andrea also provides regulatory support in the management of hazardous waste at the West Valley Demonstration Project. Prior to joining NYSERDA, she was a scientist with West Valley Nuclear Services Co., at the West Valley Demonstration Project. Andrea holds a B.S. in Biology/Chemistry from Gannon University.

Jason Moore

Jason Moore is a Managing Director of NY Green Bank. His primary responsibilities include originating, structuring, executing, and managing investments in sustainable infrastructure projects. Prior to joining NY Green Bank, Jason held investment banking and transaction advisory positions at BBVA Compass, Nordeutsche Landesbank, and P50 Capital. He is a graduate of Mississippi State University and holds a master's degree in finance from Boston College.

Courtney Moriarta

Courtney Moriarta is the Director for NYSERDA's Single Family Residential Team. Ms. Moriarta oversees NYSERDA's Clean Energy Fund work supporting the 1-4 unit existing homes market focusing on innovative initiatives designed to promote and rapidly scale uptake of energy efficiency and clean energy options for all New Yorkers. Her team is also responsible for providing free home energy audits statewide under the state's Green Jobs Green New York Act. Ms. Moriarta previously provided consulting services to the U.S. Department of Energy supporting their residential energy efficiency programs and the Massachusetts Energy Efficiency Advisory Council supporting the Mass Save residential program portfolio. With more than 25 years experience in the residential energy efficiency and sustainability field, she is frequently called upon as a subject matter expert supporting standards development, program design, and public policy matters. She currently serves on the Consortium for Energy Efficiency's Program Advisory Council, as NYSERDA's liaison to the Board of Directors for the Building Performance Institute, and is an active member of the Northeast Energy Efficiency Partnerships' Cold Climate Air Source Heat Pump industry working group. She holds dual bachelor's degrees from the Massachusetts Institute of Technology and is a member of the American Society of Heating Refrigeration and Air Conditioning Engineers and the Association of Energy Services Professionals.

Susan Moyer

Susan B. Moyer is Director of Corporate Marketing, responsible for planning, development and implementation of the organization's marketing strategies, marketing communications, and oversees an integrated effort to effectively position NYSERDA in the market. Prior to joining NYSERDA in 2008, Susan was Senior Vice President and Director of Marketing for the Northeast Region of KeyBank N.A., where she was responsible for KeyBank's Field Marketing initiatives across the East Region. In addition, Susan was with General Electric Company ("GE") for 19 years, where, as Manager, Communications Programs, she was responsible for the design and launch of GE's Web site. Other roles in her tenure at GE included: marketing for consumer and industrial business units, strategic supplier management, management of GE's Accessibility Programs, and Communications Director for the GE Business Information Center. Susan graduated from the University of Florida with a B.S. in Advertising and Marketing.

Katherine Muller

Katherine Muller is Director of Communications and Corporate Marketing, managing the Authority's communications, marketing, consumer services and events departments. She is responsible for media relations, crisis communications, brand management, corporate marketing, social media and events management. Prior to joining NYSERDA in 2011, Ms. Muller worked for a decade at World Wrestling Entertainment ("WWE"), a global entertainment company, advancing to Senior Director of Corporate Communications. While at WWE, her responsibilities included managing corporate communications, crisis communications, and community relations programs throughout the U.S. Ms. Muller worked in corporate communications at the General Electric Company ("GE") in Fairfield, Conn. before joining WWE. She graduated from Marist College with a B.A. in Communications, and a MPA from Rockefeller College of Public Affairs and Policy at SUNY Albany.

Christopher O'Connor

Christopher O'Connor is a Program Manager overseeing the Performance Measurement & Reporting group at NYSERDA. This group provides the framework, corporate-wide, for collecting and presenting decision-quality information in support of NYSERDA's test-measure-adjust strategy. Under this framework falls regulatory reporting of all program performance as well as development & administration of web-based data visualizations for both internal and external stakeholder use. Prior to joining NYSERDA, Chris held management and operations leadership roles in Engineering and Architecture consulting firms, crossing paths with NYSERDA in areas of Solar PV, the Industrial & Process Efficiency Program, and Technical Assistance programs. Chris began his career with nearly a decade of work in the Aerospace industry, becoming a practitioner of Lean Manufacturing and Six Sigma tools. He has BS in Aerospace Engineering from the University at Buffalo, and an MBA from the University at Albany.

Peter Olmstead

Peter Olmsted joined NYSERDA as Chief of Staff in May 2019. In this position, he supports the President and CEO along with NYSERDA's Executive Team in overseeing all program and activities of NYSERDA. Prior to joining NYSERDA, Mr. Olmsted served as Assistant Secretary of Energy for Governor Andrew Cuomo, and prior to this role served as Manager of Strategic Engagement for the New York State Department of Public Service. Before joining the ranks of New York State government, Mr. Olmsted held various roles in the public and non-profit sectors to address some of the most pressing energy and environmental issues of our time. For five years, Mr. Olmsted served as East Coast Regional Director for the Vote Solar Initiative. Prior to Vote Solar, he held various positions in the mid-Atlantic, including serving as Energy Committee staff in the Delaware State Senate, Research Associate at the Center for Energy and Environmental Policy at the University of Delaware, and Policy Intern for the Energy Coordinating Agency in Philadelphia, Pennsylvania. Mr. Olmsted started his professional career at Lancaster Farmland Trust in Lancaster County, Pennsylvania as Land Preservation Coordinator. Mr. Olmsted currently serves on the Board of Director for Saratoga PLAN, located in Saratoga Springs, New York. He graduated from Skidmore College with a B.A. in Environmental Studies, and from the University of Delaware with a Masters of Energy and Environmental Policy.

Patrick O'Shei

Patrick O'Shei is the Director of Market Development at NYSERDA. He is responsible for the design and delivery of Energy Efficiency programs serving existing commercial buildings and new construction in all sectors. He also oversees the development of building energy codes, product and technical standards, and quality assurance. He is responsible for the development of new market initiatives based upon Big Data, E-Commerce and digital technologies. In his previous role as Director of Performance Management and Evaluation he was responsible for measuring and evaluating NYSERDA program performance and their impact on markets and the provision and development of data/information resources to support analytics and performance management. Prior to this position, he was the Program Manager for Quality Standards & Compliance. Prior to joining NYSERDA, Patrick held positions as a Senior Consultant for Metamorphosis Management Group, VP Operations & Finance for ESCO Energy Services, VP & COO for the Kripalu Center for Yoga and Health. He has 15 years of experience in corporate quality management and operational excellence and 15 years of teaching experience in the fields of management and mathematics at SUNY Empire State College. Patrick holds a B.S. in Paper Science & Engineering from the SUNY College of Environmental Science & Forestry and an M.S. in Applied & Mathematical Statistics from the Rochester Institute of Technology.

Mary Peck

Mary Peck was appointed as the Director of Internal Audit for NYSERDA on June 27, 2018. In this position, Mary is responsible for managing all aspects of the execution of the annual audit plan, reviewing operations to assure compliance with management policies, governance processes, and the effectiveness of internal controls. Throughout her career, she has earned a reputation at both the state and national level as an expert and leader in developing and promoting strong systems of governance, risk, and controls. In 2004, the NYS Division of the Budget, in conjunction with the Office of the State Comptroller, created an interagency task force to address both internal audit compliance issues, as well as to provide compliance guidance on the broader internal control requirements of the NYS Internal Control Act. In support of that effort, Mary was chosen as the Task Force Co-Chair and was asked to present on the final report and the NYS model at an audit symposium in South Korea. Mary serves on the Board of Governors for the Institute of Internal Auditors and the New York State Internal Control Association. Prior to her appointment at NYSERDA, Mary served as the Director of Internal Control for NYS OPWDD, was a Senior Auditor for the New York ISO, a not for profit organization responsible for monitoring the statewide electrical power grid and held various positions within the Office of the State Comptroller. Mary graduated summa cum laude with a BBA in Accounting from Siena College. She is a Certified Internal Auditor and holds various other risk and audit designations

Alyse Peterson

Alyse Peterson is Senior Advisor for Nuclear Coordination and Radioactive Waste Policy at NYSERDA. In this role, she serves as the State's Liaison Officer (SLO) Designee to the U.S. Nuclear Regulatory Commission (NRC) and as the State's nuclear coordinator. As SLO Designee, she is the primary communication channel between the State and the NRC. As State nuclear coordinator, she works closely with the New York State Departments of Public Service, Health, Environmental Conservation, and Homeland Security & Emergency Services on all state activities related to atomic energy. She serves as a member of the Indian Point Closure Task Force. She is the State's representative to the national Low Level Radioactive Waste Forum on which she has

long served in a leadership role, currently as Past-Chair. Alyse came to NYSERDA from the New York State Department of Environmental Conservation (DEC) where she served as a Senior Environmental Engineer and was responsible for environmental contaminant investigation & remediation under CERCLA, and RCRA waste management & beneficial use practices, among other issues. Alyse holds an Bachelor of Science degree in Environmental Engineering from Rensselaer Polytechnic Institute and is a licensed Professional Engineer.

Ashley Porubcan

Ashley Porubcan was named as Program Manager for the Operational Transformation & Lean team in 2017. In this role, she leads a team that engages in a range of initiatives to expand impact, build new capabilities, improve customer and partner interfaces, improve responsiveness, reduce cycle times, streamline and enable internal workflow, support reporting and managerial decision-making, manage risk, and reduce cost. Additionally, the Operational Transformation and Lean Unit serves as an internal consultancy that supports projects in partnership with programmatic and functional units to improve the way NYSERDA does business for their customers and contractors. Ashley has over 10 years of service at NYSERDA and has served in the roles of Business Analyst, Project Manager, and Project Coordinator for various teams. Ashley holds a Bachelor of Science in Business & Technology Management from Clarkson University and a Master of Business Administration from the University at Albany.

Donna Rabito

Donna Rabito is Director of Human Resources and is responsible for providing overall strategic human resource leadership to the organization by overseeing the development and implementation of human resources policies, programs and services. Prior to joining NYSERDA in January 2013, Donna served as Associate Director of Human Resources for Albany Medical Center; Human Resources Manager for Albany Molecular Research, Inc.; and Manager of Human Resources for Laberge Engineering and Consulting Group. Donna holds a B.S. in Marketing from SUNY New Paltz, an M.B.A. in Human Resources/Information Systems from the University at Albany, and is a certified Senior Professional in Human Resources.

Sarah Rambacher

Sarah Rambacher is a Program Manager for the Shared Services team at NYSERDA, a team charged with centralizing common administrative process across the Authority, to reduce overall administrative costs, streamline and standardize processes, and deliver continuous improvement opportunities. Sarah joined NYSERDA in 2012 and has held a variety of positions at NYSERDA over the last six years, including Project Manager in the Industrial & Process Efficiency Team and Business Analyst in the Operational Transformation and Lean Team. Sarah is also a Certified Empire Belt in the New York State Lean Initiative. Sarah holds a Bachelor of Business Administration with a Major in International Business from Loyola College and a Minor Equivalent in Mandarin Chinese from Johns Hopkins University.

Michael Reed

Michael Reed is a Program Manager on the Commercial Market Development team. As the team lead for commercial programs in New York City, Michael helps lead programs focused on accelerating the adoption of smart building technology and services, as well as addressing barriers preventing the adoption of energy efficiency in commercial tenant spaces. Prior to joining

NYSERDA in May of 2017, Michael led clean energy programs for Groundswell, a DC based clean energy nonprofit. Michael also served for three years in the Peace Corps in Peru. Michael holds a B.A. from the University of California, San Diego, and an M.P.A from the NYU Wagner School of Public Service.

Priscilla Richards

Priscilla Richards, LC is a Program Manager and leads NYSERDA's Codes Team. She is responsible for managing a team of staff and consultants, focusing on three key energy code strategies to reduce carbon impacts of buildings: advancing energy codes, improving code compliance, and increasing and streamlining enforcement. During her career at NYSERDA, she has led or implemented energy efficiency and market transformation initiatives totaling over \$350 million, primarily targeting the commercial sector. She holds a Lighting Certified credential from the National Council on Qualifications for the Lighting Professions. Prior to joining NYSERDA, Priscilla was a project manager with the New York State Energy Office, and worked as an engineer for Kallen and Lemelson, Consulting Engineers, LLP. Priscilla has a Bachelor of Science in Electrical Engineering from Rensselaer Polytechnic Institute and a Master's degree in Public Affairs from SUNY Albany.

Adam Ruder

Adam Ruder is the Program Manager for NYSERDA's Clean Transportation group. The Clean Transportation group focuses on developing and demonstrating new technologies, policies, and business models that support three key focus areas: electric vehicles, public transportation, and mobility management. Adam has led the implementation of Gov. Cuomo's ChargeNY initiative to advance electric vehicle adoption in New York State and he closely collaborates with other states and the federal government to jointly advance EV policies and programs. Before joining NYSERDA in 2008, Adam received a Master in Public Policy degree from the John F. Kennedy School of Government at Harvard University.

David Sandbank

In November 2014 David Sandbank joined NYSERDA to run New York State's \$1 billion NY-Sun initiative and has overseen the largest year-over-year growth of solar in New York State. In addition, Sandbank led the design and launch of a comprehensive Community Solar program to reduce the over-all cost of solar in the State and enable access to solar for all New Yorkers along with Solarize, Affordable Solar and K-Solar. Prior to joining NYSERDA, Sandbank worked as a solar developer, helping a start-up grow into a \$30 million company. Sandbank helped build a staff of more than 100 and oversaw company operations, marketing, engineering and installation teams. In November 2013, Sandbank was elected vice president of the New York Solar Energy Industries Association to actively work with government agencies, policy makers and utility companies to help advance the solar industry in New York.

Erich Scherer

As Senior Advisor for Energy and Environmental Analysis, Erich Scherer's role focuses on providing policy advice and developing underpinning analysis on key New York State clean energy strategies. In doing so, Erich works closely with teams across NYSERDA as well as policy leads at the Department of Public Service. Erich leads on EEA's capability to analyze clean energy technology cost, value and resource availability. Recent projects include New York's Clean

Energy Standard, Renewable Heating and Cooling Policy Framework and Offshore Wind Master Plan. Erich's career in the energy sector spans almost fifteen years. Prior to arriving at NYSERDA in 2015, he worked in the private sector as a financial services advisor for solar PV, biomass heat and energy efficiency in London and Philadelphia. He started his career in the energy sector at the UK Government Department of Energy and Climate Change, where he was one of the authors of the UK Renewables Strategy as well as key renewables policies including the Renewables Obligation, Feed-in Tariffs and the Renewable Heat Incentive. At the European Commission in Brussels, he was one of the designers of the 2009 Renewables Directive, which sets mandatory 2020 targets driving renewable energy policy efforts across the European Union. Before joining the energy sector, Erich practiced law for five years, specializing in corporate and finance law. He holds Masters degrees in Law from the University of Oxford and the Free University of Amsterdam.

Kimberlie Schryer

Kimberlie Schryer is the Program Manager for Residential Data Analysis and Systems Planning. Kim is responsible for data analytics to better determine contractor training needs, improve project and business-level performance and scale residential energy efficiency. She represents New York on several nationally recognized data standards working groups and facilitates standards practice in IT systems planning for new NYSERDA initiatives. Previous NYSERDA responsibilities have spanned several public benefit commercial and residential incentive and training programs and quality assurance. Kim joined NYSERDA in 2002, bringing 15 years of experience with Fortune 500 organizations, including Oracle Corporation and General Electric, focused on change management. She is a Chemical Engineer from the University of Louisville and also has an MBA from Union College in Schenectady, NY.

Michael Shimazu

Michael Shimazu serves as NYSERDA's Senior Advisor for Business Growth and Innovation. In this capacity, Mike is responsible for managing several programs that support research and innovation across the spectrum of clean energy technologies, including launching the 76West Clean Energy Competition, and advises NYSERDA teams regarding technology commercialization. During his 8 years at NYSERDA, he launched and managed the nationally-recognized Clean Energy Business Incubator program, began a venture mentoring service, and initiated outreach to venture, corporate, and impact investors to support early-stage clean energy companies in New York State. Previously, Mike was a co-founder and Vice-President of Molecular OptoElectronics Corporation (venture-backed startup company), a business development executive at Rensselaer Polytechnic Institute and the University at Albany, and the principal of Industrial Physics Group, a successful technology business development consultancy. Mike received a B.S from the Massachusetts Institute of Technology and M.S. from Rensselaer. He holds three U.S. patents.

Scott Smith

Scott Smith is a member of the Clean Heating and Cooling Team which develops and executes strategies to scale the renewable heating and cooling market in New York State including: ground source and air source heat pumps, solar thermal and biomass. Prior to joining NYSERDA, Scott worked as an environmental consultant for Dames & Moore on the clean-up of PCBs at the former General Electric Company transformer manufacturing facility in Hudson Falls. He has a

Bachelor's degree in Chemical Engineering from Worcester Polytechnic Institute and a Master's Degree in Chemical Engineering from the University of Oklahoma.

Bradford Tito

Bradford Tito serves as Program Manager for Communities and Local Government at NYSERDA. Brad works with communities across the state to save energy and improve the environment. His role is to package and promote innovative and responsive clean energy offerings that resonate with local governments and the nearly 20 million people they serve. Prior to joining NYSERDA in 2015, Brad served as Director of Sustainability for the City of Yonkers, NY where he led a number of high-profile initiatives including an award-winning LED streetlight project, the establishment of mandatory green building standards, and the replacement of 500 windows in historic Yonkers City Hall. Brad also served as the Director of Environmental Coordination for Nassau County, NY where he worked for five years implementing a broad range of environmental and health initiatives. Brad holds a master's degree in Urban Policy Analysis and Management from the New School University and a bachelor's degree in Sustainable Development from Prescott College in Arizona.

Brian Treanor

Brian Treanor is Assistant Controller and oversees accounting operations including accounts payable, billing/accounts receivable, and payroll. Brian is also primarily responsible for the preparation of quarterly and annual financial statements, and is the principal lead for the Authority's independent financial statement audit. Brian also maintains the Authority's system for budgetary control over public funds and is responsible for various internal and external program financial reports. Brian has been with NYSERDA for 14 years. Brian is a Certified Public Accountant with a B.S. in Accounting from the State University at Albany. Brian's 12 years of prior professional experience included work for international CPA firm KPMG as an auditor, and employment as a Director of Accounting and Decision Support for a community hospital system.

Stanley D. Trybulski

Stan Trybulski is the Director of Market Insights, where he and his team ensure NYSERDA's programs and strategies are rooted in actionable insights about the economics and decision making of customers, partners and markets where NYSERDA operates. Market research and analytics is foundational to NYSERDA's work to inform and develop strategies that overcome market barriers, and animate the market to increase the scale and adoption of clean energy. Prior to joining NYSERDA in May of 2016, Stan spent over 15 years as a clean energy private equity investor, investment banker and management consultant at such firms as Good Energies, Morgan Stanley and Marakon Associates. Throughout his career, Stan has conducted extensive company due diligence, market analysis and insight generation across clean energy markets. Stan holds a bachelor's degree in Politics from Princeton University and an MBA from Columbia University.

Kelly Tyler

Kelly Tyler is the Director of the Communities and Local Government Department at NYSERDA where she leads a team that engages, collaborates and partners with municipalities and community stakeholders to proactively address local energy and economic development needs with market-oriented clean energy strategies. Under her leadership, the department administers the Clean

Energy Communities, Community Energy Engagement and Cleaner, Greener Communities Program. Additionally, she serves as Manager of the Buffalo Regional Office. Prior to NYSERDA, Kelly worked for the Buffalo Niagara Partnership as Manager of Business and Workforce Development where she administered business growth and advocacy efforts through a 160-member manufacturers group; and at the Amherst Chamber of Commerce as Vice President of Operations. Kelly holds a Masters of Business Administration from Medaille College and a Bachelor of Arts in Public Communication and English from Buffalo State College.

Vanessa Ulmer

Vanessa supports NYSERDA's Energy and Environmental Analysis group as a member of the Policy Development Team. Vanessa's current portfolio focuses on statewide energy efficiency policy and the Reforming the Energy Vision (REV) regulatory process. She is a member of the core NYSERDA and Department of Public Service team which developed a 2025 statewide energy efficiency target and plan for NYS, and which is now advancing implementation efforts. Vanessa joined NYSERDA in 2012, initially supporting the Authority's commercial programs. Prior to NYSERDA, Vanessa's career focused on public policy analysis and advocacy across the fields of public health, urban policy, sustainable development, and international trade. She worked previously for a Tulane University health research center, for the Carnegie Endowment for International Peace, and for a transatlantic think tank. Vanessa holds a Master in Public Affairs from Princeton University and a BS in Policy Analysis and Management from Cornell University.

Matthew Vestal

Mr. Vestal is Senior Advisor for NYSERDA's Large-Scale Renewables Team, leading various State efforts related to achieving New York's goals of 9 GW of offshore wind by 2035 and 70% renewables by 2030. His position focuses on providing commercial and technical guidance for policies and frameworks that underpin New York's clean energy strategies. Prior to NYSERDA, Mr. Vestal was an associate at Capital Dynamics, a market-leading investor in land-based renewables and conventional fuel technologies where he supported deal origination, transaction underwriting, and asset management. Prior to Capital Dynamics, Mr. Vestal was an analyst at GE Energy Financial Services where he worked in project development and fixed-income underwriting. Mr. Vestal holds a bachelor's degree in engineering physics from the University of Kansas.

John Williams

John Williams is Vice President of Policy and Regulatory Affairs and has responsibility for overall policy and planning guidance for NYSERDA. In this role, John leads the Authority's efforts with respect to the New York State Energy Plan. He engages the Authority's Energy and Environmental Analysis and Government Affairs functions, as well as the Performance Management and program evaluation functions of the Authority. In his previous role with NYSERDA, John served as Director of Energy Analysis and as Deputy Counsel. Prior to joining NYSERDA, John served as Energy Counsel for the New York State Assembly; was a Staff Attorney for The Energy Project of the Pace University School of Law; and also worked as a Financial Analyst for the Public Service Company of New Mexico, a combined electric and natural gas utility company serving the largest markets in the state of New Mexico. John serves as the designated alternate for NYSERDA on the NYS Board on Electric Generation Siting and the

Environment, and also serves on the Board of Directors for the National Association of State Energy Officials. John has a B.A. in History from Columbia University, a J.D. from St. John's University School of Law, and an LL.M. in Environmental Law from Pace University School of Law. John is a Member of the Bar of the states of New York and New Jersey.

Andrew Zielinksi

Andrew Zielinski is an Advisor for the Large-Scale Renewables (LSR) team. In this role, Andrew focuses on New York Independent System Operator (NYISO) activities including participation in the shared governance process, transmission related issues with the NYSERDA renewable portfolio, and technical studies in collaboration with the Energy and Environmental Analysis group. Andrew supports the LSR team on topics related to transmission, NYISO activity and various other technical issues. Prior to joining NYSERDA, Andrew worked at the NYISO in the Transmission Studies group as a Planning Engineer . Andrew has a Bachelor of Science in Electrical Engineering with a focus in Power Systems from Clarkson University and a Masters of Business Administration from the College of Saint Rose.

RESOLVED, that the Authority's compensation schedule presented at this June 22, 2020 meeting is hereby recommended for approval by the Board as the compensation schedule to be submitted pursuant to Section 2800 of the Public Authorities Law; and

BE IT FURTHER RESOLVED that the attached vitae are recommended for approval by the Board for submission under Section 2800 of the Public Authorities Law.

ANNUAL CONFIDENTIAL BOARD MEMBER EVALUATION

To be provided under separate cover

Resolution	No.	

RESOLVED, that pursuant to Section 108 of the Public Officers Law and Section 2800 of the Public Authorities Law, the Members of the Governance Committee shall convene in private session on June 22, 2020 for the purpose of reviewing the Annual Confidential Board Member Performance Evaluation of the Authority.



ANDREW M. CUOMOGovernor

RICHARD L. KAUFFMAN Chair **ALICIA BARTON**President and CEO

NOTICE OF MEETING AND AGENDA

June 9, 2020

TO THE MEMBERS OF THE AUDIT AND FINANCE COMMITTEE:

PLEASE TAKE NOTICE that the one hundred forty-fourth (144th) meeting of the AUDIT AND FINANCE COMMITTEE of the New York State Energy Research and Development Authority will be held via video conference, on Tuesday, June 23, 2019, commencing at 10:00 a.m., for the following purposes:

- 1. To consider the Minutes of the 143rd meeting held on April 28, 2020.
- 2. To consider and act upon a resolution recommending approval of the Annual Investment Report of the Authority and the "Investment Guidelines, Operative Policy and Instructions (June 2020)."
- 3. To consider and act upon a resolution recommending approval of the Annual Investment Report for the NYSERDA OPEB (Other Post-Employment Benefits) Trust for the year ended March 31, 2020 and the "Investment Policy Statement for the NYSERDA OPEB Trust (June 2020)."
- 4. To receive the Financial Statements of the Authority and NY Green Bank for fiscal year 2019-2020.
- 5. To consider and act upon a motion to enter into executive session for the purpose of reviewing the financial condition of the Authority.
- 6. To consider and act upon a resolution recommending approval of the Financial Statements of the Authority and NY Green Bank for fiscal year 2019-2020.
- 7. To consider and act upon a resolution recommending approval of the appointment of the Authority's independent auditors for fiscal year 2020-2021.
- 8. To consider and act upon a resolution recommending approval of an annual bond sales report.

(F) 518-862-1091

- 9. To consider and act upon a resolution recommending approval of the Audit and Finance Committee Charter.
- 10. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting via the video conference which can be accessed at https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

Sara L. LeCain

Sara J. Le Ci

Secretary to the Audit and Finance Committee

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

FY 2019-20 ANNUAL INVESTMENT REPORT

A. EXPLANATION OF INVESTMENT GUIDELINES

Public Authorities Law Section 2925 provides that the investment guidelines of a public authority shall set forth, among other things:

- a detailed list of permitted investments;
- what types of investments shall be secured with collateral and to what extent;
- what types of investments shall be made pursuant to written contracts;
- how collateral shall be valued and monitored;
- standards for diversifying types of investments and for qualifying and diversifying firms with which business is transacted;
- requirements for Board verification of matters relating to investments;
- provisions for annual independent audit of all investments; and
- provisions for preparing and filing quarterly and annual investment reports.

The Guidelines explicitly require the Board to determine whether results are consistent with objectives, to review the independent audit of investments, to review the program for consistency with statutory requirements, and to verify collateral semi-annually (at least once on an unscheduled basis). The Guidelines permit delegation of these functions through the Audit and Finance Committee to the Authority's independent auditors.

The Guidelines provide that, where practicable, the Members shall review and approve at the June meeting an annual investment report and the investment guidelines.

B. AMENDMENTS

The Investment Guidelines were last approved by the Members at the June 2019 meeting. No amendments to the investment guidelines were made during the year.

C.	INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTION
	Following is the Investments Guidelines, Operative Policy and Instruction as of June 2019.

INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS (June 2019)

I. Introduction

These guidelines set forth the policy of the New York State Energy Research and Development Authority (hereafter "the Authority") and instructions to its officers and staff with regard to its investments and the monitoring and reporting of these investments. The guidelines are intended to meet or exceed the provisions of Public Authorities Law (hereafter, "PAL") Section 2925, the Office of the State Comptroller's Investment Guidelines for Public Authorities contained in 2 NYCRR Part 201, Section 201.3, and the provisions of the Authority's enabling legislation concerning Authority investments. In accordance with PAL Section 2925, the guidelines will be reviewed, revised, if necessary, and approved as frequently as necessary and appropriate, but not less frequently than annually, in the manner described hereafter.

The provisions of these guidelines apply to all monies for which the Authority is responsible for directing investment. This includes monies to which the Authority has legal title and which are held by the Commissioner of Taxation and Finance as fiscal agent of the Authority (PAL Section 1859(1)). It also includes monies to which the Authority does not have legal title, but for which it is responsible for directing investment such as monies held by the trustee for the State Service Contract Revenue (West Valley) Bonds.

The Authority conducts a Private Activity Bond Financing Program. Pursuant to this program, tax-exempt non-recourse securities are issued by the Authority, and the proceeds are made available to State utilities and other non-State entities to finance eligible projects. These securities do not constitute a debt of or charge against the credit of the Authority or the State. Rather, the utility or other entity for which the securities are issued is liable for payment of the principal, redemption premium, if any, and interest on the securities. The proceeds of each issuance are deposited with a trustee chosen by the participating utility or other entity and are not available for investment by the Authority. Generally, the Indenture of Trust for the transaction will contain a list of securities in which the Trustee may invest these monies. The list of permitted investments is approved by the Commissioner of Taxation and Finance as part of the Commissioner's review pursuant to the enabling legislation of the Authority. Investments are made at the direction of the participating utility or other entity and not at the direction of the Authority. Accordingly, the provisions of these Investment Guidelines do not apply to the investing of these monies. Nonetheless, when participating in the formulation of these financing transactions, staff are directed to pursue the objectives set forth in the Investment Guidelines and to require that prudent provisions as to permitted investments, collateral requirements and investment monitoring be included in the underlying documents, as appropriate.

II. Definitions

"Broker-Dealer" means any government bond trader approved by the Commissioner of Taxation and Finance reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York.

"Custodian" means the Commissioner of Taxation and Finance, or a bank, trust company or national banking association designated or approved to hold securities on behalf of or for the benefit of the Authority, as trustee or otherwise.

"Eligible Banking Institution" means any bank, trust company, or national banking association approved by the Commissioner of Taxation and Finance doing business through offices located within New York State. For the State of New York's Excelsior Linked Deposit Program only, Eligible Banking Institution shall also include savings and loan institutions.

"Federal Governmental Obligations" means obligations of the United States and obligations the principal and interest of which are unconditionally guaranteed by the United States.

"Repurchase Agreement" means a written contract whereby the Authority purchases securities, and the seller of the securities agrees to repurchase the securities at a future date for a specified price. Repurchase

Agreements may be used to purchase only Federal Government Obligations. The Authority may enter into a Repurchase Agreement only with an Eligible Banking Institution or a Broker-Dealer.

"Money Market Fund" means shares of a diversified open-end management investment company, as defined in the Investment Company Act of 1940, registered under the Federal Securities Act of 1933, and operated in accordance with Rule 2a-7 of the Investment Company Act of 1940 as a "Government Money Market Fund" (investing at least 99.5 percent of its total assets in cash, Government Securities, and and/or Repurchase Agreements that are fully collateralized), provided that it is rated in the highest rating category by at least two nationally recognized rating organizations, and provided that it does not impose any liquidity fees or suspend redemptions as provided thereunder.

III. Investment Objectives

The investment objectives of the Authority, listed in order of importance, are as follows: to conform with all applicable Federal, State and other legal requirements; to safeguard adequately investment principal; to earn reasonable rates of return; and to provide for portfolio liquidity. These investment objectives will likely be achieved through substantial reliance on Federal Governmental Obligations and minimal investment in long-term securities.

IV. Delegation of Authority

The responsibility for implementing the investment program is delegated to the Authority's Treasurer. All investment transactions shall be approved and authorized by the Treasurer or, in his/her absence the Controller and Assistant Treasurer, or any Officer of the Authority. Such authorized investment transactions shall be initiated and executed by the Commissioner of Taxation and Finance (or his/her authorized designees), the Authority's fiscal agent established pursuant to Section 1859 of the Public Authorities Law. The Treasurer shall establish written procedures for the operation of the investment program consistent with these Investment Guidelines. Such procedures shall include an internal control structure to provide a reasonable level of accountability over the authorization, recording and reporting of investment transactions, and to provide for a segregation of duties between authorization and accounting functions.

Investments shall be made in accordance with the Authority's Investment Guidelines, Operative Policy and Instructions using the judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the objectives set forth herein. All Authority staff participating in the investment process shall act responsibly as custodians of the public trust and shall avoid any transaction that might impair public confidence in the Authority's ability to effectively fulfill its responsibilities. All participants involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

V. Types of Investments Authorized

The Authority may deposit monies in demand deposit (checking) and time deposit (savings) accounts with Eligible Banking Institutions located in New York State. Monies deposited in such accounts shall be fully secured as soon as practicable by Federal Deposit Insurance Corporation (FDIC) insurance or obligations of New York State or Federal Government Obligations, subject to approval of the Commissioner of Taxation and Finance, the Authority's fiscal agent, in consultation with the Authority.

Investments shall be limited to the following types of securities:

- (1) Federal Governmental Obligations, provided that the term of each shall not exceed five (5) years;
- (2) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State, provided that the term of each shall not exceed five (5) years;
- (3) certificates of deposit of Eligible Banking Institutions located in New York, provided that: the term

of each shall not exceed five (5) years; pursuant to the limitations of a resolution adopted by the Members in June 1994, the Authority may invest in certificates of deposits through the State of New York's Excelsior Linked Deposit Program, whereby the Authority's deposit will earn a fixed rate of interest equal to 2% to 3% less than the institution's published certificate of deposit rate consistent with this program's criteria; and subject to all other provisions outlined in these Guidelines.

- (4) Repurchase Agreements, provided that the term of each shall not exceed sixty (60) days and that no more than 40 percent of the Authority's total investments shall be invested in Repurchase Agreements at the time of purchase; and
- (5) Money Market Funds, provided that no more than 20 percent of the total amount of the Authority's investments shall be invested in Money Market Funds for more than 15 consecutive days.

Nothing herein contained shall preclude the Authority from imposing further restrictions on the investing of funds in any Indenture of Trust relating to the issuance of bonds.

VI. Authorized Financial Institutions and Dealers

Eligible Banking Institutions and Broker-Dealers authorized for the Authority's investment purposes shall be approved based upon policies and procedures established by the Commissioner of Taxation and Finance. The Authority will periodically consult with the Department of Taxation and Finance concerning their policies, practices and the resulting list.

VII. Diversity of Investments

To the extent practical, the Authority shall diversify its investments by financial institution, by investment instrument, and by maturity. The cash flow requirements of the Authority will be a significant determining factor in selecting the term of investment securities. Competitive quotations, pursuant to policies established by the Commissioner of Taxation and Finance and executed by his/her designated staff, shall be used to select the institution from which investments are purchased.

Except as otherwise required by any policies and practices of the Commissioner of Taxation and Finance, the Authority shall not invest more than 35 percent of its total investment portfolio with a single Eligible Banking Institution.

VIII. Collateral and Delivery of Securities

Collateral for investments shall be limited to: (i) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State; and (ii) Federal Governmental Obligations. The Authority shall not accept a pledge of a proportionate interest in a pool of collateral. Collateral shall be segregated in the name of the Authority, and shall be in the custody of the Authority or a third party Custodian pursuant to a written custodial agreement; provided, that if the Custodian is the Commissioner of Taxation and Finance, a written custodial agreement shall not be required. The written custodial agreement shall specify circumstances, if any, under which collateral may be substituted, and shall provide that the Custodian holds the collateral solely for the benefit of the Authority and makes no claim thereto. The market value of collateral and accrued interest, if any, shall equal or exceed the value of the secured investment and accrued interest, if any, at all times. Collateral shall be marked to market at the time of the initial investment and, thereafter, no less frequently than monthly using the bid or closing price as quoted in The Wall Street Journal.

In addition to collateral permitted for investments, collateral for deposits made with banks participating in the State's Excelsior Linked Deposit Program shall, subject to the discretion of the Commissioner of Taxation and Finance with confirmation to the Authority, include obligations permitted under Section 105 of the State Finance Law.

Certificates of deposit, demand deposits and time deposits shall be fully collateralized for amounts in excess of Federal Deposit Insurance Corporation (FDIC) coverage.

Securities purchased through a Repurchase Agreement shall be marked to market at least monthly.

Collateral shall not be required with respect to the purchase of obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, or money market funds.

Under any Repurchase Agreement, payment shall be made by or on behalf of the Authority to the seller upon the seller's delivery of obligations of the United States to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the obligations of the United States are credited to the Custodian's Federal Reserve Bank account. Payment shall be made by or on behalf of the Authority for obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, certificates of deposit, and other purchased securities upon the delivery thereof to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the purchased securities are credited to the Custodian's Federal Reserve System account.

IX. Written Contracts

The Authority has determined that, with the exception of Repurchase Agreements, written contracts are not a regular business practice for the types of securities (obligations of New York State, Federal Governmental Obligations, etc.) in which Authority monies may be invested. The interests of the Authority will be adequately protected by conditioning payment by or on behalf of the Authority on the physical delivery of purchased securities to the Authority or its Custodian, or, in the case of book-entry transactions, on the crediting of purchased securities to the Custodian's Federal Reserve System account. In addition, all purchases will be confirmed in writing to the Authority.

Only an Eligible Banking Institution or a Broker-Dealer shall be qualified to enter into a Repurchase Agreement with the Authority's fiscal agent. The Authority's fiscal agent shall enter into a Master Repurchase Agreement, patterned after the Bond Market Association (formerly Public Security Association) model master repurchase agreement, with each Eligible Banking Institution or Broker-Dealer with which the fiscal agent enters into a specific Repurchase Agreement. The Master Repurchase Agreement shall include:

- (a) a description of the relationship of the parties as purchaser and seller;
- (b) a description of the events of default which would permit the purchaser to liquidate the pledged collateral;
- (c) procedures which ensure that the Authority obtains a perfected security interest in the underlying securities; and
- (d) the method of computing margin maintenance requirements, including a limitation, based on policies established by the Commissioner of Taxation and Finance, that securities purchased and held as collateral for repurchase agreements shall be Federal Government Obligations maturing in twelve years or less, and provided that: (i) if such collateral has a maturity of seven years or less, the market value must equal or exceed 101% of the par value of the repurchase agreement; and (ii.) if such collateral has a maturity greater than seven years, the market value must equal or exceed 102% of the par value of the repurchase agreement.

X. Qualification of Custodians

The following shall be qualified to act as Custodian: the Commissioner of Taxation and Finance, any bank or trust company chartered by the State of New York which is not a member of the Federal Reserve System, or any bank, trust company, or national banking association which is a member of the Federal Reserve System, including an Eligible Banking Institution, which transacts business through offices located within the State of New York. During the time that any bank or trust company serves as Custodian, it must be rated at least "A", or its equivalent, by a nationally recognized independent rating agency. With respect to the holding of securities purchased by the Authority through a Repurchase Agreement, the Custodian may not be the Eligible Banking Institution with which the Authority or its fiscal agent has

entered into such Repurchase Agreement, nor an agent of such Eligible Banking Institution for purposes of the Repurchase Agreement.

XI. Audit and Finance Committee

The functions of the Audit and Finance Committee with respect to investments are to:

- (a) monitor the system of internal controls;
- (b) verify relevant matters relating to securities purchased or held as collateral semi-annually and on an unscheduled basis;
- (c) determine whether the investment results are consistent with the investment objectives set forth in these Investment Guidelines;
- (d) review any independent audits of the investment program;
- (e) review these Investment Guidelines periodically and recommend to the Members of the Authority such amendments thereto as may be necessary or appropriate; and
- (f) evaluate systematically and periodically the investment program consistency with the provisions of PAL Section 2925, these Investment Guidelines, and the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3).

In support of its functions, the Audit and Finance Committee shall:

- (a) require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under Government Auditing Standards issued by the Comptroller General of the United States;
- (b) review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate;
- (c) review the written annual audit report of the independent auditors;
- (d) discuss with the independent auditors, with staff and officers not present, the results of the annual independent audit and the written annual audit report; and
- (e) review not less frequently than annually these Investment Guidelines, and recommend to the Members of the Authority such changes in these Investment Guidelines as it deems necessary or appropriate.

XII. Operations and Procedures

The Treasurer, or in his/her absence the Controller and Assistant Treasurer or any Authority Officer, shall authorize the purchase and sale of all securities, authorize the disbursement of funds for delivery of securities, determine the selection of brokers, dealers and Custodians, and execute contracts for Repurchase Agreements and custodial services on behalf of the Authority. The process of initiating, reviewing and approving requests to purchase and sell securities shall be documented and retained for audit purposes. Oral directions concerning the purchase or sale of securities shall be confirmed in writing. The Authority shall pay for purchased securities upon the delivery or book-entry thereof, and the Authority will obtain written confirmation of each delivery or book-entry. Custodians must have prior authorization from the Authority to deliver securities and collateral and shall not deliver securities except upon receipt of funds. Custodians shall confirm in writing all such transactions. Custodians shall report whenever activity has occurred in a custodial account of the Authority.

The Treasurer shall develop detailed investment procedures implementing the Investment Guidelines as part of the Accounting Policy and Procedures Manual which shall include, but not be limited to, the following:

- (a) the establishment and maintenance of a system of internal controls for investments;
- (b) methods for adding, changing or deleting information contained in the investment record, including a description of the documents to be created and verification tests to be conducted;
- (c) a data base or record incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices and related information necessary to manage the portfolio; and
- (d) requirements for periodic reporting and a satisfactory level of accountability.

Except in the purchase of government securities at their initial auction, the Authority will encourage investment selections utilizing competitive quotations based upon the procedures established by the Commissioner of Taxation and Finance and carried out by his/her designated personnel.

The Treasurer shall maintain a record of investments. The record shall identify each security, the fund for which held, the place where kept, date of disposition and amount realized, and the market value and Custodian of the collateral.

At least monthly, the Authority shall verify the principal amount and market values of all investments and collateral. The Authority shall obtain appropriate listings from Custodians and compare such listings against the records of the Authority.

XIII. Audit

At the time the independent auditors to the Authority conduct the annual audit of the accounts and financial affairs of the Authority, the independent auditors shall audit the investments of the Authority for the subject fiscal year. The annual investment audit shall determine whether:

- (a) the Authority's investment practices and operations have been consistent with the provisions of PAL Section 2925, these Investment Guidelines, the Office of the Comptroller's Investment Guidelines for Public Authorities, and the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (b) adequate accounts and records are maintained which accurately reflect all transactions and report on the disposition of the Authority's investment assets; and
- (c) a system of adequate internal controls for investments is maintained.

The independent auditors shall prepare a written annual audit report which presents the results of their annual investment audit, and shall include:

- (a) a description of the scope and objectives of the audit;
- (b) a statement that the audit was made in accordance with generally accepted government auditing standards;
- (c) a description of any material weaknesses found in the internal investment controls;
- (d) a description of all non-compliance with provisions of PAL Section 2925, these Investment Guidelines, the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3), or the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;

- (e) a statement of positive assurance of compliance on the items tested; and
- (f) a statement of any other material deficiency or finding identified during the audit not covered in (e) above.

XIV. Reporting

Within sixty (60) days of the end of each of the first three quarters of the Authority's fiscal year, the Treasurer shall prepare and submit to the Members of the Authority and to the Audit and Finance Committee of the Authority a quarterly investment report which indicates new investments, the inventory of existing investments, the selection of Custodians and Broker-Dealers, and such other matters as the Treasurer deems appropriate.

Within 120 days of the end of the fiscal year, the Treasurer shall prepare and submit to the Audit and Finance Committee an annual investment report, which shall include the Investment Guidelines, including any amendment to the Investment Guidelines since the last annual investment report; an explanation of the Investment Guidelines and amendments; the results of the annual independent audit; the investment income record; a list of total fees, commissions or other charges paid to each Broker-Dealer and Custodian; and such other matters as the Treasurer deems appropriate.

The Members of the Authority shall review and approve the annual investment report, if practicable, at the June meeting of the Authority, for submission thereof to the Division of the Budget, the Department of Audit and Control, the Senate Finance Committee, and the Assembly Ways and Means Committee.

The Authority's annual financial statements shall report the Authority's investments and provide such disclosure information as is required by applicable governmental accounting standards.

Not less frequently than annually, and if practicable, at the June meeting of the Authority, the Members of the Authority shall review, amend, if necessary or appropriate, and approve these Investment Guidelines.

The provisions of these Investment Guidelines and any amendments hereto shall take effect prospectively and shall not invalidate the prior selection of any Custodian, Broker-Dealer, any prior investment, nor any list of permitted investments set forth in any indenture of trust or similar document previously executed by the Authority.

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D. INVESTMENT SUMMARY AS OF MARCH 31, 2020

Following is summary and detail of the Authority's investments as of March 31, 2020

3/31/2020 Market Value 67,654,739 47,020,659 57,539,271 67,551,470		3/31/2019 Market Value 29,615,142 27,808,312 53,535,651	Decrease	
Market Value 67,654,739 47,020,659 57,539,271		29,615,142 27,808,312 53,535,651	Decrease \$ 38,039,597 19,212,347	
Market Value 67,654,739 47,020,659 57,539,271		29,615,142 27,808,312 53,535,651	Decrease \$ 38,039,597 19,212,347	
Market Value 67,654,739 47,020,659 57,539,271		29,615,142 27,808,312 53,535,651	Decrease \$ 38,039,597 19,212,347	
Market Value 67,654,739 47,020,659 57,539,271		29,615,142 27,808,312 53,535,651	Decrease \$ 38,039,597 19,212,347	
67,654,739 47,020,659 57,539,271		29,615,142 27,808,312 53,535,651	\$ 38,039,597 19,212,347	
47,020,659 57,539,271	\$	27,808,312 53,535,651	19,212,347	
47,020,659 57,539,271	\$	27,808,312 53,535,651	19,212,347	
57,539,271		53,535,651		
			4,003,620	
67,551,470				
		84,162,861	(16,611,390)	
60,691,368		82,990,191	(22,298,822)	
99,377,312		128,785,529	(29,408,217)	
72,628,273		124,204,976	(51,576,704)	
165,618,658		252,533,979	(86,915,322)	
31,372,266		30,081,260	1,291,006	
2,529,804		2,517,178	12,627	
	\$	816,235,078	\$ (144,251,257)	
	31,372,266	31,372,266 2,529,804	31,372,266 30,081,260 2,529,804 2,517,178	31,372,266 30,081,260 1,291,006 2,529,804 2,517,178 12,627

Analysis: Multi Funding Source Cash Management increased to provide more attractive yields and maintain liquidity as an alternative to investing in US Treasury Obligations, due to market disruptions in March resulting from the COVID-19 health crisis. NY-Sun balance increased primarily due to Bill-As-You-Go collections for projected working capital needs exceeding actual expenses. The decrease in CEF, Other, RGGI, and CES represents redemptions of certain US Treasury Obligations which were held in fully collateralized demand deposit account balances to avoid both Money Market fund limits and investing in negative yield US Treasury Obligations through March 31, 2020. Green Bank decrease was primarily due to additional capital deployed, principally on relatively recently closed deals.

Summary of Investments by Investment Type				
	3/31/2020		3/31/2019	
US Treasury Obligations	\$ 549,246,614	\$	747,431,300	
Certificates of Deposit	-		477,206	
Money Market Deposits	122,737,206		68,326,572	
Total	\$ 671,983,820	_	816,235,078	
Weighted average term of investments	7.4 months		8.6 months	
Weighted average time to maturity	2.1 months		6.0 months	

Analysis: The weighted average term of investments decreased principally due to shorter maturities on recent investments taking into consideration cash flow needs, available money market limits, and current yields.

Investment Income	Qtr Ended	Year Ended	
mivesument micome			
	<u>3/31/2020</u>	<u>3/31/2019</u>	
- " O	(Including adjustments to	, , ,	
<u>Funding Source</u>	fair market value)	to fair market value)	
Multi Funding Source Cash Management ADMIN	\$ 1,117,777	\$ 355,099	
NY-Sun	\$ 1,197,206	\$ 453,134	
Green Jobs Green New York (GJGNY)	\$ 1,086,534	\$ 935,204	
Market Development/Innovation & Research (CEF)	\$ 1,594,450	\$ 1,102,732	
Other	\$ 1,765,839	\$ 2,388,521	
Regional Greenhouse Gas Initiative (RGGI)	\$ 2,930,831	\$ 1,485,572	
Clean Energy Standard (CES)	\$ 2,422,168	\$ 1,848,437	
NY Green Bank	\$ 6,224,124	\$ 7,223,226	
Fiduciary Funds:			
Perpetual Care Funds - Fiduciary Fund	\$ 1,289,026	\$ 789,179	
Low Level Radioactive Waste Account - Fiduciary Fund	\$ 51,853	\$ 55,629	
Total	\$ 19,679,809	\$ 16,636,733	
Investment Yield (Annualized)	2.6%	2.3%	
Weighted Average Yield to Maturity of Current Investments	1.4%	2.3%	

Analysis: The annualized yield was higher than the prior year, primarily due to higher US Treasury yields. The decrease in the weighted average yield to maturity on current investments is due to decreases in current yields.

NYSERDA Investments 03/31/20

						_	-Market
	-Investment Type-	-Purchase Date-	-Maturity Date-	-Cost-	-Principal-	Yield-	Value-
Multi Funding Source Cash Manage	ement						
	Money Market	N/A		67,654,739	67,654,739	0.20%	67,654,739
Multi Funding Source Cash Manage	ement Total			\$67,654,739	\$67,654,739		\$67,654,739
NY-SUN							
	US Treasury Bill	12/12/19	04/09/20	13,418,909	13,486,000	1.54%	13,485,730
		02/13/20	06/04/20	15,060,913	15,132,000	1.53%	15,130,033
		01/16/20	05/07/20	18,319,390	18,406,000	1.53%	18,404,896
NY-SUN Total				\$46,799,212	\$47,024,000		\$47,020,659
Green Jobs Green New York							
	Money Market	N/A		39,293,898	39,293,898	0.00%	39,293,898
	US Treasury Bill	02/13/20	04/16/20	15,925,036	15,968,000	1.54%	15,967,521
	US Treasury Strip	01/31/18	02/15/21	2,131,937	2,281,000	2.24%	2,277,852
Green Jobs Green New York Total				\$57,350,871	\$57,542,898		\$57,539,271
Market Development/Innovation & R							
	US Treasury Bill	01/09/20	04/16/20	29,820,796	29,942,000	1.51%	29,941,102
		02/13/20	05/14/20	23,678,465	23,771,000	1.55%	23,768,861
		02/20/20	06/11/20	13,778,964	13,844,000	1.53%	13,841,508
Market Development/Innovation & R	Research Total			\$67,278,225	\$67,557,000		\$67,551,470
Indian Point Energy Center							
	US Treasury Bill	02/06/20	04/16/20	1,322,081	1,326,000	1.52%	1,325,960
Indian Point Energy Center Total				\$1,322,081	\$1,326,000		\$1,325,960
Energy Efficiency Portfolio Standard							
	US Treasury Bill	02/20/20	04/16/20	14,790,138	14,826,000	1.56%	14,825,555
	US Treasury Note	09/13/18	09/30/20	1,803,377	1,854,000	2.76%	1,866,162

Energy Efficiency Portfolio Standard	d Total				\$16,593,515	\$16,680,000		\$16,691,717
National Fuel Gas								
	US Treasury Bill		02/06/20	04/16/20	1,259,267	1,263,000	1.52%	1,262,962
National Fuel Gas Total					\$1,259,267	\$1,263,000		\$1,262,962
Energy Storage								
Energy eterage	US Treasury Bill		12/05/19	04/16/20	11,758,354	11,823,000	1.51%	11,822,645
Energy Storage Total	,				\$11,758,354	\$11,823,000	_	\$11,822,645
December 9 Development								
Research & Development	US Treasury Bill		09/12/19	09/10/20	9,999,239	10,177,000	1.78%	10,171,810
	US Treasury Note		09/06/18	09/30/20	5,745,145	5,896,000	2.66%	5,934,678
Research & Development Total	oo rreasary note		00/00/10	00/00/20	\$15,744,384	\$16,073,000	2.0070	\$16,106,487
-								
Renewable Portfolio Standard								
	US Treasury Bill		03/12/20	04/16/20	13,478,694	13,482,000	0.26%	13,481,596
Renewable Portfolio Standard Total					\$13,478,694	\$13,482,000		\$13,481,596
Pagional Croophouse Cas Initiative								
Regional Greenhouse Gas Initiative	US Treasury Bill		12/19/19	04/23/20	28,430,938	28,583,000	1.55%	28,582,428
	05 Heasury Bill		01/03/20	05/21/20	45,598,937	45,857,000	1.48%	45,852,873
			01/30/20	06/18/20	24,801,476	24,947,000	1.53%	24,942,011
Regional Greenhouse Gas Initiative	Total				\$98,831,351	\$99,387,000		\$99,377,312
Clean Energy Standard	110 T		00/00/00	0.4/4.0/00	20 075 040	20 405 000	4.500/	20 404 005
	US Treasury Bill		02/06/20 03/05/20	04/16/20 05/21/20	30,075,846 42,410,375	30,165,000 42,468,000	1.52% 0.64%	30,164,095 42,464,178
Clean Energy Standard Total			03/03/20	03/21/20	\$72,486,220	\$72,633,000	0.0470	\$72,628,273
orean Energy Community Found						ψ. <u>_</u> , <u>_</u> , <u>_</u> <u>_</u> , <u>_</u> <u>_</u> . <u>_</u>		+
NY Green Bank								
	Money Market	N/A			15,788,569	15,788,569		15,788,569
	US Treasury Bill		09/05/19	08/13/20	10,996,947	11,178,000	1.75%	11,173,618
			08/29/19	08/13/20	10,798,952	10,980,000	1.75%	10,975,696
			12/05/19	10/08/20	6,002,624	6,080,000	1.53%	6,075,939
			10/31/19	09/10/20	13,199,636	13,374,000	1.53%	13,365,788

		01/03/19	11/05/20	11,996,799	12,147,000	0.68%	12,139,080
	US Treasury Note	12/06/18	05/15/20	11,789,213	11,993,000	2.71%	12,081,638
	,	12/27/18	06/15/20	21,988,096	22,338,000	2.59%	22,501,385
		,,	07/15/20	21,850,245	22,220,000	2.60%	22,377,297
		12/03/18	04/15/20	18,510,538	18,835,000	2.79%	18,975,683
		01/10/19	08/15/20	19,675,683	20,015,000	2.59%	20,163,964
NY Green Bank Total				\$162,597,303	\$164,948,569		\$165,618,658
Perpetual Care Funds							
	US Treasury Bill	02/20/20	08/20/20	683,756	689,000	1.53%	688,766
	US Treasury Note	08/15/18	02/15/21	29,746,123	30,030,000	2.64%	30,683,501
Perpetual Care Funds Total				\$30,429,879	\$30,719,000		\$31,372,266
Low Level Radioactive Waste							
	US Treasury Bill	10/10/19	04/09/20	1,751,536	1,766,000	1.66%	1,765,965
		01/16/20	07/09/20	758,355	764,000	1.55%	763,840
Low Level Radioactive Waste Total				\$2,509,891	\$2,530,000		\$2,529,804
Grand Total				\$666,093,986	\$670,643,206		\$671,983,820
					•		

E. AUDITOR'S REPORT ON COMPLIANCE WITH INVESTMENT GUIDELINES

As part of the annual audit of the financial statements of the Authority, the independent auditors audited the Authority's investments and its compliance with its Investment Guidelines for the fiscal year ended March 31, 2020. Following is the report issued by the independent auditors.

DRAFT REPORT



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Accountant's Report on Compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York

Members of the Authority
New York State Energy and Research Development Authority:

We have examined the New York State Energy Research and Development Authority's (the Authority) compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York* during the year ended March 31, 2020. Management is responsible for the Authority's compliance with those requirements. Our responsibility is to express an opinion on the Authority's compliance with those requirements based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accounts and the standards applicable to attestation engagements contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Authority complied, in all material respects, with the specified requirements referenced above. An examination involves performing procedures to obtain evidence about whether the Authority complied with the specified requirements referenced above. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material noncompliance, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Our examination does not provide a legal determination on the Authority's compliance with specified requirements.

In our opinion, the Authority complied, in all material respects, with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York* for the year ended March 31, 2020.

In accordance with *Government Auditing Standards*, we are required to report all deficiencies that are considered to be significant deficiencies or material weaknesses in internal control; fraud and noncompliance with provisions of laws and regulations that have a material effect on the Authority's compliance with Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York* and any other instances that warrant the attention of those charged with governance; noncompliance with provisions of contracts or grant agreements, and abuse that has a material effect on the subject matter. We are also required to obtain and report the views of responsible officials concerning the findings, conclusions, and recommendations, as well as any planned corrective actions. We performed our examination to express an opinion on whether the Authority complied with the aforementioned requirements and not for the purpose of expressing an opinion on the internal control over compliance with those requirements or other matters; accordingly, we express no such opinions. The results of our tests disclosed no matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of the Members and management of the Authority, the New York State Office of the State Comptroller, the New York State Division of the Budget, and the New York State Authorities Budget Office and is not intended to be and should not be used by anyone other than those specified parties.

F. LIST OF FEES AND CHARGES RELATED TO INVESTMENTS

Operating Fund
NYS Department of Taxation and Finance - fiscal agent fees and expenses

\$345,000

Total Fees and Charges

\$345,000

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

(June 2020)

INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS (June 2020)

I. Introduction

These guidelines set forth the policy of the New York State Energy Research and Development Authority (hereafter "the Authority") and instructions to its officers and staff with regard to its investments and the monitoring and reporting of these investments. The guidelines are intended to meet or exceed the provisions of Public Authorities Law (hereafter, "PAL") Section 2925, the Office of the State Comptroller's Investment Guidelines for Public Authorities contained in 2 NYCRR Part 201, Section 201.3, and the provisions of the Authority's enabling legislation concerning Authority investments. In accordance with PAL Section 2925, the guidelines will be reviewed, revised, if necessary, and approved as frequently as necessary and appropriate, but not less frequently than annually, in the manner described hereafter.

The provisions of these guidelines apply to all monies for which the Authority is responsible for directing investment. This includes monies to which the Authority has legal title and which are held by the Commissioner of Taxation and Finance as fiscal agent of the Authority (PAL Section 1859(1)). It also includes monies to which the Authority does not have legal title, but for which it is responsible for directing investment such as monies held by the trustee for the State Service Contract Revenue (West Valley) Bonds.

The Authority conducts a Private Activity Bond Financing Program. Pursuant to this program, tax-exempt non-recourse securities are issued by the Authority, and the proceeds are made available to State utilities and other non-State entities to finance eligible projects. These securities do not constitute a debt of or charge against the credit of the Authority or the State. Rather, the utility or other entity for which the securities are issued is liable for payment of the principal, redemption premium, if any, and interest on the securities. The proceeds of each issuance are deposited with a trustee chosen by the participating utility or other entity and are not available for investment by the Authority. Generally, the Indenture of Trust for the transaction will contain a list of securities in which the Trustee may invest these monies. The list of permitted investments is approved by the Commissioner of Taxation and Finance as part of the Commissioner's review pursuant to the enabling legislation of the Authority. Investments are made at the direction of the participating utility or other entity and not at the direction of the Authority. Accordingly, the provisions of these Investment Guidelines do not apply to the investing of these monies. Nonetheless, when participating in the formulation of these financing transactions, staff are directed to pursue the objectives set forth in the Investment Guidelines and to require that prudent provisions as to permitted investments, collateral requirements and investment monitoring be included in the underlying documents, as appropriate.

II. Definitions

"Broker-Dealer" means any government bond trader approved by the Commissioner of Taxation and Finance reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York.

"Custodian" means the Commissioner of Taxation and Finance, or a bank, trust company or national banking association designated or approved to hold securities on behalf of or for the benefit of the Authority, as trustee or otherwise.

"Eligible Banking Institution" means any bank, trust company, or national banking association approved by the Commissioner of Taxation and Finance doing business through offices located within New York State. For the State of New York's Excelsior Linked Deposit Program only, Eligible Banking Institution shall also include savings and loan institutions.

"Federal Governmental Obligations" means obligations of the United States and obligations the principal and interest of which are unconditionally guaranteed by the United States.

"Repurchase Agreement" means a written contract whereby the Authority purchases securities, and the seller of the securities agrees to repurchase the securities at a future date for a specified price. Repurchase Agreements may be used to purchase only Federal Government Obligations. The Authority may enter into a Repurchase Agreement only with an Eligible Banking Institution or a Broker-Dealer.

"Money Market Fund" means shares of a diversified open-end management investment company, as defined in the Investment Company Act of 1940, registered under the Federal Securities Act of 1933, and operated in accordance with Rule 2a-7 of the Investment Company Act of 1940 as a "Government Money Market Fund" (investing at least 99.5 percent of its total assets in cash, Government Securities, and and/or Repurchase Agreements that are fully collateralized), provided that it is rated in the highest rating category by at least two nationally recognized rating organizations, and provided that it does not impose any liquidity fees or suspend redemptions as provided thereunder.

III. <u>Investment Objectives</u>

The investment objectives of the Authority, listed in order of importance, are as follows: to conform with all applicable Federal, State and other legal requirements; to safeguard adequately investment principal; to earn reasonable rates of return; and to provide for portfolio liquidity. These investment objectives will likely be achieved through substantial reliance on Federal Governmental Obligations and minimal investment in long-term securities.

IV. <u>Delegation of Authority</u>

The responsibility for implementing the investment program is delegated to the Authority's Treasurer. All investment transactions shall be approved and authorized by the Treasurer or, in his/her absence the Controller and Assistant Treasurer, or any Officer of the Authority. Such authorized investment transactions shall be initiated and executed by the Commissioner of Taxation and Finance (or his/her authorized designees), the Authority's fiscal agent established pursuant to Section 1859 of the Public Authorities Law. The Treasurer shall establish written procedures for the operation of the investment program consistent with these Investment Guidelines. Such procedures shall include an internal control structure to provide a reasonable level of accountability over the authorization, recording and reporting of investment transactions, and to provide for a segregation of duties between authorization and accounting functions.

Investments shall be made in accordance with the Authority's Investment Guidelines, Operative Policy and Instructions using the judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the objectives set forth herein. All Authority staff participating in the investment process shall act responsibly as custodians of the public trust and shall avoid any transaction that might impair public confidence in the Authority's ability to effectively fulfill its responsibilities. All participants involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

V. Types of Investments Authorized

The Authority may deposit monies in demand deposit (checking) and time deposit (savings) accounts with Eligible Banking Institutions located in New York State. Monies deposited in such accounts shall be fully secured as soon as practicable by Federal Deposit Insurance Corporation (FDIC) insurance or

obligations of New York State or Federal Government Obligations, subject to approval of the Commissioner of Taxation and Finance, the Authority's fiscal agent, in consultation with the Authority.

Investments shall be limited to the following types of securities:

- (1) Federal Governmental Obligations, provided that the term of each shall not exceed five (5) years;
- (2) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State, provided that the term of each shall not exceed five (5) years;
- (3) certificates of deposit of Eligible Banking Institutions located in New York, provided that: the term of each shall not exceed five (5) years; pursuant to the limitations of a resolution adopted by the Members in June 1994, the Authority may invest in certificates of deposits through the State of New York's Excelsior Linked Deposit Program, whereby the Authority's deposit will earn a fixed rate of interest equal to 2% to 3% less than the institution's published certificate of deposit rate consistent with this program's criteria; and subject to all other provisions outlined in these Guidelines.
- (4) Repurchase Agreements, provided that the term of each shall not exceed sixty (60) days and that no more than 40 percent of the Authority's total investments shall be invested in Repurchase Agreements at the time of purchase; and
- (5) Money Market Funds, provided that no more than 20 percent of the total amount of the Authority's investments shall be invested in Money Market Funds for more than 15 consecutive days.

Nothing herein contained shall preclude the Authority from imposing further restrictions on the investing of funds in any Indenture of Trust relating to the issuance of bonds.

VI. Authorized Financial Institutions and Dealers

Eligible Banking Institutions and Broker-Dealers authorized for the Authority's investment purposes shall be approved based upon policies and procedures established by the Commissioner of Taxation and Finance. The Authority will periodically consult with the Department of Taxation and Finance concerning their policies, practices and the resulting list.

VII. Diversity of Investments

To the extent practical, the Authority shall diversify its investments by financial institution, by investment instrument, and by maturity. The cash flow requirements of the Authority will be a significant determining factor in selecting the term of investment securities. Competitive quotations, pursuant to policies established by the Commissioner of Taxation and Finance and executed by his/her designated staff, shall be used to select the institution from which investments are purchased.

Except as otherwise required by any policies and practices of the Commissioner of Taxation and Finance, the Authority shall not invest more than 35 percent of its total investment portfolio with a single Eligible Banking Institution.

VIII. Collateral and Delivery of Securities

Collateral for investments shall be limited to: (i) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State; and (ii) Federal Governmental Obligations. The Authority shall not accept a pledge of a proportionate interest in a pool of collateral. Collateral shall be segregated in the name of the Authority, and shall be in the custody of the Authority or a

third party Custodian pursuant to a written custodial agreement; provided, that if the Custodian is the Commissioner of Taxation and Finance, a written custodial agreement shall not be required. The written custodial agreement shall specify circumstances, if any, under which collateral may be substituted, and shall provide that the Custodian holds the collateral solely for the benefit of the Authority and makes no claim thereto. The market value of collateral and accrued interest, if any, shall equal or exceed the value of the secured investment and accrued interest, if any, at all times. Collateral shall be marked to market at the time of the initial investment and, thereafter, no less frequently than monthly using the bid or closing price as quoted in The Wall Street Journal.

In addition to collateral permitted for investments, collateral for deposits made with banks participating in the State's Excelsior Linked Deposit Program shall, subject to the discretion of the Commissioner of Taxation and Finance with confirmation to the Authority, include obligations permitted under Section 105 of the State Finance Law.

Certificates of deposit, demand deposits and time deposits shall be fully collateralized for amounts in excess of Federal Deposit Insurance Corporation (FDIC) coverage.

Securities purchased through a Repurchase Agreement shall be marked to market at least monthly.

Collateral shall not be required with respect to the purchase of obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, or money market funds.

Under any Repurchase Agreement, payment shall be made by or on behalf of the Authority to the seller upon the seller's delivery of obligations of the United States to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the obligations of the United States are credited to the Custodian's Federal Reserve Bank account. Payment shall be made by or on behalf of the Authority for obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, certificates of deposit, and other purchased securities upon the delivery thereof to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the purchased securities are credited to the Custodian's Federal Reserve System account.

IX. Written Contracts

The Authority has determined that, with the exception of Repurchase Agreements, written contracts are not a regular business practice for the types of securities (obligations of New York State, Federal Governmental Obligations, etc.) in which Authority monies may be invested. The interests of the Authority will be adequately protected by conditioning payment by or on behalf of the Authority on the physical delivery of purchased securities to the Authority or its Custodian, or, in the case of book-entry transactions, on the crediting of purchased securities to the Custodian's Federal Reserve System account. In addition, all purchases will be confirmed in writing to the Authority.

Only an Eligible Banking Institution or a Broker-Dealer shall be qualified to enter into a Repurchase Agreement with the Authority's fiscal agent. The Authority's fiscal agent shall enter into a Master Repurchase Agreement, patterned after the Bond Market Association (formerly Public Security Association) model master repurchase agreement, with each Eligible Banking Institution or Broker-Dealer with which the fiscal agent enters into a specific Repurchase Agreement. The Master Repurchase Agreement shall include:

- (a) a description of the relationship of the parties as purchaser and seller;
- (b) a description of the events of default which would permit the purchaser to liquidate the pledged collateral;

- (c) procedures which ensure that the Authority obtains a perfected security interest in the underlying securities; and
- (d) the method of computing margin maintenance requirements, including a limitation, based on policies established by the Commissioner of Taxation and Finance, that securities purchased and held as collateral for repurchase agreements shall be Federal Government Obligations maturing in twelve years or less, and provided that: (i) if such collateral has a maturity of seven years or less, the market value must equal or exceed 101% of the par value of the repurchase agreement; and (ii.) if such collateral has a maturity greater than seven years, the market value must equal or exceed 102% of the par value of the repurchase agreement.

X. Qualification of Custodians

The following shall be qualified to act as Custodian: the Commissioner of Taxation and Finance, any bank or trust company chartered by the State of New York which is not a member of the Federal Reserve System, or any bank, trust company, or national banking association which is a member of the Federal Reserve System, including an Eligible Banking Institution, which transacts business through offices located within the State of New York. During the time that any bank or trust company serves as Custodian, it must be rated at least "A", or its equivalent, by a nationally recognized independent rating agency. With respect to the holding of securities purchased by the Authority through a Repurchase Agreement, the Custodian may not be the Eligible Banking Institution with which the Authority or its fiscal agent has entered into such Repurchase Agreement, nor an agent of such Eligible Banking Institution for purposes of the Repurchase Agreement.

XI. Audit and Finance Committee

The functions of the Audit and Finance Committee with respect to investments are to:

- (a) monitor the system of internal controls;
- (b) verify relevant matters relating to securities purchased or held as collateral semi-annually and on an unscheduled basis;
- (c) determine whether the investment results are consistent with the investment objectives set forth in these Investment Guidelines:
- (d) review any independent audits of the investment program;
- (e) review these Investment Guidelines periodically and recommend to the Members of the Authority such amendments thereto as may be necessary or appropriate; and
- (f) evaluate systematically and periodically the investment program consistency with the provisions of PAL Section 2925, these Investment Guidelines, and the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3).

In support of its functions, the Audit and Finance Committee shall:

(a) require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under Government Auditing Standards issued by the Comptroller General of the United States;

- (b) review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate;
- (c) review the written annual audit report of the independent auditors;
- (d) discuss with the independent auditors, with staff and officers not present, the results of the annual independent audit and the written annual audit report; and
- (e) review not less frequently than annually these Investment Guidelines, and recommend to the Members of the Authority such changes in these Investment Guidelines as it deems necessary or appropriate.

XII. Operations and Procedures

The Treasurer, or in his/her absence the Controller and Assistant Treasurer or any Authority Officer, shall authorize the purchase and sale of all securities, authorize the disbursement of funds for delivery of securities, determine the selection of brokers, dealers and Custodians, and execute contracts for Repurchase Agreements and custodial services on behalf of the Authority. The process of initiating, reviewing and approving requests to purchase and sell securities shall be documented and retained for audit purposes. Oral directions concerning the purchase or sale of securities shall be confirmed in writing. The Authority shall pay for purchased securities upon the delivery or book-entry thereof, and the Authority will obtain written confirmation of each delivery or book-entry. Custodians must have prior authorization from the Authority to deliver securities and collateral and shall not deliver securities except upon receipt of funds. Custodians shall confirm in writing all such transactions. Custodians shall report whenever activity has occurred in a custodial account of the Authority.

The Treasurer shall develop detailed investment procedures implementing the Investment Guidelines as part of the Accounting Policy and Procedures Manual which shall include, but not be limited to, the following:

- (a) the establishment and maintenance of a system of internal controls for investments;
- (b) methods for adding, changing or deleting information contained in the investment record, including a description of the documents to be created and verification tests to be conducted;
- (c) a data base or record incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices and related information necessary to manage the portfolio; and
- (d) requirements for periodic reporting and a satisfactory level of accountability.

Except in the purchase of government securities at their initial auction, the Authority will encourage investment selections utilizing competitive quotations based upon the procedures established by the Commissioner of Taxation and Finance and carried out by his/her designated personnel.

The Treasurer shall maintain a record of investments. The record shall identify each security, the fund for which held, the place where kept, date of disposition and amount realized, and the market value and Custodian of the collateral.

At least monthly, the Authority shall verify the principal amount and market values of all investments

and collateral. The Authority shall obtain appropriate listings from Custodians and compare such listings against the records of the Authority.

XIII. Audit

At the time the independent auditors to the Authority conduct the annual audit of the accounts and financial affairs of the Authority, the independent auditors shall audit the investments of the Authority for the subject fiscal year. The annual investment audit shall determine whether:

- (a) the Authority's investment practices and operations have been consistent with the provisions of PAL Section 2925, these Investment Guidelines, the Office of the Comptroller's Investment Guidelines for Public Authorities, and the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (b) adequate accounts and records are maintained which accurately reflect all transactions and report on the disposition of the Authority's investment assets; and
- (c) a system of adequate internal controls for investments is maintained.

The independent auditors shall prepare a written annual audit report which presents the results of their annual investment audit, and shall include:

- (a) a description of the scope and objectives of the audit;
- (b) a statement that the audit was made in accordance with generally accepted government auditing standards:
- (c) a description of any material weaknesses found in the internal investment controls;
- (d) a description of all non-compliance with provisions of PAL Section 2925, these Investment Guidelines, the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3), or the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (e) a statement of positive assurance of compliance on the items tested; and
- (f) a statement of any other material deficiency or finding identified during the audit not covered in (e) above.

XIV. Reporting

Within sixty (60) days of the end of each of the first three quarters of the Authority's fiscal year, the Treasurer shall prepare and submit to the Members of the Authority and to the Audit and Finance Committee of the Authority a quarterly investment report which indicates new investments, the inventory of existing investments, the selection of Custodians and Broker-Dealers, and such other matters as the Treasurer deems appropriate.

Within 120 days of the end of the fiscal year, the Treasurer shall prepare and submit to the Audit and Finance Committee an annual investment report, which shall include the Investment Guidelines, including any amendment to the Investment Guidelines since the last annual investment report; an explanation of the Investment Guidelines and amendments; the results of the annual independent audit; the investment income record; a list of total fees, commissions or other charges paid to each Broker-Dealer and Custodian; and such

other matters as the Treasurer deems appropriate.

The Members of the Authority shall review and approve the annual investment report, if practicable, at the June meeting of the Authority, for submission thereof to the Division of the Budget, the Department of Audit and Control, the Senate Finance Committee, and the Assembly Ways and Means Committee.

The Authority's annual financial statements shall report the Authority's investments and provide such disclosure information as is required by applicable governmental accounting standards.

Not less frequently than annually, and if practicable, at the June meeting of the Authority, the Members of the Authority shall review, amend, if necessary or appropriate, and approve these Investment Guidelines.

The provisions of these Investment Guidelines and any amendments hereto shall take effect prospectively and shall not invalidate the prior selection of any Custodian, Broker-Dealer, any prior investment, nor any list of permitted investments set forth in any indenture of trust or similar document previously executed by the Authority.

RESOLVED, that the "Investment Guidelines, Operative Policy and Instructions (June 2020)," as presented at this June 23, 2020 meeting are hereby recommended for approval by the Board; and

BE IT FURTHER RESOLVED, that the Authority's "2019-2020 Annual Investment Report," for the year ended March 31, 2020, as presented at this June 23, 2020 meeting, is hereby recommended for approval by the Board to be adopted as the annual investment report of the Authority required by Section 2800 and Section 2925(6) of the Public Authorities Law.

	Market <u>Value</u>		Market <u>Value</u>
	3/31/2020	<u>Change</u>	3/31/2019
Contributions to date	\$45,757,473	\$2,607,637	\$43,149,836
Benefit payments (retiree health insurance)	(\$9,607,549)	(\$1,578,525)	(\$8,029,024)
Administrative expenses	(\$285,725)	(\$26,959)	(\$258,766)
Net contributions	\$35,864,199	\$1,002,154	\$34,862,046
Investment Income (realized gains)	\$20,666,574	\$1,219,394	\$19,447,180
Investments at costs	\$56,530,773	\$2,221,547	\$54,309,226
Unrealized gains/(losses)	-\$6,009,243	(\$4,817,205)	-\$1,192,037
Market value of Investments	\$50,521,530	(\$2,595,658)	\$53,117,188

	Market	Market	
	<u>Value</u>	<u>Value</u>	
Asset Category	3/31/2020	% of total 3/31/2019	% of total
Cash/money market	\$456,495	0.9% \$550,966	1.0%
Real Estate	\$446,045	0.9% \$547,577	1.0%
Foreign/Emerging	\$14,637,489	29.0% \$15,820,808	29.8%
Equities	\$10,873,980	21.5% \$11,560,090	21.8%
Fixed income (bonds)	\$24,107,521	47.7% \$24,637,747	46.4%
Total	\$50,521,530	<u>100.0%</u> <u>\$53,117,188</u>	<u>100.0%</u>
Investment Yield	3/31/2020	3/31/2019	
Annualized	-6.9%	1.5%	
Cumulative to Date	40.9%	52.4%	
Average annual yield *	4.1%	5.8%	

Investment Detail

	Investment	t		Market	
Asset Class	Policy Targ	et Current Holding	<u>Cost</u>	<u>Value %</u>	of Total
Cash	0%-6%	Cash Balance	\$23,752	\$23,752	0.0%
Cash	0%-6%	Dreyfus Instit Reserves Treasury Prime Fund	\$432,743	\$432,743	0.9%
Short Term Bonds	1%-6%	Tributary Short-Intermediate bond Fund	\$1,665,885	\$1,681,564	3.3%
Intermediate Term Bond	9%-19%	Calvert Bond Fund	\$7,444,575	\$7,545,472	14.9%
Inflation-Protected Securities	5%-15%	MassMutual Premier Inflation Protected & Income Func	\$5,419,005	\$5,514,871	10.9%
Long-Term Bond	1%-11%	PIMCO Long Term Credit Bond Fund	\$2,878,627	\$3,004,406	5.9%
High Yield Bond	7%-17%	Credit Suisse Strategic Income Fund	\$6,923,410	\$5,866,897	11.6%
Large Blend	5%-26%	First Trust Capital Strength ETF	\$8,163,059	\$7,690,682	15.2%
Mid-Cap Blend	1%-11%	FMI Common Stock Fund	\$648,894	\$480,177	1.0%
Small Blend	3%-16%	Principal Smallcap S&P 600 Index Fund	\$4,271,283	\$2,703,121	5.4%
Foreign Large Cap	10%-20%	T Rowe Price Overseas Stock Fund	\$9,371,326	\$7,398,941	14.6%
Diversified Emerging Mkts	10%-20%	Calvert Emerging Markets Equity Fund	\$8,153,116	\$7,238,548	14.3%
Global Real Estate	1%-6%	Schwab Fundamental Global Real Estate Index Fund	\$597,376	\$446,045	0.9%
Global Bond	1%-6%	Matthews Asia Strategic Income Fund	\$537,722	\$494,311	1.0%
			\$56,530,773	\$50,521,530	100.0%

^{*} The targeted long-term expected rate of return of the NYSERDA OPEB TRUST is estimated to be 6.50% per year.

INVESTMENT POLICY STATEMENT

NYSERDA OPEB TRUST (RETIREE HEALTH INSURANCE BENEFITS)

June 2020

I. **DEFINITIONS**

Authorized Agent: One or more individuals designated by resolution of the NYSERDA Board to serve as authorized agent(s) to the Plan Administrator as provided in the Trust Agreement.

Benefits: NYSERDA's obligation to provide post-employment health insurance benefits and to pay a portion of the cost of such benefits for retirees and their eligible dependents under the New York State Health Insurance Program (NYSHIP).

Fund: A fund such as a mutual fund or exchange traded fund in which Trust assets are invested.

Investment Consultant: Milliman, Inc., or such other individual or organization as may be approved by the NYSERDA Board.

Investment Horizon: The time period over which the investment objectives, as set forth in this statement, are expected to be met.

Investment Return: The investment income and realized and unrealized gains and losses, all net of investment expense and fees.

NYSERDA: New York State Energy Research and Development Authority and its successors.

NYSERDA Board: The governing board of New York State Energy, Research and Development Authority (NYSERDA).

Plan: The arrangement for Benefits adopted and maintained by NYSERDA, as amended from time to time.

Plan Administrator: Any Officer of NYSERDA.

Plan Sponsor: NYSERDA

Trust: The trust account established to safeguard the assets of the Plan, as amended from time to time.

Trust Agreement: The agreement between NYSERDA and the Trustee establishing the Trust and providing for its administration.

Trustee: The financial institution appointed by the NYSERDA Board to serve as Trustee, and any successors or assigns.

II. PURPOSE & BACKGROUND

The Plan is a Post-Employment Benefits Plan sponsored by NYSERDA, a not-for-profit organization with a place of business in New York State. The Plan's investment program is defined in the following sections of this Investment Policy Statement (IPS).

The purpose of this IPS is to assist the Plan Administrators and Investment Consultant in effectively supervising, monitoring, and evaluating the investment of the Plan's assets. Additionally, the IPS will function to:

- 1. State in a written document the Plan Administrator's attitudes, expectations, objectives, and guidelines for the investment of Plan assets which the Plan Administrator judges to be appropriate and prudent, in consideration of the needs of the Plan.
- 2. Define and assign the responsibilities of oversight of the Plan's assets.

- 3. Set forth an investment structure for managing Plan assets. This structure will help to define asset class, Fund styles, asset allocation and acceptable ranges that, combined, will help to generate the risk/return profile needed to meet the objectives of this policy.
- 4. Encourage effective communication between the Plan Administrator and the Investment Consultant, as well as any other interested parties.
- 5. Establish formalized performance criteria that any Fund selected is expected to meet and against which they are to be measured on a regular basis.
- 6. Serve as a review document to guide the Plan Administrators and the Investment Consultant's ongoing oversight of the investment options of the Plan's assets.
- 7. Manage plan assets according to prudent standards as established in common trust law and ERISA fiduciary requirements.
- 8. Establish the relevant investment time horizon of the Plan, risk tolerances of the Plan Administrators and performance expectations of the Plan assets.

III. STATEMENT OF OBJECTIVES

The assets of the Plan are invested under the supervision of the Plan Administrator.

After reviewing expected short-term and long-term cash flow requirements of the plan, as well as considering the investment time horizon and risk tolerance level believed to be appropriate for the invested assets, the following set of objectives has been established:

- 1. Preservation of capital.
- 2. Pay all benefit and expense obligations when due.
- 3. Achieve a funding cushion to reduce the impact of possible future downturns in the plan's funded status.
- 4. Achieve or exceed actuarial earnings assumptions.
- 5. Maximize the return on assets earned through the acceptance of prudent and reasonable levels of risk.
- 6. Control risk through reasonable and rational diversification of the assets into various asset classes.
- 7. Establish policies based on total return and expected projected payouts rather than current income.
- 8. Contain costs of administering and managing the portfolio.

IV. CONTROL PROCEDURES

Disclosure

Any member of the Plan Administrators, Trustee or Investment Consultant must make full disclosure of any potential conflicts of interest annually (or more frequently, as conditions warrant), including any financial gain that may be received as a result of investment decisions made by those entities. This disclosure should be made before the investment of the plan assets governed by this Investment Policy Statement. Disclosure should be in written form and presented to the other members of the Plan Administrators.

Delegation of Authority

The NYSERDA Board shall be responsible for approving any changes to this Investment Policy Statement, and shall be responsible for reviewing the implementation of the Investment Policy Statement not less frequently than annually. The NYSERDA Board hereby delegates certain responsibilities in this Investment Policy Statement to professional experts in certain fields, who shall act in a fiduciary capacity.

These responsibilities include, but are not limited to:

<u>Plan Administrator</u>: The Plan Administrator is responsible for the investment of the plan assets, and selecting Funds. The Plan Administrator will have discretion to purchase, sell or hold the investment options that will be used to meet the Plan's investment objectives, consistent with the recommendations and advice of the Investment Consultant. An Authorized Agent will provide written instructions to the Trustee for the purchase or sale of Trust investments, consistent with investment decisions made by the Plan Administrator. An Authorized Agent shall also provide written approval to make payments of Benefits from the Trust.

<u>Investment Consultant:</u> The Investment Consultant will be responsible for: providing recommendations to the Plan Administrator for the selection of Funds, consistent with the Investment Policy Statement objectives and guidelines; reviewing the performance of such Funds over time; periodically reviewing and providing recommendations to the Plan Administrator for revisions to the Investment Policy Statement; and other tasks as deemed appropriate by the Plan Administrator.

<u>Trustee:</u> The Trustee will perform monthly accounting of all assets owned, purchased or sold, as well as movement of assets into and out of the Plan account. The Trustee will maintain possession of securities owned by the Plan, collect dividend and interest payments, redeem maturing securities, and effect receipt and delivery following purchases and sales. The Trustee will also be responsible for the payments to such persons and for such purposes in order to provide benefits to plan participants and the remittance of any tax related payments to the applicable State and Federal bodies.

Responsibilities

Plan Administrator

The Plan Administrator is charged with the responsibility for the management of the assets of the Plan. The Plan Administrator shall discharge its duties solely in the interest of the Plan, with the care, skill, prudence and diligence that a prudent person, acting in a like capacity and familiar with such matters should use in the circumstances then prevailing.

The specific responsibilities of the Plan Administrator relating to the investment management of the fund include:

- 1. Provide oversight on the actions of the Investment Consultant, including, but not limited to approving or disapproving actions of the Investment Consultant.
- 2. Prudently and diligently selecting qualified investment professionals, including Funds and the Investment Consultant.
- 3. Developing and enacting proper control procedures: For example, replacing Fund(s) due to fundamental change in investment management process, or failure to comply with established guidelines.
- 4. Exercising investment discretion (including holding cash equivalents as an alternative) within the IPS objective and guidelines set forth herein.

<u>Investment Consultant</u>

The Investment Consultant's role is that of a non-discretionary advisor to the Plan Administrator. Investment advice concerning the investment management of the fund assets will be offered by the Investment Consultant and will be consistent with the investment objectives, policies, guidelines and constraints as established in this statement.

The Investment Consultant shall act as an advisor to the Plan Administrator with regard to the definition of asset classes, asset allocation ranges, acceptable investments and monitoring of the performance of the Trust. Specific responsibilities include:

- 1. Communicating financial needs of the fund to the Funds in a timely manner.
- 2. Determining the fund's risk tolerance and investment horizon, and communicating these to the appropriate parties.
- 3. Defining acceptable asset classes and allocation ranges for the investment of Plan assets.
- 4. Assisting the Plan Administrator in the development of the investment policy statement and reviewing Funds implementation.
- 5. Provide for the regular evaluation of the performance of the Funds to assure adherence to policy guidelines and monitoring investment objective progress.
- 6. Conducting Funds searches when requested by the Plan Administrator.
- 7. Selecting Funds candidates for approval of the Plan Administrator.
- 8. Providing "due diligence" or research on Funds.
- 9. Monitoring the performance of the Fund(s) to provide the Plan Administrator with the ability to determine the progress toward the investment objectives.
- 10. Communicating matters of policy, manager research, and manager performance to the Plan Administrator.

- 11. Reviewing the Fund's investment history, historical capital markets performance and the contents of this investment policy statement to any newly appointed members of the Plan Administrator.
- 12. Providing the Plan Administrator a report of their decisions and actions at least annually.

V. INVESTMENT GUIDELINES

Investment Horizon: The investment guidelines are based on the expectation that the investment horizon will be many years in length. Short-term variability in returns should be expected.

Because of this, the Plan's strategic asset allocation is established with long-term perspective in mind.

The Plan is required to pay post-retirement medical premiums as they come due. Therefore, sufficient liquid reserves must be available to satisfy this obligation.

Risk Tolerances: It is understood by the Plan Administrator that achieving the Plan's investment objectives is not guaranteed and there will be time periods for which these objectives will not be met. The Plan Administrator also recognizes that some risk must be assumed to achieve the Plan's long-term investment objectives and accepts the inevitable fluctuations in returns that will occur. While it is understood that a certain level of risk is expected in the Plan's portfolio, the ability to withstand short and intermediate term variability was specifically considered in the development of the IPS risk tolerances. Factors considered were:

- 1. NYSERDA is in an industry that should experience milder fluctuations than the general economy.
- 2. NYSERDA's intent to fund the annual contribution each year should provide ample liquidity.
- 3. Future projected benefit payments and expenses of the Plan.

As a result of the above-named considerations, the Plan Administrators believes that the Plan can tolerate some interim variability in market value and rates of return in order to achieve its long-term objectives.

Liquidity Policy: The trust will be required to provide periodic distributions in the form of retirement benefit payments to participants. The actuary provides annual assessments of the funding requirements and payments necessary to meet the plans benefit obligations.

Rebalancing: The percentage allocation to each asset class may vary based on the table within the Overall Asset Allocation Policy section on the following page of this IPS, depending on market conditions. When necessary and/or available, cash inflows/outflows will be deployed in a manner consistent with the strategic asset allocation of the Plan as stated in this Policy. If the Plan Administrator judges cash flows to be insufficient to bring the Plan within the strategic allocation ranges, the Plan Administrator shall decide whether to effect transactions to bring the strategic allocation within the threshold ranges (strategic allocation). The Plan Administrator retains the right to rebalance the portfolio at its discretion.

Social Responsibility: The Plan Administrator will put the economic interests of the Plan first when considering alternative investment options and, in consultation with the Investment Consultant, shall consider Funds which minimize investments in the fossil-fuel industry, provided that they generally meet performance and risk criteria where available and are appropriate alternative Fund investments.

Overall Asset Allocation Policy

Based on the Plan's time horizon, risk tolerances, liquidity needs, and asset class preferences and constraints, an efficient or optimal portfolio was identified.

This allocation shall be reviewed at least annually and modified as necessary to meet the needs of the Plan Administrators. The strategic asset allocation of the Plan is as follows:

Asset Class	Range	Target
Cash	0% - 6%	1%
Short Term Bonds	1% - 6%	1%
Intermediate Term Bond	9% - 19%	14%
Inflation Protected Securities	5%-15%	10%
Long Term Bond	1% - 11%	6%
High Yield Bonds	7- 17%	12%
Large Cap	5%-26%	15%
Mid Cap	1%-11%	1%
Small Cap	3%-16%	6%
Foreign Developed Equity	10% - 20%	15%
Emerging Markets Equity	10% - 20%	15%
Global Real Estate	1% - 6%	1%
Non-US bonds	1% - 6%	1%

The above ranges will be considered the long-term or policy allocation. The current "Policy" is the target for such respective Asset Class of investment. Any deviations beyond the "Range" must have prior approval by the Plan Administrator, unless caused by market actions. Any deviations will be cured within 90 days of discovery.

The Plan will diversify its investment portfolio to avoid incurring unreasonable risks.

The only allowable investments of the Plan will be in cash and equivalents and Funds:

Cash Policy

Cash equivalents will be invested in an appropriate cash-like fund. Returns should be equal to or better than the 90-day Treasury Bill Index (3-month).

Money market mutual funds may be used, so long as these funds meet the high standards suitable for funds of this nature.

Fixed Income Policy

<u>Investment Objectives</u>

These assets are to be invested in a Fund of high-grade index or active fixed income portfolio subject to the limitations set forth below. The investment objectives of the fixed income portion in order of importance are:

1. Preservation of capital.

- 2. Provide for regular dividend and or interest payments.
- 3. Maintenance of liquidity to provide for recurring benefit payments.
- 4. Stability of Returns Obtain fairly consistent annual returns.

Investment Guidelines

Generally, the Fixed Income portion of the Trust shall be comprised of high-grade, intermediate—term, fixed income Funds. While high levels of risk are to be avoided, as evidenced by Funds with high volatility and low quality rated securities, the assumption of a moderate and reasonable risk may be warranted and encouraged in order to achieve satisfactory long-term results consistent with the objectives of the Plan. The following restrictions apply to the fixed income holdings of the Plan:

- 1. No more than 20 percent of the market value of any fixed income Fund shall be rated less than single A quality.
- 2. The exposure of any fixed income Fund to any one issuer, other than securities of the U.S. government or agencies, shall not exceed 10 percent of the market value of the fixed income fund.
- 3. No more than 25 percent of any fixed income Fund shall be invested in one industry category, other than securities of the U.S. government.

Equity Policy

Investment Objectives

Equity assets are to be invested in Funds. Within this framework, the investment objectives of the equity portion are

- 1. Long Term Growth of Capital Assets, exclusive of contributions and withdrawals, should grow in the long run and earn returns equal to the market while risk should be less than the market.
- 2. Follow a predefined market style (e.g. large cap vs. small cap) strategy.

Investment Guidelines

The Plan's equity assets will be managed in accordance with the following:

- 1. All Funds selected for the equity portion must have a readily ascertainable market value and must be readily marketable.
- 2. Fund investments must be U.S. dollar denominated.
- 3. Not more than 25 percent of the market value of any Fund should be invested in any one industry as defined by Standard and Poors.
- 4. A Fund's investment in any single company should not exceed 10 percent of the Plan's assets.
- 5. Funds selected will be diversified and generally conform to the above-mentioned industry and company guidelines.

VI. SELECTION OF FUNDS

The Plan Administrator, with the assistance of the Investment Consultant, will select Funds meeting the following minimum criteria:

- 1. Is a bank, insurance company, investment management company, or investment advisor as defined by the Registered Investment Advisers Act of 1940.
- 2. Provide at a minimum, historical quarterly performance numbers calculated on a time-weighted basis, based on a composite of all the fully discretionary accounts of similar investment style, and reported net and gross of fees.
- 3. Provide performance evaluation reports prepared by an objective third party that illustrate the risk/return profile of the Funds relative to other managers of like investment style.
- 4. Provide detailed information on the history of the firm, key personnel, key clients, fee schedule, and support personnel. This information can be supplied by a third party vendor comparable to Lipper or Morningstar.
- 5. Clearly articulate the investment strategy that will be followed and document that the strategy has been successfully adhered to over time.
- 6. Ranked within the top 50 percent of their respective styles on the Investment Consultant's internal ranking program, as well as rankings using widely used third-party sources (such as Morningstar).
- 7. Some of the measures that may be included in the statistical analysis of a Fund would be:
 - a. Performance historical annualized average return for 1 year, 3 year, and 5 year periods
 - b. Return Rank—the ranking of the Fund's performance relative to other funds in its asset category
 - c. Alpha a measure of fund performance compared to its expected return
 - d. Beta the general level of influence a fund's market has over its performance
 - e. Standard Deviation a measure of a fund's variation of returns over time
 - f. Sharpe Ratio a measure of a fund's risk-adjusted return compared to its risk
 - g. *Duration* a measure of sensitivity to interest rate fluctuations over time
 - h. *Carbon Metrics* a measure of the Fund's exposure to carbon risk, including the percentage of Fund investments invested in fossil fuels, as may be reported by a third party source (Morningstar, fossilfreefunds.org)

VII. INVESTMENT EVALUATION

Not more than 90 days after the end of each calendar quarter, the Investment Consultant shall report investment positions and performance results to the NYSERDA Board and the Plan Administrator, based on performance reported by each Funds, to monitor and evaluate progress toward the attainment of longer-term targets.

The target rate of return for the Plan has been based on the assumption that future real returns will approximate the long-term rates of return experienced for each asset class in the IPS. The real rate of return is the return in excess of the anticipated rate of inflation as measured by the Consumer Price Index (CPI).

Total Plan Portfolio: Over a complete business cycle, the Plan's overall annualized total return (net of expenses) should perform at or above the weighted average of a customized index comprised of market

indexes weighted by the strategic asset allocation of the Plan. This customized index is composed of the following benchmarks and weights:

Index	Target
Bank of Amercia ML 91-dya TBill Auction Avg	1%
BBgBarc US 1-5 Yr Gov/Credit Fl Adj TR	3%
BBgBarc US Govt/Credit 5-10 Yr TR	14%
BBgBarc US Treasury US TIPS TR	10%
BB Long Government/Credit	6%
BB High Yield Corporate Bond	12%
CRSP US Large Cap TR	15%
CRSP US Mid Cap TR	1%
CRSP US Small Cap TR	6%
FTSE Developed Ex US	15%
FTSE EM AC China A Incl (US RIC)	15%
FTSE EPRA/NAREITGlobal NR	1%
BBgBarc Global Agg Float Adj TR	1%

Individual Funds: During its periodic meetings but not less than annually, the Plan Administrator, with consultation from the Investment Consultant, will review the following specifics with regard to each Fund:

- 1. The Fund's adherence to their prospectus.
- 2. Material changes in the Fund's organization, investment philosophy, and/or personnel.
- 3. Performance compared against an appropriate peer group and benchmark, as listed in the Executive Summary of this IPS, over various time periods.

The Plan Administrator expects the following criteria to be met by each Fund. If a manager fails to meet these, a further review of the manager will be warranted. The Plan Administrator reserves the right to replace an Funds at their discretion at any time.

- 1. The Plan Administrator with recommendation from the Investment Consultant may consider replacing an actively managed Fund if the Return Rank versus its peer group remains in the bottom 50 percent for four consecutive quarters versus its peer group and if statistical analysis concludes that the Fund's level of return does not provide an acceptable ratio as compared to its general level of risk.
- 2. The Fund's risk over 3 and 5 years, as measured by the Relative Standard Deviation, should be equal to or less than 1 when compared to the Fund's appropriate benchmark. If the Relative Standard Deviation is greater than 1, an increase in performance is expected.
- 3. The Fund's Sharpe ratio over 3 and 5 years should be ranked above the peer group median.
- 4. The Fund's Alpha should be positive over a 3 and 5 year period and should be ranked above the peer group median.
- 5. For passive-index investments, a Beta between 0.95 and 1.05 and a Tracking Error from 0 to 1 when compared to the index the Fund is designed to follow. Each statistic should be measured over 3 and 5 year time periods.

6.	The Plan Administrator may consider a Fund for replacement when the Funds or policy of the Fund is changed. In addition, if there are any substantial transactions with regard to the Fund management company or holding, or other types of instabilities in the Fund company, replacement will be considered.
7.	The Plan Administrator may also consider replacing a Fund if its relative performance over a complete market cycle trails its benchmark.

Reso	lution	No.	

RESOLVED, that the "NYSERDA OPEB Trust Investment Report" for the year ended March 31, 2020, as presented at this June 23, 2020 meeting is hereby recommended for approval by the Board as the annual investment report of the NYSERDA OPEB Trust required by Section 2800 and Section 2925(6) of the Public Authorities Law; and

BE IT FURTHER RESOLVED, that the "Policy Statement for the NYSERDA OPEB Trust (Retiree Health Insurance Benefits Trust)" as presented at this June 23, 2020 meeting, is hereby recommended for approval by the Board.

NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances March 31, 2020

(Amounts in thousands)

1	March 31, 2020	March 31, 2019	Change from March 31, 2019
Cash and investments (current and non-current totals):			
NY-Sun	45,315	20,377	24,938
CEF	91,036	73,715	17,321
RGGI	135,851	127,231	8,620
Multi Funding Source Cash Management	35,649	29,615	6,034
GJGNY	56,994	59,735	(2,741)
CES	129,341	136,597	(7,256)
Other (individually less than 5% of total)	73,636	91,187	(17,551)
NY Green Bank	164,361	269,374	(105,013)
_	732.183	807.831	(75.648)

Analysis: NY-Sun and CEF balances increased primarily due to Bill-As-You-Go collections and transfers for projected working capital needs exceeding expenses. The increase in RGGI was the result of allowance auction proceeds in excess of expenditures and transfers. Other funds decreased principally due to the winding-down of the RPS and IPEC programs. Green Bank's decrease was primarily due to additional capital deployed.

New York State receivable

8.451

11.377

(2,926)

Analysis: The variance is primarily due to a decrease of \$3,900,000 in Zero-emission credit (ZEC) program receivables from State-affiliated load serving entities and a decrease of \$2,800,000 in unreimbursed Fuel NY program expenses. These decreases were partially offset by an increase in the receivable of \$2,524,000 for unreimbursed expenses funded from appropriations for Energy and Environmental programs.

Third-party billings receivable

14,459

5,820

8,639

Analysis: The variance is primarily due to an increase in the Zero-emission credit (ZEC) program receivables from various load serving entities of \$8,371,000 and an increase of \$1,523,000 across several co-funding projects.

Interest receivable on loans

3,746

2.830

916

Analysis: The variance is primarily due to a larger amount of capital deployed and the timing of due dates for interest payments on NY Green Bank loans and financing receivables.

Loans and financing receivables - current and non-current totals:

NY Green Bank	441,559	299,430	142,129
GJGNY	199,773	198,932	841
	641 332	498 362	142 970

Analysis: The GJGNY balance reflects little change from the previous fiscal year end amount. As of March 31, 2020, 93.1% of the GJGNY portfolio loan balance is current on payments, \$8,180,000 has been recorded as an allowance reserve for loans more than 120 days past due, and cumulative allowance reserves and write-offs have been recorded representing 2.8% of original loan principal. The NY Green Bank balance increased due to net loan activity, which included deploying capital on several deals executed in FY 2019-20.

Prepaid expense

2,706

2,713

Analysis: Minor variance.

Total assets

Other assets 6,962

14,236 (7,274)

Analysis: Variance primarily reflects a decrease in the value of the Down State Strategic Gasoline Reserve as a result of lower crude and spot prices at year end.

Capital assets, net of depreciation

14,235

15,918

(1,683)

Analysis: Decrease due to fixed asset additions of \$1,293,000 less depreciation expense of \$2,976,000.

1,424,074

1,359,087 64,987

Deferred outflows of resources

12,334

17,063

(4,729)

Analysis: Reflects amortization of actuarially-determined deferred outflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices), as well as amortization of the FY 2018-19 contributions subsequent to measurement date, addition of similar FY 2019-20 contributions, and addition of new balances determined from the actuarial updates to the new measurement date.

NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances March 31, 2020

(Amounts in thousands)

Change	from
--------	------

<u>March 31, 2020</u> <u>March 31, 2019</u> <u>March 31, 2019</u>

Accounts payable 7,572 8,332 (760)

Analysis: Variance is principally due to timing of payments of vendor billings.

Accrued liabilities 174,547 179,144 (4,597)

Analysis: Variance is primarily due to a decrease in accrued liability for ZEC program payments for NYS Load Serving Entities and from a decrease in accrued payments to contractors under the RPS program.

Unearned revenue 3,251 3,522 (271)

Analysis: Variance is principally related to a decrease in deferred cofunding for the Clean Energy Communities program, offset in part by an increase in deferred cofunding revenue for the Heat Pump Campaign with the National Fuel Gas

 Deposits
 25,398
 23,246
 2,152

 Analysis: Increase primarily due to receipt of additional CES large scale renewable bid and contract security deposits.

Long-term liabilities- current and non-current totals:

•	142,017	151,361	(9,344)
Bonds and notes payable	120,900	135,404	(14,504)
Net OPEB liability	3,982	3,942	40
Compensated absences	9,536	8,648	888
Net pension liability	7,599	3,367	4,232

Analysis: The decrease in Bonds payable is due to scheduled payments and bond redemptions for the GJGNY program. The change in compensated absences is primarily due to an increase in the retiree sick leave portion of the liability due to an increase in both the number of retirees and an increase in the average value of their sick leave credits. The increases in Net OPEB liability and Net pension liability reflect the change in the acturially determined liability amounts.

Total liabilities 352,785 365,605 (12,820)

Deferred inflows of resources 4,492 12,893 (8,401)

Analysis: Reflects amortization of actuarially-determined deferred inflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices), and addition of new balances determined from the actuarial updates to the new measurement date.

Net position:

Net investment in capital assets	14,234	15,917	(1,683)
Restricted for specific programs	1,058,856	977,625	81,231
Unrestricted	6,041	4,110	1,931
Total net position	1,079,131	997,652	81,479

Analysis: Decrease in Net investment in capital assets primarily reflects the net effect of fixed asset purchases, less depreciation on current assets. Increase in Net position Restricted for specific programs is principally due to revenues exceeding expenses in the NYSUN, CEF & RGGI funds, plus an increase in NY Green Bank's capitalization from additional utility ratepayer funding, and from their FY 19-20 operating income. These Restricted net position increases were offset in part by CES fund expenses exceeding revenues. The increase in Unrestricted net position is primarily due to investment earnings as a result of the pooling of investments in the Multifunding Source Cash Management money market account.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousands)			
	Actual		Over (under) Budget	
	March 31, 2020	<u>Budget</u>	<u> \$ </u>	<u> </u>
REVENUES				
State appropriations:				
Energy & Environmental Programs	4,030	3,073	957	31.1%
Brookhaven National Lab-X-ray Beam	8,607	7,971	636	8.0%
Energy Analysis (Low Level Radioactive Waste)	150	150	-	0.0%
West Valley	15,043	17,700	(2,657)	-15.0%
Cleaner Greener Communities capital projects	1,602	5,679	(4,077)	- <u>71.8</u> %
Total State appropriations	29.432	34.573	(5.141)	-14.9%

Analysis: Revenues for Cleaner Greener Communities projects and West Valley capital appropriations were less than budgeted due to lower than anticipated program expenditures incurred during the year. The preceding was offset in part by higher than anticipated expenditures under Energy & Environmental Programs and the Brookhaven National Lab-X-ray Beam program.

Utility surcharge assessments

568,910

739.054

(170, 144)

353

-23 0%

Analysis: Variance is primarily due to lower than expected CEF expenditures and an overstimate of NYSun expenditures in the FY19-20 Budget. This was partially offset by an unanticipated increase in program expenditures under the T&MD and SBC III programs pursuant to a PSC Order to transfer uncommitted funds to several utilities for the Electric Vehicle Direct Current Fast Charging initiative, as well as Green Bank liquidity requirements funded from utility receipts, whereas the budget did not anticipate any capital funding.

Renewable energy credit proceeds

5,613

5,260

6.7%

Analysis: Proceeds from the sale of quarterly renewable energy credits where slightly less than what was anticipated in the budget.

Zero-emission credit assessments

528,346

Analysis: Revenues are lower than anticipated primarily due to lower production by the nuclear generating facilities, which requires that NYSERDA make a pro-rata refund to the LSE's (in aggregate), and from uncollectible load not included in the budget.

Allowance auction proceeds

112,024

108,598

3 426

3.2%

Analysis: Average clearing prices for auctions were slightly higher than what was anticipated in the budget.

Third party reimbursements

36,896

44,051

(7.155)

(4,430)

-16.2%

Analysis: Principally due to Con Edison Indian Point Energy Center Reliability Contingency program revenues (based on expenditures) being less than anticipated in the budget, and because revenues anticipated pursuant to an expected MOU with National Fuel Gas for FY19-20 were not received. These decreases were partially offset by higher than expected revenues for the Clean Transportation Volkswagen Settlement and the Low Income Home Energy Assistance program.

Federal grants

2,910

7,340

-60.4%

Analysis: Principally due to actual expenses (accrued as revenues on a cost reimbursement basis) under a Congestion Mitigation & Air Quality grant and a DOE Thermal Data Clearinghouse grant being less than anticipated in the budget.

QECB interest subsidy

402

399

0.8%

Analysis: Minor variance.

Project repayments

68

384

-82.3%

(316)Analysis: Actual revenues for the year were much lower than historical levels used to establish the budget

Rentals from leases

1,026

982

4.5%

Analysis: Minor variance is a combination of unanticipated cell tower lease income from West Valley, and lower STEP lease income as a result of pass-through cost expectations versus budget

Fees and other income

6,125

3,526

73.7%

Analysis: Variance is primarily due to unanticipated CES program alternative compliance payments received from certain load serving entities to meet their REC obligations, as well as CES bid deposit fees not included in the FY 2019-20 budget.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousands)				
	Actual		Over (under) Budget		
	March 31, 2020	Budget	\$	%	
Interest on loans					
GJGNY	7,739	8,053	(314)	-3.9%	
NY Green Bank	18,612	18,741	(129)	- <u>0.7</u> %	
Total Interest on Loans	26,351	26,794	(443)	-1.7%	
Analysis: Insignificant variances as a percent of budget.					
Investment income	18.338	6.333	12.005	189.6%	

Analysis: Variance is principally due to higher than expected yields, as well as higher average invested balances than anticipated.

TOTAL REVENUES	1,336,441	1,518,330	(181,889)	-12.0%
<u>EXPENSES</u>				
Salaries	39,683	39,488	195	0.5%
Fringe benefits	17,125	16,484	641	<u>3.9</u> %
Salaries and benefits	56,808	55,972	836	1.5%

Analysis: Fluctuation in salary expense versus budget is principally due to payment of a 2% general salary increase (as adopted by NYS for M/C employees), which was not included in the Budget since it had not yet been authorized. The fringe benefits variance is principally due to an increase in the retiree sick leave portion of compensated absences expense. OPEB expense was also greater than expected, but was offset by lower than anticipated costs for pension and heath insurance than were assumed in the budget.

Program expenditures:				
T&MD (SBCIV)	29,216	16,960	12,256	72.3%
Energy Analysis	4,856	1,500	3,356	223.7%
NY Green Bank	214	520	(306)	-58.8%
West Valley	14,126	15,976	(1,850)	-11.6%
CES	545,917	550,591	(4,674)	-0.8%
RPS	58,213	65,492	(7,279)	-11.1%
RGGI	69,865	100,208	(30,343)	-30.3%
CEF	215,211	270,496	(55,285)	-20.4%
Other (individually less than 5% of the total)	114,924	192,140	(77,216)	-40.2%
NY-Sun	111,779	244,532	(132,753)	- <u>54.3</u> %
	1,164,321	1,458,415	(294,094)	-20.2%

Analysis: The NY-Sun variance is principally due to an overstatement of budgeted expenses for project completions and incentive dollars anticipated to be paid. Progress towards meeting NY-Sun goals are not affected by the variance. The Other variance is principally due to expenses being lower than anticipated under the EEPS, Energy Storage and Indian Point Energy Center Reliability Contingency programs. The EEPS program was closed during the fiscal year, all unspent funds will be reported to DPS for future ratepayer benefit. The variance in CEF is generally due to the timing of program commencement, construction delays, and slower than anticipated market participation resulting in lower spending than budgeted. The RGGI variance is due to the timing of Cleaner Greener Community projects moving slower than anticipated, from lower Electric Vehicle participation rates than originally anticipated, from contractor delays, and timing of anticipated expenditures.

Investment related expenses	399	560	(161)	-28.8%

Analysis: Variance primarily due to lower transaction activity than anticipated.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousand Actual	(Amounts in Thousands) Actual		Over (under) Budget	
	March 31, 2020	<u>Budget</u>	\$	%	
Program operating costs:					
Office Supplies, Equipment Rental, and Other	292	233	59	25.3%	
Rent, Maintenance & Repairs, Utilities, Insurance	403	365	38	10.4%	
Temporary Staffing, Outside Technical Reviewer	443	477	(34)	-7.1%	
Training, Recruitment & Relocation	-	56	(56)	-100.0%	
Computer Services and Software	313	382	(69)	-18.1%	
Travel and Outreach Costs	440	588	(148)	-25.2%	
Professional & Consulting Services	1,210	2,412	(1,202)	<u>-49.8%</u>	
	3,101	4,513	(1,412)	-31.3%	

Analysis: Variance in the Office Supplies line is primarily due to the purchase of several publications during the year that were not anticipated for in the budget. The variance in Professional & Consulting Services was principally due to NY Green Bank financial, technical consulting, legal, and fund administration costs being lower than were anticipated in the budget. All other cost categories were less than anticipated in the budget.

General and administrative expenses:				
Rent, Maintenance & Repairs, Utilities, Insurance	3,196	2,822	374	13.3%
Professional & Consulting Services	1,751	1,640	111	6.8%
Travel and Outreach Costs Office Supplies, Equipment Rental, and Other	263 202	268 216	(5) (14)	-1.9% -6.5%
Computer Services and Software	1,529	1,629	(100)	-6.1%
Temporary Staffing, Outside Technical Reviewer	2,478	2,645	(167)	-6.3%
Training, Recruitment & Relocation	110	297	(187)	- <u>63.0</u> %
	9.529	9 517	12	0.1%

Analysis: Variance in Rent and Maintenance & Repairs is due to the cost of additional office space being higher than anticipated, the timing of receipt and payment of facility cleaning costs as well as copier maintenance costs being higher that what was assumed in the budget. Professional and Consulting fees were incurred for projects not anticipated in the budget. All other cost categories have minor variances or were less than anticipated.

2,976	3,137	(161)	-5.1%
lanned capital asset additio	ns as compared to	budget expec	tations.
13,593	13,593	-	0.0%
4,235	3,729	506	13.6%
	olanned capital asset addition	olanned capital asset additions as compared to	olanned capital asset additions as compared to budget expect 13,593 -

Analysis: Variance over budget is primarily due to the Series 2019 Residential Solar and Energy Efficiency Financing Green Revenue bonds issuance which was not anticipated in the budget, but was offset in part by slightly lower than expected interest expense for certain of the other GJGNY bond issues due to redemptions from loan repayment receipts exceeding expectations.

TOTAL EXPENSES	1,254,962	1,549,436	(294,474)	-19.0%
Capital asset purchases:				
System development costs	795	1,000	(205)	-20.5%
Information technology upgrades	293	672	(379)	-56.4%
Buildings	=	628	(628)	-100.0%
Furniture, fixtures and equipment	185	76	109	143.4%
Leasehold Improvements	20	-	20	100.0%
Total Other uses	1,293	2,376	(1,083)	-45.6%

Analysis: Variances are generally related to timing, or capital projects budgeted but not proceeding.

FINANCIAL STATEMENTS

March 31, 2020

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March 31, 2020

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RESPONSIBILITY FOR FINANCIAL REPORTING

DRAFT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the New York State Energy Research and Development Authority (the Authority), as well as all other information contained in the Authority's Annual Report. The financial statements of the Authority for the fiscal year ended March 31, 2020 were prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP). The Board of the Authority (the Board) adopted these financial statements and the Annual Report at a meeting on June 23, 2020.

The Authority maintains a system of internal controls, the objectives of which are to provide reasonable assurance as to the proper authorization and recording of transactions, the safeguarding of Authority assets, the compliance with applicable laws and regulations, and the reliability of financial records for preparing financial statements. The internal control structure is subject to periodic review by management, internal audit staff and the independent auditors. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such system should not exceed the benefits derived.

The Authority's financial statements have been audited by KPMG LLP, independent auditors appointed by the Members of the Authority. Management has made available to the independent auditors all the financial records and related data of the Authority, as well as provided access to all the minutes of the meetings of the Board and its standing committees. The independent auditors periodically meet directly with the Audit and Finance Committee of the Board, which is comprised of Members who are not employees of the Authority.

The independent audit included obtaining an understanding of the internal control structure, tests of accounting records, and other procedures which the independent auditors considered necessary in order to express opinions as to the fairness of the presentation of the financial statements. No material weaknesses in internal control or any condition of non-compliance with applicable laws, regulations or policy were noted by the independent auditors through the execution of their audit procedures. The unmodified independent auditors' report attests that the financial statements are presented fairly, in all material respects, in accordance with U.S. GAAP.

DRAFT

Alicia Barton

President and Chief Executive Officer

Jeffrey J. Pitkin

Treasurer and Chief Financial Officer



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report

Members of the Authority
New York State Energy Research and Development Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy Research and Development Authority (a component unit of the State of New York) (the Authority) as of and for the year ended March 31, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy Research and Development Authority as of March 31, 2020, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.

Report on Summarized Comparative Information

We have previously audited the 2019 financial statements of the New York State Energy Research and Development Authority, and we expressed unmodified audit opinions on those audited financial statements in our report dated June 27, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended March 31, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis and the required supplementary information on pages __ to __ be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The Responsibility for Financial Reporting section is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June _____, 2020 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

KPMG LLP

Albany, New York June ____, 2020

The following Management's Discussion and Analysis (MD&A) of New York State Energy Research and Development Authority's (NYSERDA) financial performance provides an overview of NYSERDA's financial activities for the fiscal year ended March 31, 2020. The information contained in the MD&A should be considered in conjunction with the information presented as part of NYSERDA's basic financial statements. Following this MD&A are the basic financial statements of NYSERDA with the notes thereto that are essential to a full understanding of the data contained in the financial statements. NYSERDA's basic financial statements have the following components: (1) government-wide financial statements; (2) governmental fund financial statements; (3) proprietary fund financial statements; (4) fiduciary fund financial statements; and (5) notes to the basic financial statements.

The government-wide financial statements are designed to provide readers with a broad overview of NYSERDA's finances in a manner similar to a private-sector business. The *Statement of Net Position* presents information on all of NYSERDA's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, and the difference between these is reported as net position. The *Statement of Activities* presents information showing how NYSERDA's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in the Statement for some items that will result in cash flows in future fiscal periods, or which already resulted in cash flows in a prior fiscal period. The government-wide financial statements present information about NYSERDA as a whole. All activities of NYSERDA are considered to be governmental activities, with the exception of the activities of NY Green Bank, which are considered business-type activities.

Governmental fund financial statements focus on near-term inflows and outflows of resources, as well as on balances of resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements. Because the focus of governmental funds is narrower than that of the government-wide statements, it is useful to compare the information presented for governmental activities in the government-wide financial statements. By doing so, the reader may better understand the long-term impact of the government's near-term financing decisions. The governmental funds *Balance Sheet* and the governmental funds *Statement of Revenues, Expenditures, and Changes in Fund Balances* provide a reconciliation to facilitate the comparison between governmental funds and governmental activities.

Proprietary fund financial statements provide information for business-type activities where NYSERDA charges fees to customers to recover costs of providing services. NY Green Bank is reported as a proprietary fund. The proprietary fund financial statements include a *Statement of Net Position*, a *Statement of Revenues*. *Expenses and Changes in Fund Net Position*, and a *Statement of Cash Flows*.

The fiduciary fund financial statements report assets held by NYSERDA in a fiduciary capacity for others and consist of a *Statement of Fiduciary Net Position* and a *Statement of Changes in Fiduciary Net Position*. These funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support NYSERDA's programs.

The notes to the basic financial statements provide additional information that is essential for a full understanding of the information provided in the government-wide, governmental fund, proprietary fund, and fiduciary fund financial statements.

CONDENSED FINANCIAL INFORMATION

The following condensed financial information is presented from NYSERDA's government-wide financial statements:

(Amounts in thousands)

Summary of Net Position	Governmental <u>Activities</u>	Business-type <u>Activities</u>	Total March 31, <u>2020</u>	Total March 31, <u>2019</u>	% Change 2020-2019
Cash and investments	\$567,822	164,361	732,183	807,831	-9.4%
Capital assets	14,235	-	14,235	15,918	-10.6%
Loans and financing receivables, net	199,773	441,559	641,332	498,362	28.7%
Other assets	33,117	3,207	36,324	36,976	-1.8%
Total assets	814,947	609,127	1,424,074	1,359,087	4.8%
Deferred outflows of resources	10,807	1,527	12,334	17,063	-27.7%
Other liabilities	208,407	2,361	210,768	214,244	-1.6%
Non-current liabilities	140,604	1,413	142,017	151,361	-6.2%
Total liabilities	349,011	3,774	352,785	365,605	-3.5%
Deferred inflows of resources	4,006	486	4,492	12,893	-65.2%
Net Position:					
Net investment in capital assets	14,234	-	14,234	15,917	-10.6%
Restricted	452,462	606,394	1,058,856	977,625	8.3%
Unrestricted	6,041	-	6,041	4,110	47.0%
Total net position	\$472,737	606,394	1,079,131	997,652	8.2%

Total assets increased \$65.0 million (4.8%). Cash and investments decreased \$75.7 million (9.4%) primarily due to Loans and financing receivables deployed by NY Green Bank, offset in part by an increase in NY-Sun program receipts in excess of expenses. Loans and financing receivables increased \$143.0 million (28.7%) primarily due to an increase in NY Green Bank Loans and financing receivables outstanding. Other assets decreased \$0.7 million (-1.8%) primarily due to a decrease in the value of the Strategic Gasoline Reserves as a result of lower crude and spot prices at year end, offset in part by an increase in Zero-Emissions Credit (ZEC) program payments owed by load serving entities.

Deferred outflows of resources decreased by \$4.7 million (27.7%) due to a decrease in the actuarially-determined deferred outflows related to pension and other post-employment benefits (OPEB), and the net change in contributions subsequent to measurement date, principally for OPEB, where the prior year's now-amortized contribution had been greater than the Annual Required Contribution due to the decision to fund the cumulative effect of adoption of GASB No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

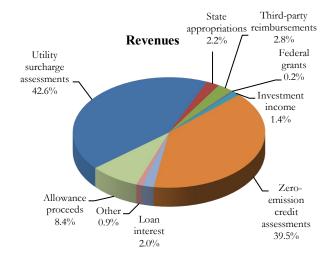
Total liabilities decreased \$12.8 million (-3.5%). Non-current liabilities decreased \$9.3 million (-6.2%) primarily due to a decrease in Bonds and notes payable as a result of scheduled principal payments and bond redemptions, offset in part by an increase in the net pension liability. Other liabilities decreased by \$3.5 million (-1.6%); primarily a result of a decrease in accounts payable related to the ZEC program, offset in part by an increase in bid deposits received in connection with the Renewable Energy Credit (REC) program.

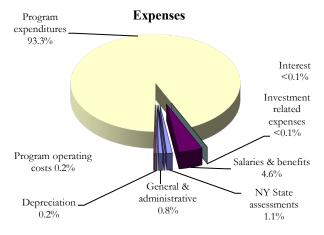
Deferred inflows of resources decreased by \$8.4 million (-65.2%) due to a decrease in the actuarially-determined deferred inflows related to pension and OPEB.

Net position increased \$81.5 million (8.2%) principally due to revenues exceeding expenditures in the RGGI program, and an increase in NY Green Bank's funded capitalization and from its operating income exceeding expenses.

(Amounts in thousands)

	·	•	Total	Total	
	Governmental	Business-type	March 31,	March 31,	% Change
Summary of Changes in Net Position	<u>Activities</u>	<u>Activities</u>	<u>2020</u>	<u>2019</u>	2020-2019
Revenues:					
State appropriations	\$29,432	-	29,432	25,190	16.8%
Utility surcharge assessments	548,232	20,678	568,910	556,603	2.2%
Renewable energy credit assessments	5,613	-	5,613	1,138	393.2%
Zero-emission credit assessments	528,346	-	528,346	451,560	17.0%
Allowance proceeds	112,024	-	112,024	100,839	11.1%
Third-party reimbursements	36,896	-	36,896	38,881	-5.1%
Federal grants	2,910	-	2,910	16,351	-82.2%
Interest subsidy	402	-	402	436	-7.8%
Loans and financing receivables interest	7,739	18,612	26,351	22,427	17.5%
Investment income	12,114	6,224	18,338	15,792	16.1%
Other program revenue	3,872	3,347	7,219	8,300	-13.0%
Total revenues	1,287,580	48,861	1,336,441	1,237,517	8.0%
Expenses:					
Salaries and benefits	49,324	7,484	56,808	52,041	9.2%
Program expenditures	1,164,107	214	1,164,321	1,020,270	14.1%
Investment related expenses	-	399	399	456	-12.5%
Program operating costs	1,824	1,277	3,101	2,733	13.5%
General & administrative costs	8,282	1,247	9,529	8,957	6.4%
Depreciation	2,787	189	2,976	2,863	3.9%
NY State assessments	13,481	112	13,593	13,593	0.0%
Interest	4,235	-	4,235	4,146	2.1%
Total expenses	1,244,040	10,922	1,254,962	1,105,059	13.6%
Change in net position	43,540	37,939	81,479	132,458	-38.5%
Net position, beginning of year	429,197	568,455	997,652	868,086	n/a
Cumulative effect of change in accounting principle (GASB 75)	-	-	-	(2,892)	n/a
Net position, end of year	\$472,737	606,394	1,079,131	997,652	8.2%





Total revenue increased \$98.9 million (8.0%). State appropriation revenue increased by \$4.2 million (16.8%) due to an increase in reimbursable expenditures across various program initiatives. Utility surcharge assessments revenue increased by \$12.3 million (2.2%) principally as a result of billings to utilities for reimbursable expenditures and required working capital balances, pursuant to the Bill-As-You-Go funding mechanism. REC proceeds increased by \$4.5 million (393.2%) due to an increase in proceeds from the sale of RECs. ZEC proceeds increased by \$76.8 million (17.0%) consistent with Public Service Commission ordered assessments. Allowance proceeds increased by \$11.2 million (11.1%) due to the average quarterly auction sale prices being higher than in the prior fiscal year. Third-party reimbursements decreased by \$2.0 million (-5.1%), principally due to lower revenues in the Con Edison Indian Point Energy Center Reliability Contingency (IPEC) and National Fuel Gas EmPower programs, offset in part by an increase in reimbursable funding from the Clean Transportation Volkswagen Settlement Agreement and the Clean Energy Fund (CEF) program's cofunding revenues. Federal grants revenue decreased \$13.4 million (-82.2%) primarily due to a reduction in reimbursable expenses for several Federal grants. Loans and financing receivables interest income increased \$3.9 million (17.5%) principally as a result of additional NY Green Bank loans outstanding. Total investment income increased \$2.5 million (16.1%) primarily due to higher yields.

Total expenses increased \$149.9 million (13.6%). Program expenditures increased \$144.1 million (14.1%) primarily due to higher expenditures in the Clean Energy Standard (CES), CEF and NY-Sun programs, offset in part by lower expenditures in the Regional Greenhouse Gas Initiative (RGGI) program. Salaries and benefits expense increased \$4.8 million (9.2%) primarily due to approved cost-of-living general salary increases, a slight increase in staffing levels, increases in pension and other post-employment actuarially determined expense, and an increase in compensated absences costs. Program operating and General and administrative expenses increased by \$0.9M (8.0%) based on additional New York City office space and from a slight increase in spending levels as compared to the prior year.

FINANCIAL ANALYSIS OF FUNDS

Total fund balances for the governmental funds increased from \$561.3 million to \$593.4 million as further described below:

- The CEF fund balance increased from \$61.9 million to \$79.9 million principally due to an increase in the
 estimated two-month working capital to be maintained pursuant to the BAYG funding mechanism, as the
 rate of expenditure increased.
- The CES fund balance decreased from (\$2.7) million to (\$8.0) million primarily due to ZEC expenditures made to the nuclear generation facilities exceeding assessments revenue.
- The RGGI fund balance increased from \$121.7 million to \$134.4 million principally as a result of revenues exceeding expenditures and transfers.
- The GJGNY fund balance decreased from \$261.6 million to \$259.2 million principally due to the timing of bond financing activity; debt service payments were made on pre-existing bonds payable, however no new bond proceeds were received in the current fiscal year.
- The aggregated Other funds fund balance increased from \$118.8 million to \$128.0 million principally due
 to revenues received in advance of expenditures for the Clean Transportation Volkswagen Settlement
 Agreement.

Total net position for the proprietary fund was \$606.4 million at March 31, 2020, as described below:

NY Green Bank's net position increased by \$37.9 million (6.7%) primarily due to additional capitalization
of \$20.7 million paid by electric utilities pursuant to BAYG, as well as operating revenues exceeding
operating expenses by \$11.3 million. Operating revenues increased by \$3.1 million primarily due to an
increase in interest earned on Loans and financing receivables. Operating expenses increased by \$1.7
million primarily due to an increase in staffing levels and associated fringe benefit costs, as well as
payment of general salary increases.

CAPITAL ASSET AND DEBT ADMINISTRATION

NYSERDA maintains land, buildings, and furniture and equipment in various locations for its corporate purposes. Total capital assets as of March 31, 2020 were \$14.2 million, net of accumulated depreciation. Capital asset additions for the fiscal year ended March 31, 2020 were \$1.3 million, primarily for information technology systems development costs.

Total non-current liabilities decreased from \$151.4 million to \$142.0 million primarily due to debt service payments made on bonds payable, partially offset by an increase in the net pension liability.

NYSERDA also issues tax-exempt bonds on a conduit basis on behalf of utility companies to finance certain eligible projects. As of March 31, 2020, approximately \$1.5 billion of bonds are outstanding. These bonds are non-recourse bonds and, as such, are not included in NYSERDA's financial statements.

ECONOMIC FACTORS

On behalf of the State, NYSERDA manages the Western New York Nuclear Service Center in West Valley, New York, the site of a former plant for reprocessing used nuclear fuel. Depending upon the clean-up options selected and agreement on cost sharing with the federal government, these costs could be substantial. It is anticipated that New York State's share of future costs for the West Valley site will be provided by New York State to NYSERDA and will not impact NYSERDA's current funding. As permitted by Governmental GASB Statement No. 49, Accounting and Financial Reporting for Pollution Remediation Obligations, no liability has been recorded in NYSERDA's financial statements for this contingency due to the expected recoveries from New York State.

NYSERDA's programs are impacted by a number of factors including, but not limited to, general economic conditions, energy prices, energy system reliability, and energy technology advancements. Revenues in the RGGI program in particular can be highly sensitive to some of the aforementioned factors.

COVID-19 IMPACTS

In response to the COVID-19 health crisis, NYSERDA moved its workforce to work remotely effective March 16, 2020 and was able to maintain effective communications and carry out its activities without any disruption through March 31, 2020. NYSERDA's program activities are largely carried out through agreements with more than 1,900 clean energy companies, consultants, and contactors, many of whom were impacted by the "New York State on Pause" Executive Order which directed non-essential businesses in New York State to close in-office personnel functions effective March 22. These organizations were eligible to resume operations after March 31, 2020 in accordance with Federal, State and local government guidelines. Given the timing of the suspension of programmatic activities, this did not materially impact programmatic activities and accomplishments for the fiscal year ending March 31, 2020. The COVID-19 health crisis had limited impacts on certain financial performance for the fiscal year ended March 31, 2020, but has not had a material impact on the financial condition of NYSERDA as of March 31, 2020.

CONTACT FOR NYSERDA'S FINANCIAL MANAGEMENT

This report is designed to provide a general overview of the finances of NYSERDA for interested parties. Questions concerning any information within this report or requests for additional information should be addressed to Jeffrey J. Pitkin, Treasurer and Chief Financial Officer, NYSERDA, 17 Columbia Circle, Albany, NY 12203.

(A Component Unit of the State of New York)

Statement of Net Position

March 31, 2020

(with summarized comparative totals for March 31, 2019)

(Amounts in thousands)

(Amou	ilis ili tilousalius)			
	_		Total	Total
	Governmental	Business-type	March 31,	March 31,
	Activities	Activities	2020	2019
ASSETS:				
Current assets:				
Cash and investments	\$567,822	164,361	732,183	703,158
New York State receivable	8,451	-	8,451	11,377
Third-party billings receivable	14,424	35	14,459	5,820
Interest receivable on loans	574	3,172	3,746	2,830
Loans and financing receivables due within one year, net	16,601	55,823	72,424	49,371
Prepaid expense	2,706	-	2,706	2,713
Other assets	6,962		6,962	14,236
Total current assets	617,540	223,391	840,931	789,505
Non-current assets:				
Investments	-	-	-	104,673
Loans and financing receivables- long-term, net	183,172	385,736	568,908	448,991
Capital assets, net of depreciation	14,235	-	14,235	15,918
Total non-current assets	197,407	385,736	583,143	569,582
Total assets	814,947	609,127	1,424,074	1,359,087
DEFERRED OUTFLOWS OF RESOURCES:	10,807	1,527	12,334	17,063
LIABILITIES:				
Current liabilities:				
Non-current liabilities due within one year	13,275	-	13,275	10,286
Accounts payable	7,543	29	7,572	8,332
Accrued liabilities	174,320	227	174,547	179,144
Unearned revenue	3,251	-	3,251	3,522
Deposits	23,293	2,105	25,398	23,246
Total current liabilities	221,682	2,361	224,043	224,530
Non-current liabilities:				· · · · · · · · · · · · · · · · · · ·
Bonds and notes payable	111,408	-	111,408	128,639
Other non-current liabilities	15,921	1,413	17,334	12,436
Total non-current liabilities	127,329	1,413	128,742	141,075
Total liabilities	349,011	3,774	352,785	365,605
DEFERRED INFLOWS OF RESOURCES:	4,006	486	4,492	12,893
NET POSITION:				
Net investment in capital assets	14,234	-	14,234	15,917
Restricted for specific programs	452,462	606,394	1,058,856	977,625
Unrestricted	6,041	-	6,041	4,110
Total net position	\$472,737	606,394	1,079,131	997,652
	Ţ // L ,/ O/	230,001	.,0.0,101	551,552

(A Component Unit of the State of New York)

Statement of Activities

For the year ended March 31, 2020

For the year ended March 51, 2020											
(with summarized comparative totals for M	arch 31, 2019)							Duainese time	Total	Total
(Amounts in thousands)				Governmenta	al Activities				Business-type Activities	March 31, 2020	March 31, 2019
-			Func	tions/Progra					Activities	2020	2019
-			Tunc	nons/i rograi	Energy	West			NY Green		
	CEF	NY-Sun	CES	RGGI	Analysis	<u>Valley</u>	Other	Total	Bank		
EXPENSES:	<u>92.</u>	111 0411	<u>020</u>	1.00.	<u>/ 11 (01 / 01 0</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
Salaries and benefits	\$22,677	2,453	3,404	2,900	3,728	2,608	11,554	49,324	7,484	56,808	52,041
Program expenditures	215,211	111,779	545,917	69,865	4,856	14,126	202,353	1,164,107	214	1,164,321	1,020,270
Investment related expenses	· -	· -	· -	· -	_	· -	· -	-	399	399	456
Program operating costs	362	72	59	26	555	128	622	1,824	1,277	3,101	2,733
General & administrative expenses	3,800	413	572	485	621	442	1,949	8,282	1,247	9,529	8,957
Depreciation .	1,309	363	260	73	94	80	608	2,787	189	2,976	2,863
NY State assessments	2,283	1,172	5,714	789	102	181	3,240	13,481	112	13,593	13,593
Interest	_	-	· -	-	-	_	4,235	4,235	-	4,235	4,146
Total expenses	245,642	116,252	555,926	74,138	9,956	17,565	224,561	1,244,040	10,922	1,254,962	1,105,059
REVENUES:											
Operating grants and contributions											
State appropriations	-	-	-	1,602	150	15,043	12,637	29,432	-	29,432	25,190
Utility surcharge assessments	226,809	126,197	-	-	7,551	-	187,675	548,232	20,678	568,910	556,603
Renewable energy credit proceeds	-	-	5,613	-	-	-	-	5,613	-	5,613	1,138
Zero-emission credit assessments	-	-	528,346	-	-	-	-	528,346	-	528,346	451,560
Allowance auction proceeds	-	-	-	112,024	-	-	-	112,024	-	112,024	100,839
Third-party reimbursements	20,212	-	34	-	-	2,515	14,135	36,896	-	36,896	38,881
Federal grants	-	-	-	-	2,538	-	372	2,910	-	2,910	16,351
Interest subsidy	-	-	-	-	-	-	402	402	-	402	436
Charges for services											
Project repayments	-	-	-	-	-	-	68	68	-	68	616
Rentals from leases	-	-	-	-	-	7	1,019	1,026	-	1,026	978
Fees and other income	-	-	2,488	-	-	-	290	2,778	3,347	6,125	6,706
Loans and financing receivables interest	_	_	_	_	_	_	7,739	7,739	18,612	26,351	22,427
Other											
Investment income	1,594	1,197	2,422	2,931	-	-	3,970	12,114	6,224	18,338	15,792
Total revenues	248,615	127,394	538,903	116,557	10,239	17,565	228,307	1,287,580	48,861	1,336,441	1,237,517
Increase (decrease) in net position											
before transfers	2,973	11,142	(17,023)	42,419	283	-	3,746	43,540	37,939	81,479	132,458
Transfers	13,539	11,658	11,395	(29,941)	_	_	(6,651)	_	_	_	_
Change in net position	16,512	22,800	(5,628)	12,478	283	-	(2,905)	43,540	37,939	81,479	132,458
Net position, beginning of period	63,173	14,274	(1,603)	121,645	2,911	_	228,797	429,197	568,455	997,652	868,086
Cumulative effect of change in accounting principle (GASB 75)	-	-	-	-	-	_	-, -:-				(2,892)
Net position, end of period	\$79,685	37,074	(7,231)	134,123	3,194	-	225,892	472,737	606,394	1,079,131	997,652
1	7,- 30	,	(' , ' /	,	-,		,	,		.,	

(A Component Unit of the State of New York)

Balance Sheet - Governmental Funds

March 31, 2020

(with summarized comparative totals for March 31, 2019) (Amounts in thousands)

_		Major F	unds				
	<u>CEF</u>	<u>CES</u>	<u>RGGI</u>	<u>GJGNY</u>	Other <u>Funds</u>	Total March 31, <u>2020</u>	Total March 31, <u>2019</u>
ASSETS:	***				4=4.000		
Cash and investments	\$91,036	129,341	135,851	56,994	154,600	567,822	538,457
Receivables:							
New York State	1,087	-	1,167	-	6,197	8,451	11,377
Third-party billings	2,306	8,398	-	3,099	621	14,424	5,646
Interest on loans	-	-	-	574	-	574	566
Loans	-	-	-	199,773	-	199,773	198,932
Prepaid expense	1,000	-	-	-	1,706	2,706	2,713
Other assets	-	-	-	-	6,962	6,962	14,236
Due from other funds	2,266	-	196	1,275	-	3,737	2,528
Total assets	\$97,695	137,739	137,214	261,715	170,086	804,449	774,455
LIABILITIES AND FUND BALANCES: Liabilities:							
Accounts payable	\$1,771	33	1,139	1,196	3,404	7,543	8,332
Accrued liabilities	14,193	122,380	1,551	1,239	33,843	173,206	178,473
Unearned revenue	1,827	-	205	79	1,141	3,252	3,522
Deposits	-	22,782	-	-	511	23,293	21,423
Due to other funds	-	568	-	-	3,221	3,789	1,445
Total liabilities	17,791	145,763	2,895	2,514	42,120	211,083	213,195
Fund Balances:							
Nonspendable-not in spendable form	1,000	-	-	-	1,706	2,706	2,713
Restricted	78,904	-	134,319	259,201	121,928	594,352	558,855
Unassigned	-	(8,024)	-	-	4,332	(3,692)	(308)
Total fund balances	79,904	(8,024)	134,319	259,201	127,966	593,366	561,260
Total liabilities and fund balances	\$97,695	137,739	137,214	261,715	170,086	804,449	774,455
Following is a reconciliation of amounts re Total fund balances for governmental fu	•	tly in the State	ment of Net Po	osition:		\$593,366	561,260
Capital assets used in governmental act therefore are not reported in the funds	ivities are not c	urrent financia	l resources ar	nd		14,398	15,987
Long-term liabilities are not due and payable in the current period and therefore are not reported in the funds						(140,714)	(150,867)
Pension & OPEB related deferred outflo		are not reporte	ed in goverme	ntal funds		6,801	3,744
Accrued interest expense	and milowo	2.2 110t 10port	go (oo			(1,114)	(927)
Net position of governmental activities					_	\$472,737	429,197
position of governmental destribut					=	ψ···=,/·Ο/	

(A Component Unit of the State of New York)

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds For the year ended March 31, 2020

(with summarized comparative totals for March 31, 2019) (Amounts in thousands)

						Total	Total
					Other	March 31,	March 31,
	CEF	<u>CES</u>	<u>RGGI</u>	<u>GJGNY</u>	<u>Funds</u>	<u>2020</u>	<u>2019</u>
REVENUES:							
State appropriations	\$ -	-	1,602	-	27,830	29,432	25,190
Utility surcharge assessments	226,803	-	-	-	321,429	548,232	436,721
Renewable energy credit proceeds	-	5,613	-	-	-	5,613	1,138
Zero-emission credit assessments	-	528,346	-	-	-	528,346	451,560
Allowance auction proceeds	-	-	112,024	-	-	112,024	100,839
Third-party reimbursements	20,212	34	-	-	16,650	36,896	38,881
Federal grants	-	-	-	-	2,910	2,910	16,351
Interest subsidy	-	-	-	402	-	402	436
Project repayments	-	-	-	-	68	68	616
Rentals from leases	-	-	-	-	1,026	1,026	978
Fees and other income	-	2,488	-	59	231	2,778	2,759
Loan interest	-	-	-	7,739	-	7,739	7,562
Investment income	1,594	2,422	2,931	1,087	4,080	12,114	8,569
Total revenues	248,609	538,903	116,557	9,287	374,224	1,287,580	1,091,600
EXPENDITURES:							
Current expenditures	243,738	555,576	73,988	5,325	356,928	1,235,555	1,089,182
Debt service:							
Principal	-	-	-	14,505	-	14,505	13,654
Interest	-	-	-	4,049	-	4,049	3,837
Bond issuance costs	-	-	-	167	_	167	862
Capital outlay	404	43	37	9	705	1,198	1,339
Total expenditures	244,142	555,619	74,025	24,055	357,633	1,255,474	1,108,874
·		•	•	,	,		
OTHER FINANCING SOURCES (USES):							
Residential Solar Loan revenue bonds issued	_	_	_	_	_	_	_
Transfers in	20,575	13,135	_	12,400	8,776	54,886	140,212
Transfers out	(7,036)	(1,740)	(29,941)	-	(16,169)	(54,886)	(87,286)
Net other financing sources (uses)	13,539	11,395	(29,941)	12,400	(7,393)	-	68,436
		,	(==,= : :)	,	(1,000)		
Net change in fund balances	18,006	(5,321)	12,591	(2,368)	9,198	32,106	51,162
Fund balances, beginning of year	61,898	(2,703)	121,728	261,569	118,768	561,260	510,098
Fund balances, end of year	\$79,904	(8,024)	134,319	259,201	127,966	593,366	561,260
Following is a reconciliation of amounts reported diff	erently in the Sta	tement of Acti	vities:				
Net change in fund balances for govenmental fund	ls					\$32,106	51,162
Capitalization and depreciation of capital outlays, r	ather than record	ling as an exp	enditure			(1,589)	(1,339)
Expenses for compensated absences in the States	ment of Activities	do not require	the use				
of current financial resources and therefore are				funds		(774)	(207)
Expenses for accrued bond interest in the Stateme	•	•	•			, ,	, ,
of current financial resources and therefore are		*		funds		(187)	(309)
Pension contributions are not an expense in the St	•	•	•	ididə		(107)	(000)
•						(FO1)	167
pension expense is not a use of current financial resources in the governmental funds						(521)	167
OPEB contributions are not an expense in the Statement of Activities, and GASB 75							
OPEB expense is not a use of current financial resources in the governmental funds						-	2,536
Bond proceeds are a current financial resource in the governmental funds but are not							
reported as revenues in the Statement of Activit	ies					-	(15,510)
Repayment of principal is an expenditure in the go	vernmental funds	but the repay	ment reduces				
long-term liabilities in the Statement of Net Posi	tion				_	14,505	13,654
Change in net position of governmental activities					_	\$43,540	50,154
					=		

(A Component Unit of the State of New York)

Statement of Net Position

Proprietary Fund

March 31, 2020

(with comparative totals for March 31, 2019) (Amounts in thousands)

	March 31, 2020	March 31, 2019
ASSETS:	2020	2010
Current assets:		
Cash and investments	\$164,361	\$174,576
Third-party billings receivable	35	174
Interest receivable on loans	3,172	2,264
Loans and financing receivables due within one year, net	55,823	33,310
Total current assets	223,391	210,324
Non-current assets:	•	,
Investments	-	94,798
Loans and financing receivables - long term, net	385,736	266,120
Total non-current assets	385,736	360,918
Total assets	609,127	571,242
DEFERRED OUTFLOWS OF RESOURCES:	1,527	1,955
LIABILITIES: Current liabilities:		
Accounts payable	29	-
Accrued liabilities	227	671
Escrow deposits	2,105	1,823
Total current liabilities	2,361	2,494
Non-current liabilities:		
Net pension liability	885	234
Net OPEB liability	528	485
Total non-current liabilities	1,413	719
Total liabilities	3,774	3,213
DEFERRED INFLOWS OF RESOURCES:	486	1,529
NET POSITION:		
Net position restricted for specific programs	\$606,394	568,455
	_	

(A Component Unit of the State of New York)

Statement of Revenues, Expenses and Changes in Fund Net Position Proprietary Fund

For the year ended March 31, 2020

(with comparative totals for March 31, 2019)
(Amounts in thousands)

	March 31, 2020	March 31, 2019
OPERATING REVENUES:		
Closing fees	\$2,528	2,993
Undrawn fees	572	382
Administrative fees	103	68
Other fees	144	504
Loans and financing receivables interest	18,612	15,253
Provision for losses on loans and financing receivables		(388)
Total operating revenues	21,959	18,812
OPERATING EXPENSES:		
Salaries and benefits	7,484	6,421
Investment related expenses	399	456
Program operating costs	1,277	765
General & administrative expenses	1,247	1,100
Depreciation	189	184
NY State assessments	112	125
Total operating expenses	10,708	9,051
OPERATING INCOME	11,251	9,761
NON-OPERATING REVENUES:		
Capital contributions	20,678	119,882
Investment income	6,224	7,223
Total non-operating revenues	26,902	127,105
NON-OPERATING EXPENSES:		
Capital expansion	44	1,425
Program evaluation	170	211
Total non-operating expenses	214	1,636
INCOME BEFORE TRANSFERS	37,939	135,230
Transfers- capital contributions (redemptions)	-	(52,926)
Change in net position	37,939	82,304
Net position, beginning of period	568,455	486,151
Net position, end of period	\$606,394	568,455

(A Component Unit of the State of New York)

Statement of Cash Flows

Proprietary Fund

For the year ended March 31, 2020 (with comparative totals for March 31, 2019)

(Amounts in thousands)

	March 31,	March 31,
	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Closing fees collected	\$2,588	\$2,993
Undrawn fees collected	581	450
Administrative fees collected	93	68
Other fees collected	210	475
Loans and financing receivables interest collected	17,694	14,862
Disbursement of counterparty deposits	-	(50)
Receipt of escrow deposits	282	1,798
Payments to employees & employee benefit providers	(7,405)	(6,444)
Payments to suppliers	(3,508)	(2,367)
Payment for allocated depreciation	(189)	(184)
Payments to NYS	(112)	(125)
Loans and financing receivables deployed	(258,384)	(184,150)
Loans and financing receivables principal repayments	116,279	179,674
Net cash (used in) provided by operating activities	(131,871)	7,000
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:	20.070	110 000
Capital contributions Transfers- capital contributions (redemptions)	20,678	119,882 (52,926)
Capital expansion	(44)	(1,425)
Net cash provided by non-capital financing activities	20,634	65,531
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(412,379)	(810,281)
Proceeds from sale of investments	507,973	739,942
Investment income	5,895	4,891
Net cash provided by (used in) investing activities	101,489	(65,448)
Net change in cash & cash equivalents	(9,748)	7,083
Cash and cash equivalents, beginning of year	24,279	17,196
Cash and cash equivalents, end of year	14,531	24,279
RECONCILIATION OF OPERATING INCOME TO NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES:		0.704
Operating income Adjustments to reconcile operating income to net cash used in (provided by) operating activities:	\$11,251	9,761
Decrease in third party billings receivable	139	38
Increase in interest receivable	(908)	(393)
Increase in loans and financing receivables	(142,129)	(4,088)
Increase in accounts payable	29	-
(Decrease) increase in accrued liabilities	(444)	168
Decrease in counterparty deposits	<u>.</u>	(50)
Increase in escrow deposits	282	1,798
Net change in pension & OPEB related accounts	79 (170)	(23)
Non-operating expenses unrelated to financing activities Net cash (used in) provided by operating activities	(170) (\$131,871)	7,000
The Sast (asea iii) provided by operating activities	(ψ101,071)	7,000

(A Component Unit of the State of New York)
Statement of Fiduciary Net Position
March 31, 2020
(Amounts in thousands)

	OPEB Trust Fund	Custodial Fund
ASSETS:		
Cash and investments	\$50,522	\$34,905
LLRW assessment billings receivable		
Total assets	\$50,522	\$34,905
LIABILITIES:		
Accrued expenses	155	-
Payable to New York State	-	968
LLRW escrow funds	-	2,223
Perpetual care of nuclear waste	-	31,711
Federal Energy Regulatory Commission		3
Total liabilities	155	\$34,905
NET POSITION:		
Held in trust for other postemployment		
benefits	\$50,367	

(A Component Unit of the State of New York)
Statement of Changes in Fiduciary Net Position
For the year ended March 31, 2020
(Amounts in thousands)

ADDITIONS:	OPEB Trust Fund	Custodial Fund
Employer contributions	\$2,608	\$ -
Utility assessments	-	661
Investment (loss) income	(3,602)	1,341
Less investment management expenses	(10)	
Net investment (loss) income	(3,612)	1,341
Total (losses) additions, net	(1,004)	\$2,002
	<u></u>	
DEDUCTIONS:		
Benefits	1,582	-
Reimbursement to NYS	-	2,906
Administrative fees	18	
Total deductions	1,600	\$2,906
	<u></u>	
Change in net position	(2,604)	
NET POSITION:		
Net position, beginning of year	52,971	
Net position, end of year	\$50,367	
,		

Notes to Basic Financial Statements March 31, 2020

(1) GENERAL

The New York State Energy Research and Development Authority (NYSERDA) is a public benefit corporation established in 1975 pursuant to Title 9 of Article 8 of the Public Authorities Law of the State of New York (the State). NYSERDA is included in the State's basic financial statements as a component unit. NYSERDA's significant functions and programs reported in the Statement of Activities are summarized below; those which are reported as major funds in the Governmental Fund Financial Statements are noted parenthetically.

Clean Energy Fund (CEF) Market Development/Innovation & Research (Major fund)
Pursuant to a January 2016 Order (CEF Order), the State Public Service Commission (Commission) authorized a ten-year commitment through 2025 of approximately \$5.3 billion to clean energy programs through a CEF. The CEF is designed to meet four primary objectives: greenhouse gas emission reductions; energy affordability; statewide penetration and scale of energy efficiency and clean energy generation; and growth in the State's clean energy economy.

The CEF Market Development activities are designed to reduce costs, accelerate customer demand, and increase private investment for energy efficiency and other behind-the-meter clean energy solutions through strategies including financial support, technical knowledge, data, education to customers and service providers, and advanced workforce training. The CEF Innovation & Research activities are designed to invest in cutting-edge technologies that will meet increasing demand for clean energy including: smart grid technology, renewables and distributed energy resources, high performance buildings, transportation, and clean tech startup and innovation development.

The CEF Order provided for a ten-year funding authorization of \$3.4 billion, as amended, for the Market Development and Innovation & Research activities, and also provided additional funding authorization of \$781.5 million for NY Green Bank, \$960.6 million for NY-Sun, and \$150.0 million for the RPS Program for a 2016 Main Tier solicitation. The NY Green Bank, and NY-Sun programs are presented as separate Programs/Functions in the financial statements as further described below.

The CEF Order authorized the continuation of previously authorized ratepayer collections for calendar years 2016 through 2024 for previous program authorizations for the New York Energy \$mart, Energy Efficiency Portfolio Standard, Technology and Market Development, and RPS programs (the Previously Approved Programs).

To reimburse NYSERDA for actual CEF program expenses, the CEF Order established a "Bill-As-You-Go" (BAYG) approach for revenue collection effective January 1, 2016. Under this approach, CEF ratepayer collections are held by the electric and gas utilities and used to reimburse NYSERDA monthly, provided that the reimbursement allows NYSERDA to maintain a sufficient cash balance based on projected expenses for the subsequent two-month period, subject to the collection amounts approved in the CEF Order.

NY-Sun

Approved through a 2012 Commission Order, the NY-Sun program is designed to develop a sustainable and subsidy-free solar electric industry through a megawatt block approach. The NY-Sun program was initially funded through \$216 million reallocated under the Renewable Portfolio Standard (RPS) program. The CEF Order established the incremental collection schedule and reallocation of uncommitted funds to support program activities approved through the 2012 Order.

Notes to Basic Financial Statements March 31, 2020

Clean Energy Standard (CES) (Major fund)

Pursuant to an August 2016 and subsequent Orders, the Clean Energy Standard was established, adopting a State Energy Plan goal that 70% of New York's electricity is to be generated by renewable sources by 2030 as part of a strategy to reduce statewide greenhouse gas emissions by 40% by 2030. The CES is comprised of a series of deliberate and mandatory actions to enhance opportunities for customer choice necessary to achieve the State Energy Plan goal. The mandated actions are divided into two categories, a Renewable Energy Standard (RES) and a Zero-Emissions Credit (ZEC) requirement. The RES consists of an obligation on Load Serving Entities (LSEs) in New York State to invest in new renewable generation resources to serve their retail customers evidenced by the procurement of qualifying renewable energy credits; an obligation on distribution utilities on behalf of all retail customers to continue to invest in the maintenance of existing at-risk renewable generation attributes; and a program to maximize the value potential of new offshore wind resources. As part of the RES component of the program, NYSERDA will offer for sale to the LSEs at various times Renewable Energy Credits (RECs) produced from, and received under, contracts with qualifying renewable energy facilities to meet the LSEs' mandatory compliance requirements. Alternatively, NYSERDA may receive Alternative Compliance Payments from LSEs in lieu of their purchasing RECs from NYSERDA. The ZEC requirement consists of an obligation on LSEs in New York State to invest in the preservation of existing at-risk nuclear zero-emissions attributes to serve their retail customers, evidenced by the procurement of qualifying ZECs. As part of the ZEC component, NYSERDA provides support payments for specified nuclear generating facilities in amounts prescribed by the Commission's Order based on each facility's output. The funding for these payments is collected through ZECs sold to each LSE in amounts calculated for each LSE's proportionate share of the statewide energy load. The RES component and the ZEC component are interrelated but the goals are additive; that is, the carbon benefits of preserving the nuclear zero-emissions attributes will not count toward achieving the required number of renewable resources to satisfy the 70% by 2030 goal. The RES and ZEC components will, however, in combination, contribute toward the State's comprehensive greenhouse gas reduction goals.

NYSERDA is leading the coordination of offshore wind opportunities in New York State and is supporting the development of 9,000 megawatts of offshore wind energy by 2035 in a responsible and cost-effective manner. In July 2018, the Commission issued an Order Adopting the Offshore Wind Standard. The Offshore Wind Standard authorized solicitations by NYSERDA, in consultation with the Long Island Power Authority and New York Power Authority, for first phase of offshore wind procurements. In October of 2018, NYSERDA issued its first solicitation for offshore wind to stimulate the development of the domestic offshore wind industry, reduce the cost of later offshore wind procurements, and allow New York State to realize the direct benefits associated with the construction, operation, and maintenance of offshore wind resources.

Regional Greenhouse Gas Initiative (RGGI) (Major fund)

RGGI is an agreement among nine Northeastern and Mid-Atlantic States to reduce greenhouse gas emissions from power plants. The RGGI states (Participating States) have committed to cap and then reduce the amount of carbon dioxide that certain power plants are allowed to emit, limiting the region's total contribution to atmospheric greenhouse gas levels. The Participating States have agreed to implement RGGI through a regional cap-and-trade program whereby the Participating States have agreed to auction annual regional emissions. Rules and regulations promulgated by the NYS Department of Environmental Conservation (DEC) call for NYSERDA to administer periodic auctions for annual emissions. Pursuant to these regulations, the proceeds will be used by NYSERDA to administer energy efficiency, renewable energy, and/or innovative carbon abatement programs, and to cover the costs to administer such programs.

Notes to Basic Financial Statements March 31, 2020

Green Jobs-Green New York (GJGNY) (Major fund)

GJGNY is a statewide program created by legislation enacted in October 2009 to promote energy efficiency retrofits in residential, multifamily, small business and not-for-profit buildings, and authorizes NYSERDA to establish innovative financing approaches through revolving loan funds to finance such projects. The program will also support sustainable community development and create opportunities for green jobs. The legislation funded the program with \$112.0 million from RGGI auction proceeds and restricts the use of interest earnings and revolving loan proceeds for additional programmatic spending. NYSERDA subsequently allocated \$94.6 million in additional RGGI funds to support program activities.

Energy Analysis

Through this program, NYSERDA provides objective and credible analyses of energy issues to various stakeholders. The program also includes activities for energy-related emergency planning and response, and support for State energy planning. These program activities are funded primarily by a State assessment on the intrastate gas and electricity sales of the State's investor-owned utilities.

Furthermore, Energy Analysis staff provide oversight activities pursuant to the State Low-Level Radioactive Waste (LLRW) Management Act of 1986, whereby NYSERDA is responsible for ultimately constructing and operating the State's LLRW disposal facilities, collecting information, and providing regular reports to the Governor and Legislature on LLRW generation in the State. These activities are funded annually by State appropriations through a sub-allocation from the New York State Department of Health.

NYSERDA is also responsible for the coordination of nuclear material matters, including serving as the State liaison with the Nuclear Regulatory Commission.

West Valley

NYSERDA manages, on behalf of the State, the Western New York Nuclear Service Center (West Valley), which is the site of a former plant for reprocessing used nuclear fuel. Through 1972, the former plant operator, Nuclear Fuel Services, Inc., generated as a by-product of its reprocessing operations, more than 600,000 gallons of liquid, high-level radioactive waste, which was stored at the site. In 1980, Congress enacted the West Valley Demonstration Project Act (West Valley Act). Pursuant to the West Valley Act, the U.S. Department of Energy (DOE) is carrying out a demonstration project to: (1) solidify the liquid high-level radioactive waste at West Valley; (2) transport the solidified waste to a permanent federal repository; and (3) decontaminate and decommission the reprocessing plant and the facilities, materials, and hardware used in the project.

NYSERDA also maintains, on behalf of the State, the State-Licensed Disposal Area (SDA), which is a shut-down commercial low-level radioactive waste disposal facility at West Valley. NYSERDA is evaluating how to remediate and close this facility in accordance with regulatory requirements.

Other

Other represents an aggregate of smaller Programs/Functions. These activities are primarily funded through Commission Orders, Memorandums of Understanding with various utilities pursuant to Commission Orders, various third-party reimbursement agreements, and federal energy grants.

NY Green Bank

NY Green Bank, a division of NYSERDA accounted for as a proprietary fund, is a \$1.0 billion, statesponsored, specialized financial entity working in partnership with the private sector to increase investments into New York's clean energy markets, creating a more efficient, reliable, and sustainable

Notes to Basic Financial Statements March 31, 2020

energy system. NY Green Bank's mission is to accelerate clean energy deployment in New York State by working in partnership with the private sector to transform financing markets.

To date, NY Green Bank has participated in transactions by providing: construction and longer-term post-construction financing and investment, financing to enable developers to aggregate smaller distributed assets into portfolios at scale, and credit enhancements.

NY Green Bank works to increase the size, volume, and breadth of clean energy investment activity throughout the State, expand the base of investors focused on New York State clean energy, and increase clean energy participants' access to capital. To do so, NY Green Bank collaborates with the private sector to develop transaction structures and methodologies that overcome typical clean energy investment barriers, such as challenges in evaluating risk and addressing the needs of distributed energy and efficiency projects where underwriting may be geared more towards larger and/or groups of somewhat homogeneous investment opportunities.

NY Green Bank focuses on opportunities that create attractive precedents, standardized practices, and roadmaps that capital providers can willingly replicate and scale. As funders "crowd in" to a particular area within the clean energy landscape, NY Green Bank moves on to other areas that have attracted less investor interest.

As a key component of New York's CEF, NY Green Bank is structured to be self-sustaining in that it must ultimately cover its own costs of operation.

Pursuant to various Orders of the Commission, the Commission authorized a total of \$1 billion in funded capitalization for NY Green Bank. As of March 31, 2020, total ratepayer funded capitalization provided to NY Green Bank was \$618.8 million, resulting in an unfunded amount of \$381.2 million that will be subsequently provided through the BAYG funding approach.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

The basic financial statements include government-wide financial statements, governmental fund financial statements, proprietary fund financial statements, and fiduciary fund financial statements.

The government-wide financial statements report information on governmental and business-type activities, and consist of a Statement of Net Position and a Statement of Activities. These statements exclude information about fiduciary activities where NYSERDA holds assets in a trustee or agency capacity for others since such assets cannot be used to support NYSERDA's own programs.

Net position classifications used in the government-wide financial statements are as follows:

- <u>Net investment in capital assets</u> amount of capital assets, net of accumulated depreciation, reduced by the outstanding balances of debt attributable to the acquisition, construction, or improvement of those assets, and deferred outflows of resources less deferred inflows of resources, that are attributable to the acquisition, construction, or improvement of those assets or related debt, excluding any significant unspent related debt proceeds or deferred inflows of resources
- Restricted for specific programs amount of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets
- <u>Unrestricted</u> amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of Net investment in capital assets or the Restricted for specific programs components of net position

Notes to Basic Financial Statements March 31, 2020

The governmental fund financial statements report governmental activities and consist of a Balance Sheet and a Statement of Revenues, Expenditures, and Changes in Fund Balances. The funds presented in the governmental funds financial statements are categorized as either major or non-major funds (the latter are aggregated within "Other") as required by U.S. generally accepted accounting principles (U.S. GAAP).

Fund balance classifications used in the governmental fund financial statements are as follows:

- Nonspendable amounts that cannot be spent because they are not in spendable form
- Restricted amounts with constraints placed on the use of resources that are legally imposed by creditors, grantors, contributors, or laws or regulations of other governments that may be imposed by law through constitutional provisions or enabling legislation
- <u>Committed</u> amounts that can only be used for specific purposes pursuant to constraints imposed
 by formal action of the government's highest level of decision making. Amounts cannot be used for
 any other purposes unless the government removes the specified use
- <u>Assigned</u> amounts are constrained by the government's intent to be used for specific purposes, but are neither restricted or committed
- <u>Unassigned</u> residual balance is the amount not meeting other fund balance classifications

NYSERDA had no Committed or Assigned Fund Balances as of March 31, 2020.

NYSERDA administers certain programs on behalf of the Commission and others whereby the terms of the program sponsor or enabling legislation limit the use of funds to certain program purposes, and as such, the funds are reported as restricted. Since NYSERDA has multiple constraints on its resources, restricted funds are considered spent first, committed funds second, assigned funds third, and unassigned funds last.

As of March 31, 2020, a fund deficit was reported in the Clean Energy Standard Fund. The deficit is the result of differences in cash flow timing relating to the receipts of cash and disbursements under the program.

The proprietary fund financial statements, based on an enterprise type fund, report business-type activities for which a fee is charged to external users for goods or services, and consist of a Statement of Net Position; a Statement of Revenues, Expenses and Changes in Fund Net Position; and a Statement of Cash Flows. NY Green Bank is presented in the proprietary fund financial statements.

The fiduciary fund financial statements report assets held by NYSERDA in a fiduciary capacity for others and consist of a Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position. NYSERDA's fiduciary funds include: (1) funds held for reimbursement to the State for costs associated with the Low-Level Radioactive Waste Management Act of 1986; (2) funds that, pursuant to a Cooperative Agreement, must be turned over to the U.S. Department of Energy upon delivery of the solidified high-level radioactive waste from West Valley to a permanent federal disposal repository to provide for perpetual care and management of the waste; and (3) funds held in an irrevocable trust maintained by a third-party trustee to receive employer contributions for NYSERDA's health insurance premiums for benefits provided to NYSERDA employees and/or their eligible spouses and dependent children after active employment ends (postemployment).

The basic financial statements include certain prior-year summarized comparative information in total, but not by separate governmental activities and major funds. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with NYSERDA's financial statements as of and for the year ended March 31, 2019, from which the summarized information was derived.

Notes to Basic Financial Statements March 31, 2020

(b) Basis of accounting

The government-wide financial statements are prepared using the economic resources measurement focus and accrual basis of accounting, as are the proprietary fund and the fiduciary fund financial statements. Revenues resulting from exchange transactions are recognized when the exchange takes place. Revenues resulting from non-exchange transactions, such as program funding in the form of grants, contributions, utility surcharge assessments, and State appropriations, are recognized when all eligibility requirements (if any) have been met. Resources received in advance of meeting all eligibility requirements are recorded as unearned revenue. Expenses in the government-wide financial statements are recognized when incurred. NYSERDA's administrative overhead charges are included as program direct expenses in the Statement of Activities.

Financial statements for governmental funds are presented using the current financial resources measurement focus and the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recorded when they become measurable and available (expected to be collected in the next 12 months) and have met eligibility requirements (if any). Expenditures, rather than expenses, are recognized in governmental fund financial statements. Only transactions that require the use of current financial resources are recognized. Expenses related to non-current liabilities are not recorded; however, certain expenses that are recognized over time in the government-wide financial statements are recognized as expenditures in the governmental fund financial statements in the period in which the underlying transaction takes place.

The governmental fund financial statements include a reconciliation of total fund balance and the changes therein, to total net position and the changes therein that are reflected in the government-wide financial statements. The reconciling items are the result of the above described differences in measurement focus and basis of accounting.

(c) Indirect cost allocation method

NYSERDA incurs certain indirect costs (e.g., administrative salary expense, fringe benefit expense, and general and administrative expense) that are not directly associated with a specific function/program. Therefore, these costs are allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank. Net pension and OPEB liabilities are also allocated proportionately to NY Green Bank, as required for Proprietary funds.

(d) Investments

Investments are recorded at fair value, which reflects quoted market prices for U.S. government obligations, mutual funds, and exchange-traded funds.

(e) Loans and financing receivables

Loans and financing receivables are recorded at their cost basis, less any provision for losses. For NY Green Bank, a provision for losses is established on any individual loan and financing receivable which: (i) is delinquent by more than 120 days on payment of principal or interest obligations; and (ii) indicates a deficiency in the present value of expected cash flows discounted at its effective interest rate, or a deficiency in the valuation of its collateral, as compared to its outstanding balance plus any accrued interest receivable. For the GJGNY program, an allowance for doubtful accounts is recorded at the amount of the outstanding principal balance of all loans over 120 days past due.

(f) Capital assets

Assets with a cost of more than \$2,500 and an estimated useful life in excess of two years are capitalized and reported at historical cost in the government-wide financial statements. Depreciation is calculated using the straight-line method over the estimated useful life of the capital assets, which

Notes to Basic Financial Statements March 31, 2020

ranges from three to fifty years and is reported in the government-wide and proprietary fund financial statements. Capital asset purchases are recorded as expenditures in the governmental funds financial statements.

(g) Unearned revenue

Unearned revenue consists of funds received or receivable in advance of revenue recognition conditions having been met for the underlying exchange transactions.

(h) <u>Deferred outflows of resources and deferred inflows of resources</u>

Deferred outflows of resources as presented in the government-wide and proprietary fund financial statements represent a consumption of net assets applicable to a future reporting period. Deferred inflows of resources as presented are defined as an acquisition of net assets applicable to a future reporting period. Deferred outflows of resources and deferred inflows of resources include differences between expected projected results and actual results related to NYSERDA's net pension and net OPEB liabilities, as well as contributions subsequent to the measurement date for each post-retirement/post-employment benefit plan. Deferred outflows of resources and deferred inflows of resources are also allocated proportionately to NY Green Bank, as required for Proprietary funds.

(i) Compensated absences

NYSERDA employees are granted vacation and sick leave in varying amounts. In the event of termination or retirement, an employee is reimbursed for accumulated vacation leave up to the equivalent of 45 days, and sick leave up to a maximum of five days. Retired employees may use additional accumulated sick leave to pay for the employee share of health insurance premiums.

NYSERDA's accrual for compensated absences, as reported in the government-wide financial statements within other non-current liabilities, includes fringe benefits on compensated absences and estimated costs to use employee sick leave for post-retirement health benefits. Compensated absences are not accrued in the governmental funds financial statements.

(j) NY State assessments

NY State assessments for the year ended March 31, 2020 consisted of \$12.7 million in fees assessed by the State under Section 2975 of the Public Authorities Law (Governmental Cost Recovery System) for general governmental services, and \$0.9 million paid to the State under a budget bill pursuant to Article VII of the New York State Constitution.

(k) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies. Estimates also affect the reported amounts of revenues and expenditures/expenses during the reporting period. Actual results could differ from those estimates.

(I) Income taxes

NYSERDA is a component unit of the State and therefore is generally exempt from federal, state, and local income taxes.

(m) Adoption of new accounting pronouncements

NYSERDA implemented GASB Statements No. 84 Fiduciary Activities (GASB 84) and No. 88, Certain disclosures Related to Debt, including Direct Borrowings and Direct Placements (GASB 88), for the fiscal year ended March 31, 2020.

GASB 84 directed that fiduciary funds previously entitled "Agency" funds be titled as "Custodial" funds in the Fiduciary Funds financial statements, and further required that Custodial funds be

Notes to Basic Financial Statements March 31, 2020

included on the Statement of Changes in Fiduciary Net Position.

GASB 88 requires enhanced notes disclosures (see note 8).

(n) Reclassifications

Certain amounts reported as of and for the fiscal year ended March 31, 2019 have been reclassified to conform with the amounts presented as of and for the fiscal year ended March 31, 2020.

(3) CASH AND INVESTMENTS

Pursuant to Public Authorities Law Section 1859(1), the Commissioner of the New York State Department of Taxation and Finance (Fiscal Agent) serves as fiscal agent for NYSERDA's cash and investments, maintaining such funds on NYSERDA's behalf and implementing investments subject to the Fiscal Agent's policies and with direction and authorization from NYSERDA. NYSERDA has a written investment policy that applies to all of its investments. The policy permits deposits with financial institutions approved by the Fiscal Agent and permits investments in: certificates of deposit of bank or trust companies located in New York State, obligations of New York State and the United States government and certain of their agencies, repurchase agreements subject to certain limitations, and money market funds subject to certain limitations.

Cash and investments of the OPEB Trust are held with the Bank of New York Mellon Trust Company. All OPEB Trust investments are made consistent with the investment policy based on target percentages established for each asset class.

The following schedule presents cash and investments as of March 31, 2020. Fair value is measured using quoted market prices for U.S. government obligations, mutual funds, and exchange traded funds. GASB Statement No. 72, *Fair Value Measurement and Application*, prescribes three approaches to measuring fair value and requires a government to use valuation techniques consistent with one or more of these approaches. The standard establishes a fair value hierarchy that categorizes the inputs to valuation techniques used to measure fair value into three levels. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs—other than quoted prices included within Level 1—that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. All NYSERDA investments are valued based on Level 1 inputs.

			Weighted
	Fair Value		Average
	(Amounts in	% of	Maturity
	<u>thousands)</u>	<u>Total</u>	(months)
Governmental funds			
Cash and cash equivalents	\$202,307	35.6	n/a
U.S. Treasury Bills	355,436	62.6	1.4
U.S. Treasury Notes	7,801	1.4	6.1
U.S. Treasury Strips	<u>2,278</u>	<u>0.4</u>	<u>10.7</u>
Total	<u>\$567,822</u>	<u>100.0</u>	<u>1.2</u>
Current portion thereof	<u>\$567,822</u>		

Notes to Basic Financial Statements March 31, 2020

Proprietary fund Cash and cash equivalents U.S. Treasury Bills U.S. Treasury Notes Total Current portion thereof	\$14,53 53,73 <u>96,10</u> <u>\$164,36</u> <u>\$164,36</u>	0 32.7 <u>0 58.5</u> <u>1 100.0</u>	5.6
Fiduciary funds Cash and equivalents Mutual funds Exchange traded funds U.S. Treasury Bills U.S. Treasury Notes Total	\$1,459	1.7	n/a
	42,374	49.6	n/a
	7,691	9.0	n/a
	3,219	3.8	2.0
	30,684	35.9	<u>10.7</u>
	\$85,427	100.0	<u>9.9</u>

Interest Rate Risk. NYSERDA's investment policy limits investment maturities to no longer than five years as a means of managing its exposure to fair value losses arising from increasing interest rates. Investment maturities are selected based on anticipated cash flow needs.

The OPEB Trust's risk tolerance is understood by the Plan Administrator such that achieving the Plan's investment objectives is not guaranteed and there will be time periods for which these objectives will not be met. The Plan Administrator also recognizes that some risk must be assumed to achieve the Trust's long-term investment objectives and accepts the inevitable fluctuations in returns that will occur. While it is understood that a certain level of risk is expected in the Trust's portfolio, the ability to withstand short and intermediate term variability was specifically considered in the development of the Investment Policy Statement risk tolerances. The debt instruments held within the above table's Mutual funds and Exchange traded funds are shown in the below table.

Credit Risk. Money market fund investments consist of non-rated funds whose investments are restricted to U.S. government obligations. As of March 31, 2020, debt instruments other than those of the U.S. government were held only by the OPEB Trust and were as follows:

	Investment policy range (% of	Fair Value (Amounts in	Morningstar 5- star rating scale
<u>Investment type</u>	<u>portfolio)</u>	<u>thousands)</u>	<u>rating</u>
Mutual funds:			
Short term bonds	1%-6%	\$1,682	4
Intermediate term bond	9%-19%	\$7,545	3
Inflation protected securities	5%-15%	\$5,515	3
Long term bond	1%-11%	\$3,004	4
High yield bond	7%-17%	\$5,867	4
Global bond	1%-6%	\$494	4

Concentration of Credit Risk. NYSERDA's investment policy limits investments with any single eligible banking institution to no more than 35% of its total investment portfolio, except as otherwise required by any policies and practices of the Fiscal Agent. As of March 31, 2020, NYSERDA did not have any investments with institutions that were individually in excess of 5% of total investments.

The OPEB Trust's investment policy places limitations on the concentration of investments in certain industries, with certain companies, and among asset classes and within investment policy ranges.

Notes to Basic Financial Statements March 31, 2020

Custodial Credit Risk for Deposits. Deposits are exposed to custodial credit risk if the deposits are not covered by depository insurance or deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging institution's trust department or agent, but not in the name of NYSERDA.

In accordance with existing policies and procedures, the Fiscal Agent of NYSERDA monitors deposit balances for the purpose of determining collateralization levels. Collateral sufficient to cover all uninsured deposits is held at the Department's custodial bank.

Custodial Credit Risk for Investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of NYSERDA, and are held either by the counterparty or the counterparty's trust department or agent, but not in the name of NYSERDA.

Fixed income investments owned directly by NYSERDA, which trade in the U.S. markets, are held at NYSERDA's Fiscal Agent's custodian, in separate accounts, in the name of the Comptroller of the State of New York in Trust for NYSERDA. These securities are typically held in electronic form through the Federal Book Entry System and by the Depository Trust Company (DTC) and its subsidiaries acting as an agent of NYSERDA's Fiscal Agent's custodian bank.

Foreign Currency Risk. As of March 31, 2020, only the OPEB Trust portfolio (reported within Fiduciary funds) held any foreign investments. Foreign mutual fund holdings at March 31, 2020 were \$15.1 million (comprised of \$14.6 million of equity funds and \$494,000 of fixed income funds).

(4) RECEIVABLE FROM NEW YORK STATE

As of March 31, 2020, the amount due from New York State is \$8.5 million, which represents appropriation and grant receivables.

(5) LOANS AND FINANCING RECEIVABLES

Loans receivable exist under the Green Jobs-Green New York program to finance energy efficiency retrofits and renewable energy system installments in residential, multifamily, small business, and not-for-profit buildings. The residential component, and certain small business/not-for-profit loans, offers loans originated by a third-party loan originator using pre-established loan underwriting criteria, which are funded by NYSERDA and serviced by a third-party loan servicer. Multifamily and small business/not-for-profit loans are provided through participating lenders with NYSERDA providing 50% of the principal, subject to certain limits.

For the fiscal years ended March 31, 2020 and March 31, 2019, provision for losses were \$1.8 million and \$2.1 million, respectively, and are included in Program/Current expenditures, respectively, for the Program/Major Fund.

NY Green Bank loans and financing receivables consist of sustainable infrastructure investments made by it into eligible technologies, consistent with its mission and investment criteria. These loans and financing transactions aim to mobilize private sector capital during the lifecycle of each investment, accelerate the deployment of economically and technically feasible clean energy projects in the State, provide financial returns to NY Green Bank, and contribute to New York's clean energy policy outcomes. NY Green Bank offers the following categories of capital solutions: construction finance, construction finance & term loan, term loans & investments (which may be debt or equity), warehousing/aggregation, and credit enhancements. NY Green Bank prices its products to reflect its credit underwriting, its risk position in the capital structure and pricing for

Notes to Basic Financial Statements March 31, 2020

comparable transactions, as well as internal portfolio return needs taking into account current market rates as well as commercial expectations of rates.

For the fiscal years ended March 31, 2020 and March 31, 2019, provision for losses were \$0.0 million and \$0.4 million, respectively, and are reflected as a reduction of Loans and financing receivables interest on the Statement of Activities.

Loans and financing receivables at March 31, 2020 include the following:

(Dollar amounts in thousands)

	Number of	Loans and
	loans and	financing
Governmental activities/funds	financing	receivables
	<u>receivables</u>	<u>Outstanding</u>
Residential	21,440	\$206,204
Small Business/Not-for-Profit	54	1,517
Multifamily Building	7	232
Total governmental activities/funds	<u>21,501</u>	207,953
Allowance for doubtful accounts		<u>(8,180)</u>
Net total governmental activities/ funds		<u>\$199,773</u>

(Dollar amounts in thousands)

	Number of loans and	Loans and financing
	financing	receivables
Business-type activities/proprietary fund	<u>receivables</u>	<u>Outstanding</u>
Construction Finance	8	\$93,300
Construction Finance & Term Loan	6	34,191
Term Loans & Investments	18	247,391
Warehousing/Aggregation	<u>5</u>	<u>66,677</u>
Total business-type activities/proprietary fund	<u>37</u>	\$ <u>441,559</u>

Loans and financing receivables at March 31, 2020 mature as follows:

Governmental activities/funds

	(Amounts in thousands)			
	Residential	Small		
Fiscal year ending	Energy	Business/	Multifamily	
March 31,	<u>Efficiency</u>	Not-for-Profit	<u>Building</u>	<u>Total</u>
2021	\$16,868	246	167	17,281
2022	16,523	228	62	16,813
2023	16,720	213	3	16,936
2024	17,111	206	-	17,317
2025	17,565	203	-	17,768
2026-2030	88,387	421	-	88,808
2031-2035	32,986	-	-	32,986
2036-2040	44		<u> </u>	44
Total governmental activities/funds	<u>\$206,204</u>	<u>1,517</u>	<u>232</u>	<u>207,953</u>

Notes to Basic Financial Statements March 31, 2020

Business-type activities/proprietary fund

(Amounts in thousands)

		Construction		,	
Fiscal year ending	Construction	Finance &	Term Loan &	Warehousing/	
March 31,	<u>Finance</u>	<u>Term Loan</u>	<u>Investments</u>	<u>Aggregation</u>	<u>Total</u>
2021	\$33,632	1,088	3,366	17,737	55,823
2022	32,371	1,232	66,675	8,923	109,201
2023	1,072	1,381	36,604	12,034	51,091
2024	12,142	1,503	8,255	20,478	42,378
2025	40	1,636	16,172	7,505	25,353
2026-2030	14,043	20,557	104,736	-	139,336
2031-2035	-	6,794	11,100	-	17,894
2036-2040	<u>-</u>	Ξ	<u>483</u>	<u>-</u>	<u>483</u>
Total business-type activities/ proprietary					
fund	<u>\$93,300</u>	<u>34,191</u>	<u>247,391</u>	<u>66,677</u>	<u>441,559</u>

(6) OTHER ASSETS

As of March 31, 2020, the other assets balance of \$7.0 million represents the lower of cost or market value of the Upstate and Downstate New York State Strategic Gasoline Reserves, which were established to provide an emergency supply of finished motor gasoline in case of a significant disruption to petroleum fuels supply or distribution.

(7) CAPITAL ASSETS

Capital asset activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	Beginning Balance	Additions	Retirements/ Reclasses	Ending Balance
Land	\$685			685
Land improvements	5,844	-	-	5,844
Buildings	8,979	-	(48)	8,931
Machinery and equipment	19,630	1,272	(565)	20,337
Leasehold improvements	2,990	20	_	3,010
·	38,128	1,292	(613)	38,807
Less accumulated depreciation for:				
Land Improvements	(1,992)	(202)	-	(2,194)
Buildings	(5,592)	(290)	48	(5,834)
Machinery and equipment	(13,513)	(2,264)	565	(15,212)
Leasehold improvements	(1,113)	(219)		(1,332)
	<u>(22,210)</u>	<u>(2,975)</u>	<u>613</u>	<u>(24,572)</u>
Capital assets, net	<u>\$15,918</u>	<u>(1,683)</u>	<u> </u>	<u>14,235</u>

Notes to Basic Financial Statements March 31, 2020

(8) NON-CURRENT LIABILITIES

Non-current liability activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	(7 timodinto in ti	1100001100)	Amounts		
	Beginning <u>Balance</u>	<u>Additions</u>	Reductions	Ending <u>Balance</u>	Due within One Year
Governmental activities Compensated					
absences	\$ 8,648	5,349	(4,459)	9,538	3,785
Bonds payable	135,404	-	(14,506)	120,898	9,490
Net pension liability	3,133	12,848	(9,267)	6,714	-
Net OPEB liability	<u>3,457</u>	<u>5,544</u>	(5,547)	<u>3,454</u>	
Non-current liabilities	<u>\$150,642</u>	<u>23,741</u>	(33,779)	<u>140,604</u>	<u>13,275</u>
Business-type activities Net pension liability	\$234	1,873	(1,222)	885	-
Net OPEB liability	<u>485</u>	<u>677</u>	(634)	<u>528</u>	
Non-current liabilities	<u>\$719</u>	<u>2,550</u>	<u>(1,856)</u>	<u>1,413</u>	<u>=</u>

Bonds payable includes various bonds issued and secured by loan repayments from loans issued under the GJGNY program. Following is a schedule of bonds issued and outstanding at March 31, 2020:

(Amounts	in thousands)		
	Principal Balance <u>Outstanding</u>	Final Maturity <u>Date</u>	Interest <u>Rate</u>
Residential Energy Efficiency Financing Revenue Bonds,			
Series 2013A	\$12,460	July 1, 2028	2.8% to 4.1%
Series 2015A	33,735	July 1, 2030	2.3% to 3.8%
Series 2016A	18,950	March 1, 2027	1.4% to 2.8%
Residential Solar Loan Revenue Bonds, Series 2015	24,548	March 1, 2027	4.6% to 5.2%
Residential Solar Financing Green Revenue Bonds, Series 2018A	15,695	April 1, 2034	3.0% to 4.8%
Residential Solar and Energy Efficiency Financing Green Revenue Bonds, Series 2019A Total	15,510 <u>\$120,898</u>	April 1, 2035	3.2% to 4.6%

Notes to Basic Financial Statements March 31, 2020

The Series 2013A, Series 2015A, and Series 2016A Bonds were issued under a master Indenture of Trust (Indenture), as supplemented, which requires that NYSERDA maintain cash and future scheduled pledge loan payments in each bond year of not less than 110% of annual debt service for each series of bonds. Payment of principal and interest on the Series 2013A bonds are guaranteed by the New York State Environmental Facilities Corporation (EFC) through the Clean Water State Revolving Fund (SRF). The Residential Energy Efficiency Financing Revenue Bonds Series 2015A and Series 2016A were issued to EFC in connection with SRF bonds issued by EFC. The Series 2015A bonds include an interest subsidy credit from EFC provided compliance with provisions of the EFC financing agreements. Under the terms of agreements with EFC, NYSERDA has on deposit with an escrow agent as of March 31, 2020, approximately \$4.7 million in a Collateral Reserve Account, which may be used by EFC to fund or reimburse its guarantee. Any funds held by the Trustee under the Indenture may be withdrawn by NYSERDA provided that cash and scheduled pledged loan payments are not less than 120% of annual debt service and provided that the balance of the Collateral Reserve Account and any Debt Service Reserve Fund are not less than 15% of aggregate bonds outstanding under the Indenture.

Bonds payable also includes Residential Solar Loan Revenue Bonds (Series 2015). The bonds are secured with a pledge of payments from consumer loans issued through the GJGNY program to finance the installation of residential photovoltaic systems (Solar Loans) in an amount which provides scheduled debt service coverage of 125% based on a 15 year structuring amortization schedule. The bonds originally included a variable rate component, but pursuant to the terms of the borrowing, pledged Solar Loan payments received in excess of structuring scheduled payments were applied on a quarterly basis first to the redemption of outstanding variable rate bonds, and then to outstanding fixed rate bonds, and as of March 31, 2020 no variable rate principal balance remained outstanding. The remaining principal outstanding bears interest at a fixed rate determined at the time each series was issued, and mature approximately 10 years from the date issued, ranging from March 1, 2026 to March 1, 2027.

Also included in Bonds Payable are Residential Solar Loan Revenue Bonds (Series 2018) issued to finance or refinance loans residential solar loans for under the GJGNY program for one to four family residential structures. The Series 2018A Bonds are limited obligations of the Authority, payable solely from and secured by Pledged Loan Payments held by the Trustee under the Indenture and all money, revenues and receipts to be received under the Indenture.

Bonds Payable further includes Residential Solar and Energy Efficiency Financing Green Revenue Bonds (Series 2019). The Series 2019A Bonds are limited obligations of the Authority, payable solely from and secured by the Pledged Revenues pursuant to the Indenture of Trust.

For each of the Series of bonds outstanding at March 31, 2020, failure of the Authority to cause to be made by the Trustee, the scheduled payment of principal and/or interest amounts still outstanding at such maturity date, would result in the Authority becoming responsible for, but only from pledged loan payments, all reasonable collection and similar fees, plus interest on overdue installments of interest at the rate borne by the Bonds. The remedy of acceleration shall not be available to the Owners of the bonds.

Notes to Basic Financial Statements March 31, 2020

As of March 31, 2020, future debt service requirements of the bonds are:

(Amounts in thousands)

Fiscal year	•		•		
ending	Bonds pa	Bonds payable			
March 31,	<u>Principal</u>	Interest	<u>Total</u>		
2021	9,490	3,874	13,364		
2022	9,420	3,652	13,072		
2023	9,015	3,423	12,438		
2024	8,620	3,197	11,817		
2025	8,360	2,962	11,322		
2026-30	58,758	7,151	65,909		
2031-35	<u> 17,235</u>	2,343	<u> 19,578</u>		
Total	<u>\$120,898</u>	<u> 26,602</u>	<u>147,500</u>		

In the above table, certain bonds with principal payments that are dependent on the amount of pledged loan receipts are shown in the period in which final maturity of such amounts occur, though pre-payment without penalty could occur. In addition, interest payments for those same bonds include the maximum amount assuming no principal pre-payments are made.

(9) RETIREMENT PLAN

There are two retirement plans for NYSERDA employees: the New York State and Local Retirement System (the System), and the New York State Voluntary Defined Contribution Plan (VDC). Nearly all employees of NYSERDA participate in one of these two plans.

The System is a cost-sharing, multiple-employer, defined benefit public employee retirement plan. The State Comptroller is sole trustee and administrative head of the System. The System issues a publicly available financial report including financial statements and required supplementary information located on the Internet at

http://www.osc.state.ny.us/retire/word_and_pdf_documents/reports/financial_statements/fs_2019.pdf or by writing to the New York State and Local Retirement System, 110 State Street, Albany, New York 12244. The System provides retirement benefits, as well as death and disability benefits. Retirement benefits are established by the New York State Retirement and Social Security Law. Retirement benefits, contributory requirements and vesting depend on the point in time at which an employee first joined the System (membership "tier"). Members of the System who joined before July 27, 1976 are enrolled in a noncontributory plan; NYSERDA contributes the entire amount determined to be payable to the System for those members. Personnel who joined the System after July 27, 1976 through January 1, 2010 and who have less than 10 years of accredited service are required by law to contribute three percent of their gross salary; NYSERDA contributes the balance payable to the System during that period, and the full amount determined to be payable thereafter. Members who joined the System between January 1, 2010 and March 31, 2012 contribute three percent of their gross salary during the full term of employment. Members who joined the System after April 1, 2012 contribute between three percent and six percent, depending on their salary. during the full term of employment. Retirement benefits vest after five to 10 years of accredited service, depending on the applicable tier.

Notes to Basic Financial Statements March 31, 2020

As of the fiscal years ended March 31, 2020 and 2019, NYSERDA's proportionate share of the System's net pension liability was approximately 0.11% and 0.10%, respectively, determined based on the ratio of NYSERDA's total projected long-term contributions to the total System projected long-term contributions from all employers. NYSERDA, in turn, allocated a share of its pension liability and deferred outflows and deferred inflows to NY Green Bank, its proprietary fund, based on a proportional allocation methodology using direct salary expenses. The governmental activities represent approximately 91% and the proprietary fund represents approximately 9% of the proportionate share of the balances of System pension-related amounts consistent with NYSERDA's current allocation methodology. NYSERDA's net pension liability, which includes that of NY Green Bank, is as follows:

	(Amount in thousands)
Measurement date	03/31/2019
Actuarial valuation date	04/01/2018
Net pension liability	\$7,599

Update procedures were used to roll forward the total pension liability from the actuarial valuation date to the measurement date. The significant actuarial assumptions included in the actuarial valuation included an inflation factor of 2.5%, projected salary increases of 4.2%, and investment rate of return of 7.0%. The System also assumed a COLA of 1.3% annually. Annuitant mortality rates are based on the System's 2015 experience study of the period April 1, 2010 – March 31, 2015, with adjustments for mortality improvements based on Society of Actuaries Scale MP-2014. The discount rate used to calculate the total pension liability was 7.0%. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to NYSERDA's participation in the System, as well as the related pension expense, information about the fiduciary net position of the System, and additions to/deductions from NYSERDA's fiduciary net position, have been determined on the same basis as they are reported by the System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the statutes governing the System. Investments are reported at fair value.

Pension expense for the fiscal year ended March 31, 2020 was \$4.4 million. NYSERDA's contribution to the System for the fiscal year ended March 31, 2020 was \$3.8 million, representing 100% of the required contribution.

The following table portrays the sensitivity of NYSERDA's proportionate share of the net pension liability due to changes in the discount rate:

	(Amounts in thousands)		
	Current Discount 1% Decrease Rate 1% Inc		
	(6.0%)	<u>(7.0%)</u>	(8.0%)
Governmental activities Net pension liability/(asset)	\$29,355	\$6,714	(\$12,306)
Business type-activities/proprietary fund Net pension liability/(asset)	\$3,869	\$885	(\$1,622)

Notes to Basic Financial Statements March 31, 2020

Balances of System pension-related deferred outflows of resources and deferred inflows of resources as of the measurement date were as follows:

	(Amounts in thousands)		
	Deferred	Deferred	
	Outflows of	Inflows of	
	Resources	Resources	
Differences between expected and actual			
experience	\$1,496	(510)	
Changes of assumptions	1,910	-	
Net difference between projected and actual			
investment earnings on pension plan			
investments	-	(1,950)	
Changes in proportion and differences			
between employer contributions and			
proportionate share of contributions	127	(1,058)	
Employer contributions subsequent to the			
measurement date	<u>3,844</u>	-	
Total	<u>\$7,377</u>	<u>(\$3,518)</u>	

The amount of employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended March 31, 2020.

The deferred outflows of resources and deferred inflows of resources to be recognized in pension expense in each of the next five years and in the aggregate thereafter is as follows:

	(Amounts in thousands)		
	Business-type		
	Governmental	activities/proprietary	
Fiscal year Ending March 31:	<u>activities</u>	<u>fund</u>	<u>Total</u>
2021	\$970	144	1,114
2022	(1,609)	(148)	(1,757)
2023	(312)	(1)	(313)
2024	844	127	971
2025	-	-	-
Thereafter		<u></u>	<u>_</u>
Totals	<u>\$(107)</u>	<u>122</u>	<u>15</u>

The VDC is a multiple-employer, defined contribution plan administered by the Director of University Benefits for the State University of New York (SUNY); TIAA-CREF serves as the third-party administrator. On July 1, 2013, the VDC option was made available to NYSERDA employees hired on or after that date whose annual salary is \$75,000 or more. Those employees voluntarily electing the VDC plan are prohibited from joining the System (defined benefit plan) at a later date (and the opposite also applies; plan participation elections are irrevocable). VDC provides benefits through annuity contracts and provides retirement and death benefits to those employees who elected to participate in the VDC. Employees have the ability to choose from a variety of investment providers for the VDC. Benefits are determined by the amount of individual accumulations and the retirement income option selected. All benefits generally vest after the completion of one year of service if the employee is retained thereafter. Employees electing to participate in the VDC plan are required to contribute between 5.75% and 6% of gross earnings, dependent upon their salary, for their entire working career; NYSERDA contributes 8%.

One hundred ten employees have vested in the VDC as of March 31, 2020. NYSERDA's

Notes to Basic Financial Statements March 31, 2020

contribution to the VDC for the year ended March 31, 2020 was \$1,001,935.

(10) LEASES

NYSERDA has multi-year operating leases expiring May 31, 2021; October 31, 2022; June 30, 2024; and October 30, 2027, for office space in West Valley, Buffalo, Albany, and New York City, respectively. For the year ended March 31, 2020, rental expense for all office facilities was \$2.0 million

The following is a schedule, by year, of future minimum rental payments for NYSERDA's office space as of March 31, 2020:

\$2,444
2,413
2,376
2,391
2,047
<u>4,911</u>
<u>\$16,582</u>

NYSERDA is also the lessor of certain equipment comprising a cooling water structure at the Indian Point Energy Center in Buchanan, New York under a lease that expires on March 31, 2027, with annual minimum lease rental payments of \$816,000 for the fiscal years ending March 31, 2021-2027.

(11) CONTINGENCIES

(a) Western New York Nuclear Service Center

Under the federal West Valley Demonstration Project Act and an implementing Cooperative Agreement between DOE and NYSERDA, the federal government pays 90 percent of the West Valley Demonstration Project (WVDP) costs, and NYSERDA, on behalf of the State of New York. pays the remaining 10 percent. In addition, in 2010, the U.S. District Court for the Western District of New York approved an agreement between New York State and the federal government that resolved most of the claims asserted in a 2006 lawsuit filed by NYSERDA and New York State against the federal government and DOE regarding the financial responsibility for cleaning up certain facilities at West Valley. The agreement defines a specific cost share for the cleanup of a number of facilities that had long been in dispute between NYSERDA and DOE. For example, under this agreement, the federal government will pay a 30 percent share of costs associated with the State Licensed Disposal Area (SDA), which is solely owned and managed by NYSERDA, and NYSERDA, on behalf of the State, will pay the remaining 70 percent. Remediation costs for the North Plateau Groundwater Plume will be split equally between the State and federal government, and costs for remediating the Nuclear Regulatory Commission Licensed Disposal Area will also be a 50/50 split. The two governments agreed that other facilities are covered by the WVDP Act, such as the Main Process Plant building, and thus the federal government will pay 90% of the cleanup costs.

In January 2010, NYSERDA and DOE issued a final Environmental Impact Statement, which identifies and assesses the potential environmental impacts of a range of reasonable alternatives proposed to meet DOE's responsibilities under the WVDP Act and options for the State of New York, acting through NYSERDA, for management of West Valley. In April and May 2010,

Notes to Basic Financial Statements March 31, 2020

respectively, DOE and NYSERDA issued decision documents that formally selected the Phased Decision Making alternative for continuing the cleanup. Under Phased Decision making, decommissioning work will be conducted in two phases. During Phase 1, the Main Process Plant building and several other highly contaminated facilities will be removed at an estimated cost of approximately \$1.0 billion. As the Phase 1 cleanup work is proceeding, DOE and NYSERDA will are conducting additional studies to reduce uncertainties in the decisions for the Phase 2 portion of the cleanup, which will be detailed in a Supplemental Environmental Impact Statement currently being developed. The 2010 Environmental Impact Statement states that the Phase 1 work would take 10 years and cost approximately \$1.0 billion based on a federal funding level of \$75.0 million per year. Since 2010, actual federal funding levels have generally ranged between \$60.0 million and \$68.0 million, although the Federal Fiscal Year 2020 Congressional appropriation for the WVDP came in at \$79.4 million. The total cost and duration of the Phase 1 cleanup work will be in part impacted by the funding amounts appropriated annually in the federal budget.

The Phase 2 decisions, which will be made in the 2023 timeframe, will address the remaining facilities, including the High-Level Waste Tanks, the SDA, the NRC-Licensed Disposal Area, and the main body of a plume of contaminated groundwater. Total estimated costs for completing the Phase 2 work range from over \$700.0 million to \$9.1 billion, and are dependent on the alternative selected for the remaining facilities.

In accordance with GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, no liability has been included in NYSERDA's financial statements as of March 31, 2020 for this contingency because NYSERDA expects to continue to be reimbursed from State appropriations for the State's share of the costs of the Demonstration Project, any costs NYSERDA may incur in relation to the SDA, and any other costs allocated to NYSERDA under the agreement resolving the lawsuit referenced above.

(b) Energy Analysis- Low-Level Radioactive Waste

Pursuant to the Low-Level Radioactive Waste (LLRW) Management Act of 1986, NYSERDA annually assesses licensees of operating nuclear power plants an amount sufficient to reimburse the State for the LLRW disposal facilities development activities of the Departments of Health and Environmental Conservation, and must provide nuclear power plant licensees with a user-fee reduction, when the disposal facilities are operational, equal to the statutory assessments collected plus interest at a fair market rate. During the year ended March 31, 2020, NYSERDA paid, from the agency fund, a total of \$2.9 million to reimburse the State for such costs pursuant to Public Authorities Law Section 1854-d(2)(a).

(c) Bond Financing Program

The principal and interest on obligations issued for participating gas and electric utility companies and other private purpose users are payable solely from payments made by participating companies. They are not general obligations of NYSERDA nor do they constitute an indebtedness of or a charge against the general credit of NYSERDA, or cause any monetary liability to NYSERDA. These bonds and notes are not a debt of the State of New York.

The bonds and notes issued bear the name of NYSERDA and the participating company. NYSERDA assigns most of its rights and obligations to a trustee who is responsible for, among other things, disbursing bond and note proceeds and handling principal and interest payments. As of March 31, 2020, the principal totaled \$1.5 billion.

(d) Risk management

NYSERDA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. NYSERDA maintains commercial insurance coverage for each of those risks of loss. Management believes such coverage is sufficient to preclude any significant uninsured losses to NYSERDA. NYSERDA has not

Notes to Basic Financial Statements March 31, 2020

experienced any reductions in coverage and has not had any insurance settlements exceeding the coverage in the past three years.

(e) Contractual obligations in excess of cash and investment balances

As of March 31, 2020, NYSERDA has aggregate outstanding contractual obligations in excess of cash and investments of governmental activities/funds totaling \$11.3 billion, which will be reimbursed for qualifying program costs from monies held by utilities pursuant to BAYG agreements, from future revenues generated through Commission Orders, Memorandums of Understanding, Third-party agreements, and from federal energy grants.

(f) NY Green Bank

As of March 31, 2020, NY Green Bank has entered into three credit contracts which, consistent with their terms, have not been funded but contain contingent obligations. NY Green Bank capital is only drawn if a contingent obligation under the respective agreement is triggered. The amount of contingent obligations as of March 31, 2020 totaled approximately \$2.6 million.

Any draws made on the above contingent obligations would be due to be repaid pursuant to the terms of their respective agreements.

(12) POSTEMPLOYMENT HEALTHCARE BENEFITS

Plan Description

The New York Civil Service Law, Section 163(2) provides for health insurance coverage for retired employees of New York State, including their spouses and dependent children. The law extends to public benefit corporations. NYSERDA maintains a single-employer defined benefit plan (the "Plan"), providing this benefit to eligible retirees and/or their spouses and dependent children. Eligibility is determined by membership in the System and New York State Voluntary Defined Contribution (VDC) Program, enrollment in the New York State Health Insurance Program at the time of retirement, and the completion of a minimum number of years of service as required by the System and VDC program. The Plan provides that members that retired prior to January 1, 2013 pay the percentage share of the health insurance premiums that active NYSERDA employees paid as of December 31, 2012. Members that retired on or after January 1, 2013 pay the same percentage share of the health insurance premiums as that charged for active State management confidential employees (as of March 31, 2020 the shares were 16% of the premium for individual coverage and 31% of the incremental premium for family coverage). NYSERDA is billed by the New York State Department of Civil Service monthly for pay-as-you-go funding requirements; however, payments are made from an irrevocable OPEB Trust account established in March 2010. The purpose of the OPEB Trust is for the accumulation of funds to pay future benefit costs. The Trust's funds are held by a third-party trustee. The Trust is managed by the Officers of NYSERDA, in consultation with an independent Investment Consultant

As of March 31, 2020, there were 121 retirees and dependent survivors actively receiving benefits and 302 active Plan members. NYSERDA's OPEB Trust is recorded as a fiduciary fund within NYSERDA's financial statements.

Net OPEB Liability and disclosures required by GASB Statement No. 75 (Employer Reporting):

The Total OPEB liability at March 31, 2020 was determined using the January 1, 2018 actuarial valuation, and was then projected forward to the measurement date of March 31, 2019.

NYSERDA allocates a share of its Net OPEB liability and related deferred outflows and deferred inflows to NY Green Bank, its proprietary fund, based on a proportional allocation methodology

Notes to Basic Financial Statements March 31, 2020

using direct salary expenses. The governmental activities represent approximately 87% and the proprietary fund represents approximately 13% of the proportionate share of the balances of OPEB-related amounts consistent with NYSERDA's current allocation methodology.

The following table summarizes changes in the net OPEB Liability of NYSERDA, which includes that of NY Green Bank:

(Amounts in thousands)

Fiscal year ended March 31, 2019 (Measurement date March 31, 2018)	Total OPEB Liability (a) \$52,709	Plan Fiduciary Net Position (b) 48,767	Net OPEB Liability (a) – (b) 3,942
Changes for the year:			
Service cost	2,031		2,031
Interest	3,512		3,512
Differences between expected			
and actual experience	140		140
Benefit payments	(1,439)	(1,439)	-
Contributions-employer	-	4,963	(4,963)
Net investment income	-	727	(727)
Administrative expenses Fiscal year ended March 31, 2020	<u>-</u> <u>\$56,953</u>	<u>(47)</u> <u>52,971</u>	<u>47</u> <u>3,982</u>
(Measurement date March 31, 2019)			

Sensitivity Analysis:

Discount rate

The Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the long-term expected rate of return.

	1% Decrease (5.5%)	(Amounts in thousands) Current Discount Rate (6.5%)	1% Increase (7.5%)
Governmental activities Net OPEB liability (asset)	\$11,962	\$3,454	(\$3,345)
Business type- activities/proprietary fund Net OPEB liability (asset)	\$1,829	\$528	(\$511)

Healthcare cost trend rates

The following presents the net OPEB liability of NYSERDA, calculated using the current healthcare cost trend rates as well as what the Authority's net OPEB liability would be if it were calculated using trend rates that are 1 percentage point lower or 1 percentage point higher than the current trend rates.

Notes to Basic Financial Statements March 31, 2020

	(Amounts in thousands)			
	1% Decrease	Current Trend Rate	1% Increase	
Governmental activities Net OPEB liability (asset)	(\$4,522)	\$3,454	\$13,729	
Business type- activities/proprietary fund Net OPEB liability (asset)	(\$691)	\$528	\$2,099	

OPEB expense for the fiscal year ended March 31, 2020 was \$2.6 million Balances of OPEB-related deferred outflows of resources and deferred inflows of resources as of March 31, 2020 were as follows:

	(Amounts in thousands)		
	Deferred Outflows of <u>Resources</u>	Deferred Inflows of <u>Resources</u>	
Differences between expected and actual experience	\$ 305	(180)	
Changes of assumptions	-	(183)	
Net difference between projected and actual investment earnings on Trust investments	2,044	(611)	
Employer contributions subsequent to the measurement date	<u>2,608</u>	-	
Total	<u>\$4,957</u>	<u>(974)</u>	

The deferred outflows of resources and deferred inflows of resources to be recognized in OPEB expense in each of the next five years and in the aggregate thereafter is as follows:

	(Amounts in thousands)		
	Business-type		
	Governmental	activities/proprietary	
Fiscal year Ending March 31:	<u>activities</u>	<u>fund</u>	<u>Total</u>
2021	\$258	41	299
2022	258	41	299
2023	258	41	299
2024	437	66	503
2025	(7)	(1)	(8)
Thereafter	<u>(15)</u>	<u>(2)</u>	<u>(17)</u>
Totals	<u>\$1,189</u>	<u>186</u>	<u>1,375</u>

Projections of benefits for financial reporting purposes are based on the Plan as understood by NYSERDA and Plan members and include the types of benefits provided at the time of valuation and the historical pattern of sharing benefit costs between NYSERDA and Plan members. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential of legal or contractual funding limitations on the pattern of cost sharing between the employer and Plan members in the future.

Notes to Basic Financial Statements March 31, 2020

The significant assumptions used in the most recent actuarial valuation were as follows:

Retirement— All employees assumed to be covered under Tier 4 of the System, with early retirement available at age 55 with 5 years of service, and unreduced benefits at age 62 with 5 years or age 55 with 30 years of service. Based on assumptions used under the System, since eligibility for NYSERDA employees covered under this plan is based on membership in that system. The System assumptions were based on extensive analysis of their covered populations.

Marital status – Assumed 60% of active male employees who choose coverage will have covered spouses at retirement, and 50% for active female employees. Male spouses were assumed to be three years older than female spouses.

Mortality Tables – Sex-distinct RP-2006 Base Healthy Annuitant/Employee with Projection Scale MP-2018.

Withdrawal—Rates were based on age and length of service for the first 10 years and age thereafter as the basis for assigning active members a probability of remaining employed until the assumed retirement age. Based on assumptions used under the System, since eligibility for NYSERDA employees covered under this plan is based on membership in that system. The System assumptions were based on extensive analysis of their covered populations.

Healthcare cost trend rate – The expected rate of increase in healthcare premiums was based on projections developed by the actuary's healthcare specialists. Rates of 5.5% and 8.4% for the two health insurers with the highest enrollment of Plan members were assumed initially, trending to an ultimate rate of 4.0% for both carrier's plans.

Health insurance premiums – Calendar year 2019 health insurance premiums for the two health insurers with the highest enrollment of Plan members were used as the basis for the projected valuation year premiums.

Investment return – As of March 31, 2020, Plan benefit payments are pre-funded in a segregated Trust, and a discount rate of 6.5% was used, representing the long-term anticipated earnings potential of investments in the Trust.

The actuarial funding method used was the Entry Age Normal Cost method, under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost (for purposes of GASB 75, the term normal cost is the equivalent of service cost). The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability (for purposes of GASB 75, the term actuarial accrued liability is the equivalent of total OPEB liability).

The Plan also provides that the dollar value, subject to certain limitations, of members' accumulated sick leave credits at the time of retirement may be used to offset the portion of health insurance premiums paid by retirees. NYSERDA's estimated liability associated with sick leave credits is recorded as a Compensated Absence within Other non-current liabilities in accordance with the requirements of GASB Statement No. 16, *Accounting for Compensated Absences*. The Trust does not accumulate resources for the purpose of paying this portion of the health insurance premiums, nor does it pay any benefits for this purpose. NYSERDA's liability for that portion of the premiums is not included in the actuarially determined liabilities of the Plan, the net OPEB liability, or the OPEB expense calculations.

Notes to Basic Financial Statements March 31, 2020

The cost of third-party administrators, actuarial reports, audits, and similar costs incurred exclusively for the Trust are paid from resources of the Trust. Routine daily administrative costs of administering the benefit plans, accounting services and similar costs are absorbed by NYSERDA.

The Trust has no legally required reserves.

Additional information can be found in the Required Supplementary Information section of these financial statements.

Net OPEB Liability and Disclosures required by GASB Statement No. 74 (Plan Reporting)

The Total OPEB Liability at March 31, 2020 was determined using the January 1, 2020 actuarial valuation, and was then projected forward to March 31, 2020, calculated using the actuarial assumptions changes described below.

	<i>(Amounts in thousands)</i> Plan		
	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability
-	(a)	(b)	(a) – (b)
Fiscal year ended March 31, 2019	\$56,953	52,971	3,982
Changes for the year: Service cost	2,154		2,154
Interest	3,791		3,791
Effect of economic/demographic gains	•		,
or losses	(8,075)		(8,075)
Effect of assumptions changes or inputs	(1,878)		(1,878)
Benefit payments	(1,582)	(1,582)	` <u>-</u>
Contributions-employer	-	2,608	(2,608)
Net investment income	-	(3,612)	3,612
Administrative expenses		<u>(18)</u>	(18)
Fiscal year ended March 31, 2020	<u>\$51,363</u>	<u>50,367</u>	<u>996</u>

The actuarial assumptions were the same as those noted above (for the GASB Statement No. 75 valuation) with the exception of:

Mortality Tables – Sex-distinct Pub-2010 General Employee/Retiree with Projection Scale MP-2019.

 $\label{eq:healthcare} \textit{Least trend rate} - \text{The expected rate of increase in healthcare premiums was based on projections developed by the actuary's healthcare specialists. Rates of 5.6% and 3.0% for the two health insurers with the highest enrollment of Plan members were assumed initially, trending to an ultimate rate of 3.8% for both carrier's plans.}$

Sensitivity Analysis:

Discount rate

The Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the long-term expected rate of return.

Notes to Basic Financial Statements March 31, 2020

(An	nounts in	thousands)	
_			

	1% Decrease	Current Discount Rate	1% Increase
	<u>(5.25%)</u>	<u>(6.25%)</u>	<u>(7.25%)</u>
Net OPEB liability	\$9,305	\$996	(\$5,697)

Healthcare cost trend rates

(Amounts in thousands)

1% DecreaseCurrent Trend Rate1% IncreaseNet OPEB liability(\$6,512)\$996\$10,556

Money-Weighted Rate of Return:

For the year ended March 31, 202020, the annual money-weighted rate of return on investments, calculated as the internal rate of return on Plan investments, net of investment expense, was (6.76%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Long-term expected rate of return:

Long term expected rat	o or rotarii.		Long- Term	Long- Term
			Expected Arithmetic	Expected Geometric
		Target	Real Rate	Real Rate
Asset Class	<u>Index</u>	Allocation	of Return	of Return
US Cash	BAML 3-Mon Tbill	1.00%	0.06%	0.07%
US Short Bonds	Barclays 1-3 Yr Gvt/Credit	3.00%	0.85%	0.83%
US Interm Bonds	Barclays IT Gvt/Credit	14.00%	1.30%	1.23%
US Long Bonds	Barclays LT Gvt/Credit	6.00%	2.94%	2.55%
US Inflation-Indexed				
Bonds	Barclays US TIPs	10.00%	0.82%	0.72%
US High Yield Bonds	BAML High Yield	12.00%	3.32%	2.87%
Non-US Bonds	JPM GBI Global xUS	1.00%	0.61%	0.18%
US Large Caps	S&P 500	15.00%	4.37%	3.24%
US Small Caps	Russell 2000	6.00%	5.71%	3.85%
US Mid Caps	Russell MidCap	1.00%	4.76%	3.31%
Foreign Developed				
Equity	MSCI EAFE NR	15.00%	6.01%	4.49%
Emerging Markets Equity	MSCI EM NR	15.00%	8.14%	5.34%
Global REITs	FTSE EPRA/NAREIT Developed	1.00%	5.56%	3.84%
J. J. J. J. T.		1.0070	0.0070	0.0170

Additional information can be found in the Required Supplementary Information section of these financial statements.

Notes to Basic Financial Statements March 31, 2020

(13) INTERFUND BALANCES AND TRANSFERS

The balances reflected in Due to other funds and Due from other funds reflect the timing difference of when expenditures are incurred and when interfund reimbursement occurs.

Transfers consist of amounts transferred between various Functions/Programs and Funds pursuant to various Orders of the Commission, NYSERDA's approved RGGI operating plan, and to fund expenditures and working capital balances pursuant to the CEF Order's "Bill-As-You-Go" process, as summarized below:

(Amounts in thousands)

		Transfer	rs To		
<u>Transfers</u> <u>From</u>	CEF	CES	<u>GJGNY</u>	Other <u>Funds</u>	<u>Total</u>
CEF	\$ -	-	-	7,036	7,036
CES	-	-	-	1,740	1,740
RGGI	17,541	-	12,400	-	29,941
Other Funds	3,034	<u>13,135</u>	-	=	<u>16,169</u>
Total Governmental Funds	<u>\$20,575</u>	<u>13,135</u>	<u>12,400</u>	<u>8,776</u>	<u>54,886</u>

(14) SUBSEQUENT EVENTS

The COVID-19 outbreak is disrupting supply chains and affecting operations and the financial condition across a range of industries, including the clean energy sector. The extent of the impact of COVID-19 on NYSERDA's operational and financial performance will depend on certain developments, including but not limited to the duration and spread of the outbreak, impact on our employees, impact on program partners and contractors, State policy directives, and actions by the Commission which may adjust current program activities, all of which are uncertain and cannot be predicted. As of June 23, 2020, the issuance date of the financial statements, the extent to which COVID-19 may impact NYSERDA's future programmatic activities and accomplishments is uncertain, and is likely to impact future financial performance against previously established budgets, but is not likely to have a materially adverse impact on NYSERDA's future financial condition.

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

NYSERDA's Contributions to the System Pension Plan

(Amounts in thousands)

		(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Fiscal year ended March 31,	2020	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Actuarially determined contribution	\$3,844	\$3,808	\$3,805	\$3,866	\$3,993
Contributions in relation to the actuarially determined contribution	\$3,844	\$3,808	\$3,805	\$3,866	\$3,993
Contribution deficiency (excess)	-	<u>φο,σσσ</u> -	<u>φο,σσσ</u> -	-	-
, , , , , , , , , , , , , , , , , , ,					
Covered- payroll	\$27,760	\$27,362	\$26,088	\$25,854	\$26,153
Contributions as a percentage of covered-employee payroll	13.8%	13.9%	14.6%	15.0%	15.3%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

NYSERDA's Proportionate Share of the System's Net Pension Liability

	(Amounts in thousands)				
Fiscal year ended March 31,	<u> 2020</u>	2019	<u>2018</u>	<u>2017</u>	<u> 2016</u>
(Measurement date March 31,)	2019	2018	2017	2016	2015
Proportion of the net pension liability	0.11%	0.10%	0.11%	0.11%	0.12%
Proportionate share of the net pension liability	\$7,599	\$3,367	\$10,279	\$17,556	\$4,004
Covered- payroll	\$27,362	\$26,088	\$25,854	\$26,153	\$25,135
Proportionate share of the net pension liability as a % of its covered payroll	27.8%	12.9%	39.8%	67.1%	15.9%
Ratio of fiduciary net position to total pension liability	96.27%	98.24%	94.7%	90.7%	97.9%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

Schedule of Changes in Net OPEB Liability and Related Ratios

Fiscal year ended March 31, Employer Reporting: Plan Reporting:	(Am n/a <u>2020</u>	ounts in thousand 2020 <u>2019</u>	2019 2018
Total OPEB liability Total OPEB liability- beginning (Measurement date March 31,)	\$56,953	\$52,709	\$49,081
	2019	2018	2017
Changes for the year: Service Cost Interest Effect of economic/demographic gains or losses Effect of assumptions changes or inputs Benefit payments	2,154	2,031	1,887
	3,791	3,512	3,260
	(8,075)	350	(233)
	(1,878)	(210)	-
	(1,582)	(1,439)	(1,286)
Total OPEB liability- ending (a) (Measurement date March 31,)	\$51,363	<u>\$56,953</u>	<u>\$52,709</u>
	2020	2019	2018
Plan fiduciary net position Plan fiduciary net position- beginning (Measurement date March 31,)	\$52,971	\$48,767	\$43,176
	2019	2018	2017
Changes for the year: Benefit payments Employer contributions Net investment income Administrative expenses Plan fiduciary net position- ending (b) (Measurement date March 31,)	(1,582)	(1,439)	(1,286)
	2,608	4,963	3,013
	(3,612)	727	3,879
	(18)	(47)	(15)
	\$50,367	\$52,971	\$48,767
	2020	2019	2018
Net OPEB liability Net OPEB liability- beginning Net OPEB liability- ending (a) – (b)	\$3,982	\$3,942	\$5,905
	\$996	\$3,982	\$3,942
Fiduciary net position as a % of total OPEB liability	98.06%	93.01%	92.52%
Covered payroll	\$39,320	\$37,638	\$35,757
Net OPEB liability as a % of covered payroll	2.53%	10.58%	11.02%

Notes to schedule: "n/a" indicates the ending Net OPEB liability (and respective columnar data presented which tabulates it), is not yet reportable by the Employer, NYSERDA, on its Statement of Net Position, due to NYSERDA's allowable (by GASB Statement No. 75) one-year lag in Employer vs. Plan reporting.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

Schedule of Employer Contributions for OPEB (Employer and Plan Reporting)

	(Amounts in thousands)		
Fiscal year ended March 31,	2020	2019	
Actuarially determined contribution	\$2,608	\$2,071	
Actual employer contribution	<u>2,608</u>	4,963	
Contribution deficiency (excess)	<u>(\$-)</u>	(\$2,892)	
Covered payroll	\$39,320	\$37,638	
Contribution as a % of covered payroll	6.63%	13.19%	

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Investment Returns- OPEB Trust (Plan Reporting)

Fiscal year ended	Net annual money-weighted
March 31,	rate of return
2020	(6.76)
2019	1.45%
2018	8.84%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

(Amounts in thousands)

Change from

March 31, 2020 March 31, 2019 March 31, 2019

Cash and investments (current and non-current totals):	164,361	269,374	(105,013)
Analysis: Variance was primarily due to additional capital deployed, principally committed capital not yet deployed totaled \$143.4 million; the balance of cash received on prior capital committed and deployed, and will be used to fund add	and investments primarily re-		
Third-party billings receivable	35	174	(139)
Analysis: Decrease due to timing of outstanding fees and receivables due beir	ng collected.		
Interest receivable on loans Analysis: Variance is the result of the timing of receipt for interest payments ar	3,172 and a larger amount of capital	2,264 deployed.	908
Loans and financing receivables - current and non-current totals:	441.559	299.430	142.129
Analysis: Increase due to net loan activity (new loans issued as well as additio payments received).	,	,	
Total assets	609,127	571,242	37,885
Deferred outflows of resources	1,527	1,955	(428)
Analysis: Reflects amortization of actuarially-determined deferred outflows of ractuarial smoothing practices), as well as amortization of the FY 2018-19 cont FY 2019-20 contributions, and addition of new balances determined from the a	ributions subsequent to meas	surement date, add	lition of similiar
Accounts Payable	29	-	29
Analysis: Reflects an increase due to additional vendor payments due but not	yet paid.		
Accrued Liabilities	227	671	(444)
Analysis: Reflects a decrease in legal and consulting expenses as compared trendered negating the need to accrue a liability.	o prior year, as well timely re	ceipt of invoices fo	r services
Escrow deposits	2,105	1,823	282
Analysis: Increase is due to deposits on future NYGB loans to potential counte	erparties.		
Long-term liabilities: Net pension liability Net OPEB liability	885 528	234 485	651 43
Total non-current liabilities	1,413	719	694
Analysis: The net pension and OPEB liability variances reflect actuarially deter of their respective deferred inflows and outflows of resources.	rmined accrued pension and	OPEB expense an	d amortization
Total liabilities	3,774	3,213	561
Deferred inflows of resources	486	1,529	(1,043)
Analysis: Reflects amortization of actuarially-determined deferred inflows of re actuarial smoothing practices).	sources (deferred pension &	OPEB expense re	sulting from
Net position: Funded Capitalization Capital Redemption	619,291 (52,926)	598,613 (52,926)	20,678

Analysis: Increase is due to an increase in funded capitalization of \$20.7 million and increase in cumulative revenues in excess of expenses of \$17.3 million.

40,029

606,394

22,768

568,455

17,261

37,939

Cumulative revenues in excess of expenses

Net position

NY Green Bank Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

To the year chaed material, 2020	(Amounts in Thousands Actual)	(for compari Over (unde	
	March 31, 2020	Budget	\$	<u>%</u>
REVENUES		<u> </u>		
Fees (Closing, Undrawn, Administrative & Other)	3,347	3,384	(37)	-1.1%
Analysis: Minor variance.				
Loans and financing receivables interest	18,612	18,740	(128)	-0.7%
Analysis: Minor variance when compared to budgetary assumption	,	10,740	(120)	-0.7 70
Subtotal: Operating revenues	21,959	22,124	(165)	-0.7%
Investment income	6 224	2 224	2.000	97 20/
Investment income Analysis: Increase is primarily due to higher yields and balances	6,224	3,324	2,900	87.2%
, wanty old. Interdade to printarily due to ringitor yields and balanese	man antioipatoa in the ba	ago		
Capital contribution revenue	20,678	-	20,678	100.0%
Analysis: Variance is due to higher loan commitments than was a	anticipated in the budget	(no capital con	tributions wer	e
budgeted during FY 2019-20).				
Subtotal: Non-operating revenues	26,902	3,324	23,578	14.1%
Total operating and non-operating revenues	48,861	25,448	23,413	92.0%
<u>EXPENSES</u>				
Salaries	5,242	4,904	338	6.9%
Fringe benefits	2,242	2,048	194	<u>9.5</u> %
Salaries and benefits Analysis: Variance is due to differences in vacancy levels from but	7,484	6,952	532	7.7%
2% general salary increase (as adopted by NYS for MC employe in fringe benefits is the result of NY Green Bank picking up a grelabor costs and from the Authority's fringe benefit cost pool being	es) which was not compte ater allocation than what	emplated in the was budgeted	e budget. The due to higher	variance
Investment related expenses	399	560	(161)	-28.8%
Analysis: Variance due to lower costs incurred and from higher c			\ /	-20.0 /0
, manyotor variation and to forter to the mountain and mountain migricine	<u> </u>			
Other operating costs				
Travel and Outreach Costs	21	36	(15)	-41.7%
Training, Development, Recruitment & Relocation	-	72	(72)	-100.0%
Professional & Consulting Services	1,256	1,568	(312)	- <u>19.9</u> %
Analysis: Variances due to lower costs than entisinated in the hu	1,277	1,676	(399)	-23.8%
Analysis: Variances due to lower costs than anticipated in the bu	agei.			
General and administrative expenses	1,247	1,188	59	5.0%
Analysis: Variance due to adjustments to actual allocation vs. wh				3.070
	•	<u> </u>		
Depreciation	189	196	(7)	-3.6%
Analysis: Minor variance due to lower allocable cost from NYSEF	RDA resulting primarily fro	m the differen	ce in planned	capital
asset additions as compared to budget expectations.				
New York State assessments	112	100	12	12.0%
Analysis: Variance due to difference in actual allocation vs. what				
, manyotor variation and to amoretice in actual anomalier for minus	Trac annopatou in ano ba	<u></u>		
Subtotal: Operating expenses	10,708	10,672	36	0.3%
Non-operating expenses				
Capital expansion	44	750	(706)	-94.1%
Program evaluation	170	520	(350)	<u>-67.3%</u>
	214	1,270	(1,056)	-83.1%
Analysis: Variance in capital expansion and evaluation activities resulting in lower costs than anticipated in the budget.	s due to the lower amour	nt of acutal acti	vity during the	e year,
Total operating and non-operating expenses	10,922	11,942	(1,020)	-8.5%

FINANCIAL STATEMENTS

March 31, 2020

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March 31, 2020

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RESPONSIBILITY FOR FINANCIAL REPORTING

DRAFT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the New York State Energy Research and Development Authority (the Authority), as well as all other information contained in the Authority's Annual Report. The financial statements of the Authority for the fiscal year ended March 31, 2020 were prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP). The Board of the Authority (the Board) adopted these financial statements and the Annual Report at a meeting on June 23, 2020.

The Authority maintains a system of internal controls, the objectives of which are to provide reasonable assurance as to the proper authorization and recording of transactions, the safeguarding of Authority assets, the compliance with applicable laws and regulations, and the reliability of financial records for preparing financial statements. The internal control structure is subject to periodic review by management, internal audit staff and the independent auditors. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such system should not exceed the benefits derived.

The Authority's financial statements have been audited by KPMG LLP, independent auditors appointed by the Members of the Authority. Management has made available to the independent auditors all the financial records and related data of the Authority, as well as provided access to all the minutes of the meetings of the Board and its standing committees. The independent auditors periodically meet directly with the Audit and Finance Committee of the Board, which is comprised of Members who are not employees of the Authority.

The independent audit included obtaining an understanding of the internal control structure, tests of accounting records, and other procedures which the independent auditors considered necessary in order to express opinions as to the fairness of the presentation of the financial statements. No material weaknesses in internal control or any condition of non-compliance with applicable laws, regulations or policy were noted by the independent auditors through the execution of their audit procedures. The unmodified independent auditors' report attests that the financial statements are presented fairly, in all material respects, in accordance with U.S. GAAP.

Alicia Barton

President and Chief Executive Officer

DRAFT

Jeffrey J. Pitkin

Treasurer and Chief Financial Officer



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report

Members of the Authority
New York State Energy Research and Development Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of NY Green Bank, an enterprise fund of the New York State Energy Research and Development Authority (the Fund), which comprise the statement of net position as of March 31, 2020, and the related statements of revenue, expenses and changes in fund net position and cash flows for the year then ended, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Fund as of March 31, 2020, and the changes in its financial position and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in Note 2(a) to the financial statements, the financial statements present only the NY Green Bank Fund and do not purport to and do not present fairly the financial position of the New York State Energy Research and Development Authority as of March 31, 2020, the changes in its financial position, or, where applicable, its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Report on Comparative Information

We have previously audited the 2019 financial statements of NY Green Bank, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 27, 2019. In our opinion, the comparative information presented herein as of and for the year ended March 31, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the Fund's basic financial statements. The Responsibility for Financial Reporting section is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June _____, 2020 on our consideration of the Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control over financial reporting and compliance.

KPMG LLP

Albany, New York June ____, 2020



(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

The following Management's Discussion and Analysis (MD&A) of NY Green Bank's financial performance provides an overview of NY Green Bank's financial activities for the fiscal year ended March 31, 2020. The information contained in the MD&A should be considered in conjunction with the information in the accompanying financial statements and related notes. Following this MD&A are the basic financial statements of NY Green Bank with the notes thereto that are essential to a full understanding of the data contained in the financial statements. NY Green Bank's basic financial statements have the following components: (1) proprietary fund financial statements and (2) notes to the basic financial statements.

Proprietary fund financial statements are designed to provide readers with a broad overview of NY Green Bank's finances in a manner similar to a private-sector business. The *Statement of Net Position* presents information on NY Green Bank's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, and the difference between these is reported as net position. The *Statement of Revenues*, *Expenses and Changes in Fund Net Position* presents information showing how NY Green Bank's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses that are reported for some items will result in cash flows in future fiscal periods. The *Statement of Cash Flows* shows how changes in balance sheet and income accounts affect cash balances at year end. The notes to the basic financial statements provide additional information that is essential for a full understanding of the information provided in the proprietary fund financial statements.

NY Green Bank is a division of the New York State Energy Research and Development Authority (NYSERDA). The financial statements present the financial results of NY Green Bank and not the overall financial results of NYSERDA. A complete set of NYSERDA's audited financial statements is available upon request.

CONDENSED FINANCIAL INFORMATION

The following condensed financial information is presented from NY Green Bank's financial statements.

	(Amounts in thousands)		
Summary of Net Position	March 31, <u>2020</u>	March 31, <u>2019</u>	% Change <u>2020-2019</u>
Cash and investments	\$164,361	\$269,374	(39.0)%
Loans and financing receivables, net	441,559	299,430	47.5%
Other assets	3,207	2,438	31.5%
Total assets	609,127	571,242	6.6%
Deferred outflows of resources	1,527	1,955	(21.9)%
Net pension liability	885	234	278.2%
Net OPEB liability	528	485	8.9%
Other liabilities	2,361	2,494	(5.3)%
Total liabilities	3,774	3,213	(-17.5)%
Deferred inflows of resources	486	1,529	(68.2)%
Net position - restricted	\$606,394	\$568,455	6.7%

For the year ended March 31, 2020, NY Green Bank continued its focus on execution and asset management across all aspects of its sustainable infrastructure investment business, consistent with comparable established entities with analogous investment activities. This was reflected in additional transaction execution activity in the period, increasing NY Green Bank's Loans and Financing

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

Receivables (hereinafter referred to as "Portfolio Investment(s)"), ongoing business development to maintain a robust pipeline of potential Portfolio Investments, as well as focus on implementing and maintaining operational platforms, policies and practices consistent with industry best practice.

NY Green Bank has received over \$4.1 billion in Portfolio Investment proposals from inception through March 31, 2020. Its active pipeline of potential Portfolio Investments proceeding towards closing was \$757.4 million as of March 31, 2020, continuing to be diversified across technology, location, and enduser segments. During the past fiscal year, NY Green Bank closed fifteen new Portfolio Investment transactions totaling \$222.3 million, facilitating clean energy development in New York State with an aggregate estimated total project cost in the range of \$2.1 billion to \$2.6 billion. Through March 31, 2020, NY Green Bank's overall sustainable infrastructure investments since inception totaled \$959.9 million. At the same date, NY Green Bank's current portfolio (representing the aggregate dollar value of its sustainable infrastructure investments and comprising deployed as well as committed amounts on that date) was \$584.7 million. This is net of all permanent repayments of principal received by NY Green Bank in accordance with the terms of its Portfolio Investments that occurred within the year in the amount of \$59.4 million (i.e., does not include paydowns against revolving facilities that remain available for redraw, which aggregated \$56.9 million in the fiscal year), and includes capitalized items (e.g., interest and/or fees) to the extent capitalized within the period (i.e., not amounts on account of interest and/or fees that may be capitalized in future periods). Principal repaid, together with net income generated by NY Green Bank becomes immediately available for recycling into further investments, amplifying the positive effects of each dollar of NY Green Bank capital on clean energy markets within the State for the benefit of all New Yorkers.

The 39.0% decrease in Cash and Investments reflects that NY Green Bank's Portfolio is more established with a 47.5% increase to loans and financing receivables as well as recycled capital being committed for new Portfolio Investment transactions. NY Green Bank's cash and invested capital balances reflect \$619.3 million in funded capitalization received to date. NY Green Bank receives incremental capital contributions through NYSERDA as capital is committed (taking into account projected liquidity needs) and an additional \$381.2 million in capitalization is authorized to be provided based on the New York State Public Service Commission's (Commission) authorization of \$1.0 billion in total funded capitalization. In turn, NYSERDA funds these contributions either from a transfer of existing cash and investment balances (of certain Commission authorized programs), or from the Clean Energy Fund (CEF) ratepayer collections held by the electric utilities under the "Bill-As-You-Go" (BAYG) approach, consistent with the Commission Order establishing the CEF. NY Green Bank's forecasted liquidity needs are fully addressed through these funded capital contributions, or through the use of a credit facility, if and when required.

As part of U.S. generally accepted accounting principles (U.S. GAAP), the Governmental Accounting Standards Board (GASB) requires capital contributions made to NY Green Bank from NYSERDA's available cash and investment balances to be treated as transfers, while those derived directly from the BAYG approach be accounted for as non-operating revenues to NY Green Bank. As a result, additions to NY Green Bank's capital during the fiscal year equal the sum of "Capital contributions" under Non-operating revenues and "Transfers In-Capital Contributions (Redemptions)" on NY Green Bank's Statement of Revenues, Expenses and Changes in Fund Net Position.

The variance in Deferred Outflows and Inflows of Resources and Net Pension and OPEB Liabilities results from changes in the actuarially-determined amounts determined through separate actuarial valuations, of which NY Green Bank, as a proprietary fund of NYSERDA, is required to record its proportionate share of NYSERDA actuarially determined amounts. Other Liabilities decreased (5.3)% during the fiscal year, primarily from a decrease in operating liabilities offset by an increase in borrower deposits.

(A Division of the New York State Energy Research and Development Authority) Management's Discussion and Analysis For the Year Ended March 31, 2020 Unaudited

It is important to note that, consistent with its business model, not all funds that NY Green Bank commits to sustainable infrastructure and clean energy development in the State are intended to be deployed and disbursed immediately, or in some cases, at all, pursuant to executed contractual arrangements. Many NY Green Bank Portfolio Investments relate to distributed generation or energy efficiency finance, which are most commonly focused on funding portfolios of projects. Once a Portfolio Investment of these types closes, developers begin implementing projects and drawing down on capital over time. These financings are "delayed draw" by design in that funds are not deployed until project sponsors meet certain development milestones over a time period necessary to originate, develop and construct a large number of smaller, distributed clean energy projects. NY Green Bank also enters into transactions that are not expected to be funded, such as those involving credit enhancements that comprise a contingent obligation for NY Green Bank, and where NY Green Bank capital is only drawn if a contingency is triggered.

Total Assets and Net Position both increased by \$37.9 million during the current fiscal year. NY Green Bank's Net Position as of March 31, 2020 was \$606.4 million, reflecting the total capitalization of \$619.3 million funded through the end of the period (including \$17.5 million as part of its initial funded capitalization authorized for start-up administration expense until such costs could be funded from revenues), less \$52.9 million of NYSERDA capital redemptions, plus \$40.0 million in cumulative revenues in excess of cumulative expenses. The \$52.9 million capital redemption reflects a portion of NY Green Bank's initial capitalization funded from Regional Greenhouse Gas Initiative revenues repurposed by NYSERDA to provide funding to support NYSERDA's statewide energy storage initiative.

	(Amounts in thousands) March 31, March 31, % C		
Summary of Changes in Net Position	2020	2019	% Change <u>2020-2019</u>
Operating revenues:			
Fees	\$3,347	\$3,947	(15.2)%
Loans and financing receivables interest	18.612	15,253	22.0%
Provisions for losses on loans and financing receivables	-	(388)	(100)%
Total operating revenues:	21,959	18,812	16.7%
Operating expenses:			
Salaries and benefits	7,484	6,421	16.6%
Investment related expenses	399	456	(12.5)%
Other operating costs	1,277	765	66.9%
General and administrative expenses	1,247	1,100	13.4%
Depreciation	189	184	2.7%
NY State assessments	112	125	(10.4)%
Total operating expenses	10,708	9,051	18.3%
Operating income	11,251	9,761	15.3%
Non-operating revenues:			
Capital contributions	20,678	119,882	(82.8)%
Investment income	6,224	7,223	(13.8)%
Total non-operating revenues	26,902	127,105	(78.8)%
Non-operating expenses:			
Capital expansion	44	1,425	(96.9)%
Program evaluation	170	211	(19.4)%
Total non-operating expenses	214	1,636	(86.9)%
Income before transfers	37,939	135,230	(71.9)%
Transfers - capital contributions (redemptions)		(52,926)	100.0%
Change in net position	37,939	82,304	53.9%
Net position, beginning of year	568,455	486,151	16.9%
Net position, end of year	\$606,394	\$568,455	6.7%

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

Total Operating Revenues increased \$3.1 million (16.7)% from the prior year. While NYGB closed the same number of transactions during the fiscal year as in the prior year, total dollar commitments were lower, which drove a 15.2% decrease in fees. An increase in loans and financing receivables interest of 22.0% reflects the increased number of transactions in NYGB's Investment Portfolio over the prior year.

Total Operating Expenses increased \$1.7 million (18.3)%, most significantly driven by increases in Salaries and Benefits; these and other costs are discussed below.

Salaries and Benefits, which include NY Green Bank staff salary expenses (\$3.62 million), NYSERDA allocated administrative salary expenses (\$1.62 million), and allocated fringe benefit expenses (\$2.24) million), increased \$1.10 million (16.6%) from the prior year. This occurred due to an increase in NY Green Bank's staffing consistent with plan as well as an increase in the overall pool of allocable expenses of which NY Green Bank pays its pro rata share (which is calculated based on NY Green Bank's direct staffing costs as a proportion of NYSERDA's program staffing costs).

Investment Related Expenses, which include legal and other costs incurred for various Portfolio Investments, were 12.5% less than the previous year, which generally reflects transaction volumes and counterparty reimbursement rates. Other Operating Costs increased \$0.5 million (66.9%) due to increase in professional service expenses (e.g., consultants and temporary employees).

General and Administrative Expenses, which include allocable costs such as rent, utilities, and insurance increased \$0.1 million (13.4%) due to an increase in the allocable cost as compared to the prior year, generally as a result of the increase in salary costs. Depreciation and NY State Assessments reflect NY Green Bank's allocable share of NYSERDA's depreciation and NYSERDA's cost recovery fee (CRF) assessment from the State of New York, respectively. Depreciation increased and NY State Assessments decreased from the prior year.

Investment Income decreased \$1.0 million (13.8%). This was driven by NYGB's greater deployment into transactions during the fiscal year of on-hand capital, operating income generated, and principal repayments received.

Non-operating expenses decreased \$1.4 million, primarily due to the decrease in capital advisory costs from the prior year.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital assets are purchased and owned by NYSERDA. NY Green Bank does not maintain capital assets on its Statement of Net Position, but instead is allocated depreciation expense on capital assets from NYSERDA.

ECONOMIC AND OTHER MARKET FACTORS

Portfolio Investments in, and funding of, clean energy projects may be impacted by a number of factors including, but not limited to, general economic conditions, energy prices, materials and equipment availability and costs, energy system reliability, energy technology advancements, and regulatory and public policy matters both within and beyond New York State.

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

COVID-19 IMPACTS

In response to the COVID-19 health crisis, NY Green Bank moved its workforce to work remotely effective March 16, 2020 and was able to maintain effective communications and carry out its activities without any disruption through March 31, 2020. NY Green Bank's Loans and Financing Receivables provide credit facilities to 27 counterparties, many of whom were impacted by the "New York State on Pause" Executive Order which directed non-essential businesses in New York State to close in-office personnel functions effective March 22. These organizations will be eligible to resume operations after March 31, 2020 in accordance with Federal, State and local government guidelines. Given the timing of the suspension of programmatic activities, this did not materially impact programmatic activities and accomplishments for the fiscal year ended March 31, 2020. From the start of remote working through the end of the fiscal year, NY Green Bank closed on \$40.7 million in transactions, demonstrating continued support for its counterparties. The COVID-19 health crisis had limited impacts on certain financial performance for the fiscal year ended March 31, 2020, but has not had a material impact on the financial condition of NY Green Bank as of March 31, 2020.

CONTACT FOR NY GREEN BANK'S FINANCIAL MANAGEMENT

This report is designed to provide a general overview of the finances of NY Green Bank, a division of NYSERDA, for interested parties. Questions concerning any information within this report or requests for additional information should be addressed to Jeffrey J. Pitkin, Treasurer and Chief Financial Officer, NYSERDA, 17 Columbia Circle, Albany, NY 12203.

(A Division of the New York State Energy Research and Development Authority) Statement of Net Position

March 31, 2020

(with comparative totals for March 31, 2019) (Amounts in thousands)

		March 31, 2020	March 31, 2019
ASSETS:	-		2010
Current assets:			
Cash and investments	\$	164,361	174,576
Third-party billings receivable	·	35	174
Interest receivable on loans		3,172	2,264
Loans and financing receivables due within one year, net		55,823	33,310
Total current assets		223,391	210,324
Non-current assets:			
Investments		-	94,798
Loans and financing receivables- long term, net		385,736	266,120
Total non-current assets		385,736	360,918
Total assets		609,127	571,242
DEFERRED OUTFLOWS OF RESOURCES		1,527	1,955
LIABILITIES:			
Current liabilities:			
Accounts payable		29	_
Accrued liabilities		227	671
Escrow deposits		2,105	1,823
Total current liabilities		2,361	2,494
Non-current liabilities:		<u> </u>	· · · · · · · · · · · · · · · · · · ·
Net pension liability		885	234
Net OPEB liability		528	485
Total non-current liabilities		1,413	719
Total liabilities		3,774	3,213
DEFERRED INFLOWS OF RESOURCES		486	1,529
NET POSITION:			
Net position restricted for specific programs	\$	606,394	568,455

See accompanying notes to the basic financial statements.

(A Division of the New York State Energy Research and Development Authority) Statement of Revenues, Expenses and Changes in Fund Net Position For the year ended March 31, 2020 (with comparative totals for March 31, 2019) (Amounts in thousands)

		March 31, 2020	March 31, 2019
OPERATING REVENUES:			
Closing fees	\$	2,528	2,993
Undrawn fees	,	572	382
Administrative fees		103	68
Other fees		144	504
Loans and financing receivables interest		18,612	15,253
Provisions for losses on loans & financing receivables		_	(388)
Total operating revenues		21,959	18,812
OPERATING EXPENSES:			
Salaries and benefits		7,484	6,421
Investment related expenses		399	456
Other operating costs		1,277	765
General & administrative expenses		1,247	1,100
Depreciation		189	184
NY State assessments Total operating expenses		112 10,708	125 9,051
OPERATING INCOME		11,251	9,761
NON OPERATING DEVENUES.			
NON-OPERATING REVENUES: Capital contributions		20,678	119,882
Investment income		6,224	7,223
Total non-operating revenues		26,902	127,105
NON-OPERATING EXPENSES:			
Capital expansion		44	1,425
Program evaluation		170	211
Total non-operating expenses		214	1,636
INCOME BEFORE TRANFERS		37,939	135,230
Transfers- capital contributions (redemptions)			(52,926)
Change in net position		37,939	82,304
Net position, beginning of year		568,455	486,151
Net position, end of year	\$	606,394	568,455

See accompanying notes to the basic financial statements.

NY Green Bank (A Division of the New York State Energy Research and Development Authority) Statement of Cash Flows For the year ended March 31, 2020

(with comparative totals for March 31, 2019)

(Amounts in thousands)

	March 31, 2020	March 31, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Closing fees collected	\$ 2,588	2,993
Undrawn fees collected	581	450
Administrative fees collected	93	68
Other fees collected	210	475
Loans and financing receivables interest collected	17,694	14,862
Disbursement of counterparty deposits	-	(50)
Receipt of escrow deposits	282	1,798
Payments to employees & employee benefit providers	(7,405)	(6,444)
Payments to suppliers	(3,508)	(2,367)
Payment for allocated depreciation	(189)	(184)
Payments to NYS	(112)	(125)
Loans and financing receivables deployed	(258,384)	(184,150)
Loans and financing receivables principal repayments	116,279	179,674
Net cash (used in) provided by operating activities	(131,871)	7,000
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Capital contributions	20,678	119,882
Transfers- capital contributions (redemptions)	-	(52,926)
Capital expansion	(44)	(1,425)
Net cash provided by non-capital financing activities	20,634	65,531
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(412,379)	(810,281)
Proceeds from sale of investments	507,973	739,942
Investment income	5,895	4,891
Net cash provided by (used in) investing activities	101,489	(65,448)
NET CHANGE IN CASH and CASH EQUIVALENTS:	(9,748)	7,083
Cash and cash equivalents, beginning of year	24,279	17,196
Cash and cash equivalents, end of year	\$ 14,531	24,279
RECONCILIATION OF OPERATING INCOME TO NET CASH (USED IN)		
PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$11,251	9,761
Adjustments to reconcile operating income to net cash (used in) provided by operating activities:		
Decrease in third party billings receivable	139	38
Increase in interest receivable	(908)	(393)
Increase in loans and financing receivables	(142,129)	(4,088)
Increasetin accounts payable	29	(4,000)
(Decrease) increase in accrued liabilities	(444)	168
Decrease in counterparty deposits	(444)	(50)
Increase in escrow deposits	282	1,798
•	79	
Net change in pension & OPEB related accounts		(23)
Non-operating expenses unrelated to financing activities	(170)	(211)
Net cash (used in) provided by operating activities	(\$131,871)	7,000

See accompanying notes to the basic financial statements.

Notes to Basic Financial Statements March 31, 2020

(1) GENERAL

The \$1.0 billion NY Green Bank was established to attract private sector capital to accelerate clean energy deployment in New York State (NYS or the State). To date, NY Green Bank has participated in transactions by providing: construction and longer-term post-construction financing and investment, financing to enable developers to aggregate smaller distributed assets into portfolios at scale, and credit enhancements.

NY Green Bank works to increase the size, volume, and breadth of clean energy and sustainable infrastructure investment activity throughout the State, expand the base of investors focused on NYS clean energy, and increase clean energy participants' access to capital. To do so, NY Green Bank collaborates with the private sector to develop transaction structures and methodologies that overcome typical clean energy investment barriers, such as challenges in evaluating risk and addressing the needs of distributed energy and efficiency projects where underwriting may be geared more towards larger projects and/or groups of somewhat homogeneous investment opportunities.

NY Green Bank focuses on opportunities that create attractive precedents, standardized practices, and roadmaps that capital providers can willingly replicate and scale. As funders "crowd in" to a particular area within the sustainable infrastructure and clean energy landscape, NY Green Bank moves on to other areas that have attracted less investor interest.

As a key component of New York's Clean Energy Fund (CEF), NY Green Bank is structured to be self-sustaining in that it must ultimately cover its own costs of operation. The CEF is a \$5.3 billion commitment, representing part of Governor Andrew M. Cuomo's Reforming the Energy Vision (REV) strategy to advance clean energy growth and innovation and drive economic development across the State while reducing ratepayer collections.

NY Green Bank is a division of the New York State Energy Research and Development Authority (NYSERDA). NYSERDA is a public benefit corporation established in 1975 pursuant to Title 9 of Article 8 of the Public Authorities Law of the State of New York. NYSERDA is included in the State's basic financial statements as a component unit.

Pursuant to various Orders of the NYS Public Service Commission (Commission), the Commission authorized a total of \$1 billion in funded capitalization for NY Green Bank. NY Green Bank receives incremental capital contributions through NYSERDA upon executing new commitments of the authorized capital. In turn, NYSERDA funds these contributions either from a transfer of existing cash and investment balances (of certain Commission authorized programs), or from the CEF ratepayer collections held by the electric utilities, an approach known as "Bill As You Go" (BAYG). As of March 31, 2020, total ratepayer funded capitalization provided to NY Green Bank was \$618.8 million, resulting in an unfunded amount of \$381.2 million that will be subsequently provided through BAYG.

As part of U.S. generally accepted accounting principles (U.S. GAAP), the Governmental Accounting Standards Board (GASB) requires capital contributions made to NY Green Bank from NYSERDA's available cash and investment balances to be treated as transfers, while those derived directly from the BAYG approach be accounted for as non-operating revenues to NY Green Bank. As a result, additions to NY Green Bank's capital during the fiscal year equal the sum of "Capital contributions" under Non-operating revenues and "Transfers in" on NY Green Bank's Statement of Revenues, Expenses and Changes in Fund Net Position.

Notes to Basic Financial Statements March 31, 2020

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

NY Green Bank is presented as a proprietary fund. Proprietary funds are used to report business-type activities for which a fee is charged to external users for goods or services. NY Green Bank's proprietary fund financial statements are designed to provide readers with a broad overview of NY Green Bank's finances in a manner similar to a private-sector business and consist of a Statement of Net Position; a Statement of Revenues, Expenses and Changes in Fund Net Position; and a Statement of Cash Flows.

Net position restricted for specific programs in the proprietary fund financial statements is defined as the amount of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets.

The accompanying financial statements present only the activities of NY Green Bank and the results of its operations in conformity with U.S. GAAP and are not intended to present the financial position of NYSERDA. These financial statements include certain prior year comparative information but not at the level of detail required for a presentation in conformity with U.S. GAAP. Accordingly, such information should be read in conjunction with NY Green Bank's financial statements for the year ended March 31, 2020 from which the information was derived.

(b) Basis of accounting

Proprietary fund financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. Revenues resulting from exchange transactions are recognized when the exchange takes place. Revenues resulting from non-exchange transactions are recognized when all eligibility requirements (if any) have been met. Expenses are recognized when incurred.

(c) Program operating costs

Program operating costs consist of certain costs that can be directly attributed to the NY Green Bank function. Program operating costs include expenses such as professional service costs and staff travel.

(d) Indirect cost allocation method

NYSERDA incurs certain indirect costs (e.g., administrative salary expense, fringe benefit expense, and general and administrative expense) that are not directly associated with a specific function/program. Therefore, these costs are allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank.

Administrative salary expense is comprised of an allocation of NYSERDA's administrative and support unit salaries and fringe benefit expenses. The administrative salary and fringe benefit expenses allocated to NY Green Bank are included in Salaries and Benefits Expense. General and Administrative Expense includes costs such as rent, equipment and facility costs, and information technology costs allocated to NY Green Bank.

(e) Investments

Investments are recorded at fair value, which reflects quoted market prices for U.S. government obligations.

Notes to Basic Financial Statements March 31, 2020

(f) Loans and financing receivables

Loans and financing receivables are recorded at their cost basis. A provision for losses is established on any individual loan and financing receivable which:(i) is delinquent by more than 120 days on payment of principal or interest obligations; and (ii) indicates a deficiency in the present value of expected cash flows discounted at its effective interest rate, or a deficiency in the valuation of its collateral, as compared to its outstanding balance plus any accrued interest receivable. For the fiscal year ended March 31, 2019 provision for losses was \$0.4 million and is reflected as a reduction of Loans and financing receivables interest on the Statement of Revenues, Expenses and Changes in Fund Net Position. There was no provision for losses for the fiscal year ended March 31, 2020.

(g) Capital assets

NY Green Bank does not maintain capital assets on its Statement of Net Position, but instead is allocated depreciation expense on NYSERDA capital assets. Depreciation is allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank.

(h) Deferred outflows of resources and deferred inflow of resources

Deferred outflows of resources as presented represent a consumption of net assets applicable to a future reporting period. Deferred inflows of resources are defined as an acquisition of net assets applicable to a future reporting period. Deferred outflows of resources and deferred inflow of resources include differences between expected projected results and actual results related to NY Green Bank's allocated portion of NYSERDA's net pension and net OPEB liabilities, as well as an allocated portion of retirement plan contributions subsequent to the measurement date.

(i) NY State assessments

NY State assessments represent NY Green Bank's pro-rata share of fees assessed to NYSERDA by the State under Section 2975 of the Public Authorities Law (Governmental Cost Recovery System) for general governmental services, which are allocated in proportion to total expenses of each NYSERDA function/program, including NY Green Bank.

(i) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(k) Reclassifications

Certain amounts reported as of and for the fiscal year ended March 31, 2019 have been reclassified to conform with the amounts presented as of and for the fiscal year ended March 31, 2020.

(3) CASH AND INVESTMENTS

Pursuant to Public Authorities Law Section 1859(1), the Commissioner of the New York State Department of Taxation and Finance (Fiscal Agent) serves as fiscal agent for NYSERDA's cash and investments, maintaining such funds on NYSERDA's behalf and implementing investments subject to the Fiscal Agent's policies and with direction and authorization from NYSERDA. NY Green Bank investments are subject to an investment policy approved by NYSERDA's Board. The policy permits deposits with financial institutions approved by the Fiscal Agent and permits investments in: certificates of deposit of bank or trust companies located in New York State, obligations of New York State and the U.S. government and certain of their agencies, repurchase agreements subject to certain limitations, and money market funds subject to certain limitations.

Notes to Basic Financial Statements March 31, 2020

The following schedule presents NY Green Bank's cash and investments as of March 31, 2020. Fair value is measured using quoted market prices for U.S. government obligations. GASB Statement No. 72, Fair Value Measurement and Application, prescribes three approaches to measuring fair value and requires a government to use valuation techniques consistent with one or more of these approaches. The standard establishes a fair value hierarchy that categorizes the inputs to valuation techniques used to measure fair value into three levels. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs – other than quoted prices included within Level 1 - that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. All NY Green Bank investments are valued based on Level 1 inputs.

			Weighted
			Average
		% of	Maturity
	Fair Value	<u>Total</u>	(months)
Cash and equivalents	\$ 14,531	8.8	N/A
U.S. Treasury Bills	53,730	32.7	5.6
U.S. Treasury Strips	96,100	58.5	<u>2.7</u>
Total	\$ 164,361	100.0	<u>3.7</u>
Current Portion	\$ 164,361		-

In addition to being subject to NYSERDA's investment policy, NY Green Bank is also subject to the same interest rate risk, concentration of credit risk, custodial credit risk for deposits, and custodial credit risks for investments.

Interest Rate Risk. NYSERDA's investment policy limits investment maturities to no longer than five years as a means of managing its exposure to fair value losses arising from increasing interest rates. Investment maturities are selected based on anticipated cash flow needs.

Concentration of Credit Risk. NYSERDA's investment policy limits investments with any single eligible banking institution to no more than 35% of its total investment portfolio, except as otherwise required by any policies and practices of the Fiscal Agent. As of March 31, 2020, NYSERDA did not have any investments with institutions that were individually in excess of 5% of total investments.

Custodial Credit Risk for Deposits. Deposits are exposed to custodial credit risk if the deposits are not covered by depository insurance or deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging institution's trust department or agent, but not in the name of NYSERDA.

In accordance with existing policies and procedures, the Fiscal Agent for NYSERDA monitors deposit balances for the purpose of determining collateralization levels. Collateral sufficient to cover all uninsured deposits is held at the Fiscal Agent's custodial bank.

Custodial Credit Risk for Investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of NYSERDA and are held either by the counterparty or the counterparty's trust department or agent, but not in the name of NYSERDA.

Fixed income investments owned directly by NYSERDA including those held on behalf of NY Green Bank, which trade in the U.S. markets, are held at NYSERDA's fiscal agent's custodian, in separate accounts, in the name of the Comptroller of the State of New York in Trust for NYSERDA.

Notes to Basic Financial Statements March 31, 2020

These securities are typically held in electronic form through the Federal Book Entry System and by the Depository Trust Company (DTC) and its subsidiaries acting as an agent of NYSERDA's fiscal agent's custodian bank.

The following is a summary of cash and investments and related committed capital as of March 31, 2020:

(Amounts in thousands)

Cash and	Committed
Investments	<u>Capital</u>
\$164,361	\$143,399

NY Green Bank's investment portfolio at any time consists of two components: committed capital and deployed capital. Committed capital relates to clean energy/sustainable infrastructure investments that NY Green Bank has legally executed, but where capital has not yet been deployed. This is supplemented by capital that has been deployed into NY Green Bank's clean energy transactions, pursuant to the terms of those arrangements. At March 31, 2020, NY Green Bank committed capital was \$143.4 million and deployed capital was \$441.6 million, as discussed further in note 4.

(4) LOANS AND FINANCING RECEIVABLES

Loans and financing receivables consist of sustainable infrastructure investments made by NY Green Bank into eligible technologies, consistent with its mission and investment criteria. These loans and financing transactions aim to mobilize private sector capital during the lifecycle of each investment, accelerate the deployment of economically and technically feasible clean energy projects in the State, provide financial returns to NY Green Bank, and contribute to New York's clean energy policy outcomes. NY Green Bank offers the following categories of capital solutions: construction finance, construction finance & term loan, term loans & investments (which may be debt or equity), warehousing/aggregation, and credit enhancements. NY Green Bank prices its products to reflect its credit underwriting, its risk position in the capital structure and pricing for comparable transactions, as well as internal portfolio return needs taking into account current market rates as well as commercial expectations of rates.

Loans and financing receivables at March 31, 2020 include the following:

	Number of <u>Transactions</u>	(Amounts in thousands) Loans and Financing Receivables Outstanding
Construction Finance	8	\$ 93,300
Construction Finance & Term Loan	6	34,191
Term Loan & Investments	18	247,391
Warehousing /Aggregation	<u>5</u>	<u>66,677</u>
Total	<u>37</u>	<u>\$ 441,559</u>

Notes to Basic Financial Statements March 31, 2020

Loans and financing receivables at March 31, 2020 mature as follows:

(Amounts in thousands)

Fiscal year		Construction			
ending	Construction	Finance &	Term Loan &	Warehousing	
March 31	<u>Finance</u>	Term Loan	<u>Investments</u>	/Aggregation	<u>Total</u>
2021	\$ 33,632	1,088	3,366	17,737	\$ 55,823
2022	32,371	1,232	66,675	8,923	109,201
2023	1,072	1,381	36,604	12,034	51,091
2024	12,142	1,503	8,255	20,478	42,378
2025	40	1,636	16,172	7,505	25,353
2026-2030	14,043	20,557	104,736	-	139,336
2031-2035	=	6,794	11,100	-	17,894
<u>2036-2040</u>	<u>=</u>	<u>=</u>	<u>483</u>	<u>=</u>	<u>483</u>
Total	<u>\$ 93,300</u>	<u>34,191</u>	<u>247,391</u>	<u>66,677</u>	<u>\$ 441,559</u>

(5) NON-CURRENT LIABILITIES

GASB Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68) requires the recognition by NYSERDA and, in turn, NY Green Bank, of its proportionate share of the net pension liability of the New York State and Local Employees' Retirement System, which is defined as the total pension liability less the plan's fiduciary net position.

NYSERDA and NY Green Bank implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Plans Other than Pensions (GASB 75), for the fiscal year ended March 31, 2019.

NY Green Bank's non-current liability represents the share of NYSERDA's net pension liability and net OPEB liability which is expected to be paid by NY Green Bank. Pension and OPEB related deferred outflows of resources and deferred inflows of resources are recognized by NY Green Bank to the extent they relate to NY Green Bank's share of the total amount recognized by NYSERDA as a whole.

Non-current liability activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	Beginning <u>Balance</u>	Additions	Reductions	Ending <u>Balance</u>
Net pension liability	\$234	1,873	(1,222)	885
Net OPEB liability	<u>485</u>	<u>677</u>	<u>(634)</u>	<u>528</u>
Total non-current liabilitie	s <u>\$719</u>	<u>2,550</u>	<u>(1,856)</u>	<u>1,413</u>

NY Green Bank (A Division of the New York State Energy Research and Development Authority)

Notes to Basic Financial Statements March 31, 2020

(6) CONTINGENCIES

Risk Management

NYSERDA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. NYSERDA maintains commercial insurance coverage for each of those risks of loss. Management believes such coverage is sufficient to preclude any significant uninsured losses to NYSERDA. NYSERDA has not experienced any reductions in coverage and has not had any insurance settlements exceeding the coverage in the past three years. NY Green Bank is covered by NYSERDA's insurance policies.

Contingent Obligations

As of March 31, 2020, NY Green Bank has entered into three credit contracts which, consistent with their terms, have not been funded but contain contingent obligations. NY Green Bank capital is only drawn if a contingent obligation under the respective agreement is triggered. The amount of contingent obligations as of March 31, 2020 totaled approximately \$2.6 million.

Any draws made on the above contingent obligations would be due to be repaid pursuant to the terms of their respective agreements.

(7) SUBSEQUENT EVENTS

The COVID-19 outbreak is disrupting supply chains and affecting operations and the financial condition across a range of industries, including the clean energy sector. The extent of the impact of COVID-19 on NY Green Bank's operational and financial performance will depend on certain developments, including but not limited to the duration and spread of the outbreak, impact on our employees, impact on program partners and contractors, State policy directives, and actions by the Public Service Commission which may adjust current program activities, all of which are uncertain and cannot be predicted. As of June 23, 2020, the issuance date of the financial statements, the extent to which COVID-19 may impact NY Green Bank's future programmatic activities and accomplishments in uncertain, and is likely to impact future financial performance against previously established budgets, but is not likely to have a material adverse impact on NY Green Bank's financial condition.

(8) TRANSFERS – CAPITAL CONTRIBUTIONS (REDEMPTIONS)

Transfers for the year ending March 31, 2019 represent a \$52.9 million capital redemption of NY Green Bank's initial capitalization funded from Regional Greenhouse Gas Initiative revenues repurposed by NYSERDA to provide funding to support NYSERDA's statewide energy storage initiative. There were no transfers for the year ending March 31, 2020.

Members of the Authority
New York State Energy Research and Development Authority:

Ladies and Gentlemen:

We have audited the financial statements of New York State Energy Research and Development Authority and the stand-alone financial statements of the Authority's enterprise fund, NY Green Bank, (collectively, the Authority) as of and for the year ended March 31, 2020, and expect to issue our reports thereon dated June ___, 2020. Under our professional standards, we are providing you with the accompanying information related to the conduct of our audits.

Our Responsibility Under Professional Standards

We are responsible for forming and expressing opinions about whether the financial statements that have been prepared by management with the oversight of the Members of the Authority are presented fairly, in all material respects, in conformity with U.S. generally accepted accounting principles. We have a responsibility to perform our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*, issued by the Comptroller General of the United States of America. In carrying out this responsibility, we planned and performed the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. Because of the nature of audit evidence and the characteristics of fraud, we are to obtain reasonable, not absolute, assurance that material misstatements are detected. We have no responsibility to plan and perform the audits to obtain reasonable assurance that misstatements, whether caused by error or fraud, that are not material to the financial statements are detected. Our audits do not relieve management or the Members of the Authority of their responsibilities.

In addition, in planning and performing our audits of the financial statements, we considered internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control. We also have a responsibility to communicate significant matters related to the financial statement audits that are, in our professional judgment, relevant to the responsibilities of the Members of the Authority in overseeing the financial reporting process. We are not required to design procedures for the purpose of identifying other matters to communicate to you.

Audit Risk Assessment

Based on our risk assessment procedures, the following is a significant risk/financial statement level risk identified that may result in a material misstatement (due to fraud or error) in the financial statements of the Authority and has been addressed during the performance of our audits:

Risk of management override of controls – Management is in a unique position to perpetrate fraud because of management's ability to manipulate accounting records and prepare fraudulent financial statements by overriding controls that otherwise appear to be operating effectively. Although the level of risk of management override of controls will vary from entity to entity, the risk nevertheless is present in all entities.

Accounting Practices and Alternative Treatments

Significant Accounting Policies

The significant accounting policies used by the Authority are described in Note 2 to the respective financial statements..

Unusual Transactions

We noted no transactions entered into by the Authority during the year that were both significant and unusual, and that, under professional standards, we are required to communicate to you, or transactions for which there is a lack of authoritative guidance or consensus.

Qualitative Aspects of Accounting Practices

We have discussed with the Members of the Authority and management our judgments about the quality, not just the acceptability, of the Authority's accounting principles as applied in its financial reporting. The discussions generally included such matters as the consistency of the Authority's accounting policies and their application, and the understandability and completeness of the Authority's financial statements, which include related disclosures.

Management Judgments and Accounting Estimates

The preparation of the financial statements requires management of the Authority to make a number of estimates and assumptions relating to the reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources and the disclosure of contingent assets and liabilities at the date of the financial statements. Estimates also affect the reported amounts of revenues and expenses/expenditures during the reporting period.

We evaluated management's estimates, including possible management bias in developing the estimates, and determined that these estimates were reasonable in relation to the financial statements as a whole.

Audit Misstatements

There were no uncorrected or corrected financial statement misstatements identified during the audits of the Authority's March 31, 2020 financial statements.

Members of the Authority New York State Energy Research and Development Authority Page 3 of 3

Disagreements with Management

There were no disagreements with management on financial accounting and reporting matters that, if not satisfactorily resolved, would have caused a modification of our auditors' reports on the Authority's financial statements.

Management's Consultation with Other Accountants

To the best of our knowledge, management has not consulted with or obtained opinions, written or oral, from other independent accountants during the year ended March 31, 2020.

Significant Issues Discussed, or Subject to Correspondence, with Management

Major Issues Discussed with Management Prior to Retention

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with Members of the Authority and management each year prior to our retention as the Authority's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention for the current year audits.

Material Written Communications

Attached to this letter please find copies of the following material written communications between management and us:

- 1. Engagement letters
- 2. Management representation letters

Additionally, a separate management letter will be issued subsequent to the issuance of this letter under separate cover.

Significant Difficulties Encountered During the Audits

We encountered no significant difficulties in dealing with management in performing our audits.

Independence

We hereby confirm that as of June ___, 2020, we are independent accountants with respect to the Authority under relevant professional and regulatory standards.

* * * * * * *

This letter to the Members of the Authority is intended solely for the information and use of the Members and management of the Authority and management and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

KPMG LLP



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Members of the Authority
New York State Energy and Research Development Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy and Research Development Authority (a component unit of the State of New York) (the Authority) as of and for the year ended March 31, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated June _____, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG

Albany, New York June ____, 2020



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Members of the Authority
New York State Energy and Research Development Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of NY Green Bank, an enterprise fund of the New York State Energy Research and Development Authority (the Fund), which comprise the statement of net position as of March 31, 2020, and the related statements of revenues, expenses and changes in fund net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June ____, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG

Albany, New York June ____, 2020



June , 2020

Members of the Authority New York State Energy Research and Development Authority Albany, New York

Ladies and Gentlemen:

In planning and performing our audit of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of New York State Energy Research and Development Authority (the Authority), which collectively comprise the basic financial statements of the Authority, as of and for the year ended March 31, 2020, in accordance with auditing standards generally accepted in the United States of America, we considered the Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the basic financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, material weaknesses may exist that have not been identified.

This communication is intended solely for the information and use of Members and management of the Authority and others within the organization, and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

KPMG LLP

RESOLVED, that pursuant to Section 105 of the Public Officers Law, the Members of the Audit and Finance Committee of the New York State Energy Research and Development Authority shall convene in executive session on June 23, 2020 for the purpose of reviewing the financial condition of the Authority.

RESOLVED, that the Authority's Financial Statements and the Financial Statements of NY Green Bank as of March 31, 2020, as presented at this June 23, 2020 meeting is hereby recommended for approval by the Board as the financial reports required by Sections 1867(1) and 2800 of the Public Authorities Law.



KPMG LLP 515 Broadway Albany, NY 12207-2974 Telephone +1 518 427 4600 kpmg.com

June ___, 2020

Ms. Alicia Barton
President and Chief Executive Officer
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, New York 12203-6399

Dear Ms. Barton:

This letter (the Engagement Letter) confirms our understanding of our engagement to provide professional services to the New York State Energy Research and Development Authority (the Authority).

Objectives and Limitations of Services

Audit Services

You have requested that we audit the Authority's financial statements (the financial statements) as set forth in Appendix I.

We have the responsibility to conduct and will conduct the audit of the financial statements in accordance with auditing standards generally accepted in the United States of America and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, with the objective of expressing an opinion as to whether the presentation of the financial statements that have been prepared by management with the oversight of those charged with governance, conforms with U.S. generally accepted accounting principles.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. In conducting the audit, we will perform tests of the accounting records and such other procedures, as we consider necessary in the circumstances, based on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to error or fraud, to provide a reasonable basis for our opinion on the financial statements. We also will evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, and evaluate the overall financial statement presentation.

Our audit of the financial statements will be planned and performed to obtain reasonable, but not absolute, assurance about whether the financial statements are free from material misstatement, whether due to fraud or error. Absolute assurance is not attainable because of the nature of audit evidence and the characteristics of fraud. Because of the inherent limitations of an audit, together with the inherent limitations of internal control, there is an unavoidable risk that some material misstatements, fraud, and noncompliance with laws and regulations may exist and not be detected by an audit of financial statements even though the audit is properly planned and performed in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*. Also, an audit is not designed to detect matters that are immaterial to the financial statements, and because the determination of the abuse is subjective, *Government Auditing Standards* do not expect auditors to detect abuse.



New York State Energy Research and Development Authority June ___, 2020 Page 2 of 10

We will also perform certain limited procedures to the required supplementary information as required by auditing standards generally accepted in the United States of America. However, we will not express an opinion or provide any assurance on the information. Our report relating to the financial statements will include our consideration of required supplementary information.

Subject to the remainder of this paragraph, we will issue a written report upon completion of our audit of the Authority's financial statements addressed to the Audit and Finance Committee of the Authority. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add emphasis-of-matter or other-matter paragraphs or withdraw from the engagement. If, during the performance of our audit procedures such circumstances arise, we will communicate to the Audit and Finance Committee our reasons for modification or withdrawal.

Internal Control over Financial Reporting and Compliance and Other Matters

In making our risk assessments as part of planning and performing our audit of the financial statements, we will consider the Authority's internal control relevant to the preparation and fair presentation of the financial statements in order to determine the nature, timing and extent of our audit procedures for the purpose of expressing an opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.

The objective of our audit of the financial statements is not to report on the Authority's internal control and we are not obligated to search for material weaknesses or significant deficiencies in internal control as part of our audit of the financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Authority's compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, our objective is not to provide an opinion on compliance with such provisions.

In accordance with Government Auditing Standards, we will prepare a written report, Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards (GAGAS report), on our consideration of internal control over financial reporting and tests of compliance made as part of our audit of the financial statements. This report will include any material weaknesses and significant deficiencies to the extent they come to our attention, and this report will also include instances of:

Fraud and noncompliance with provisions of laws or regulations that have a material effect on the financial statements or any other financial data significant to the audit objectives and any other instances that warrant the attention of those charged with governance;

Noncompliance with the provisions of contracts or grant agreements that has a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives; or

Abuse that is material, either quantitatively or qualitatively.



New York State Energy Research and Development Authority June ___, 2020 Page 3 of 10

The report will describe its purpose and will state it is not suitable for any other purpose.

In accordance with *Government Auditing Standards*, we will also issue a management letter to communicate instances of noncompliance with provisions of contracts or grant agreements or abuse that have an effect on the financial statements that is less than material but warrant the attention of those charged with governance.

In accordance with *Government Auditing Standards*, we are also required in certain circumstances to report fraud, noncompliance with the provisions of laws, regulations, contracts or grant agreements, or abuse directly to parties outside the auditee.

Investment Compliance Attestation Services

We will also report upon our examination of the Authority's compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rule and Regulations of the State of New York* during the fiscal year ended March 31, 2021. The following paragraphs describe the objectives of our engagement and the nature and limitations of the services we will provide.

We will conduct the examination in accordance with standards established by the American Institute of Certified Public Accountants and the standards applicable to attestation engagements contained in *Government Auditing Standards* issued by the Comptroller General of the United States with the objective of expressing an opinion as to whether the Authority complied with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York.* Accordingly, we will perform such procedures as we consider necessary in the circumstances to provide a reasonable basis for our opinion.

In accordance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York, we are required to report any material weaknesses found in the internal controls, all non-compliance with the the Authority's own investment guidelines, applicable laws, regulations, the State Comptroller's investment guideline requirements for Public Authorities set forth in Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York, and such public accounting directives that are issued by the State Comptroller and any other material deficiency or finding identifed during our examination.

In additon, in accordance with *Government Auditing Standards*, we are required to report findings of deficiencies in internal control, violations of provisions of contracts or grant agreements, and abuse that are material to the Authority's compliance with Section 201.3 of Title Two of the *Official Compilation of Codes*, *Rules and Regulations of the State of New York* and any fraud and illegal acts that are more than inconsequential that come to our attention during our examination. While the objective of our examination of the Authority's compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes*, *Rules and Regulations of the State of New York* is not to report on the Authority's legal compliance, and we are not obligated to search for significant deficiencies in internal control as part of our examination, this report will include any significant deficiencies in internal control to the extent they come to our attention. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Authority's ability to comply with the specified regulations. The definition of significant deficiency does not include potential future internal control problems, that is, control problems coming to our attention that do not affect compliance for the period under examination. This report will also include any instances of illegal acts and fraud identified, unless clearly inconsequential and any material violation of grants, contracts, and abuse. It will indicate that it is



New York State Energy Research and Development Authority June ___, 2020 Page 4 of 10

intended solely for the information and use of the Members and management of the Authority and that it is not intended to be and should not be used by anyone other than these specified parties.

Offering Documents

Should the Authority wish to include or incorporate by reference these financial statements and our audit reports thereon into an offering of exempt securities, prior to our consenting to include or incorporate by reference our reports on such financial statements, we would consider our consent to the inclusion of our report and the terms thereof at that time. We will be required to perform procedures as required by the standards of the American Institute of Certified Public Accountants, including, but not limited to, reading other information incorporated by reference in the offering document and performing subsequent event procedures. Our reading of the other information included or incorporated by reference in the offering document will consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements. However, we will not perform procedures to corroborate such other information (including forward-looking statements). The specific terms of our future services with respect to future offering documents will be determined at the time the services are to be performed.

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities without obtaining our consent to include or incorporate by reference our reports on such financial statements, and we are not otherwise associated with the offering document, then the Authority agrees to include the following language in the offering document:

"KPMG LLP, our independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this official statement."

Our Responsibility to Communicate with the Audit and Finance Committee

We will report to the Audit and Finance Committee, in writing, the following matters:

- Material, corrected misstatements that were brought to the attention of management as a result of audit procedures.
- Uncorrected misstatements accumulated by us during the audit and the effect that they, individually or in the aggregate, may have on our opinion in the auditor's report, and the effect of uncorrected misstatements related to prior periods.
- Significant difficulties and disagreements with management, if any, encountered during our audit.
- Other matters required to be communicated by auditing standards generally accepted in the United States
 of America.

We will also read minutes, if any, of relevant committee meetings for consistency with our understanding of the communications made to the Audit and Finance Committee and determine that the Audit and Finance Committee has received copies of all material written communications between ourselves and management. We will also determine that the Audit and Finance Committee has been informed of i) the initial selection of, or the reasons for any change in, significant accounting policies or their application during the period under audit, ii) the methods used by management to account for significant unusual transactions, and iii) the effect of



New York State Energy Research and Development Authority June ___, 2020 Page 5 of 10

significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

To the extent they come to our attention, we will inform the appropriate level of management about any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements and any instances of fraud. Further, to the extent they come to our attention, we also will communicate directly to the Audit and Finance Committee any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements, and any instances of fraud that involve senior management that, in our judgment, cause a material misstatement of the financial statements.

Management Responsibilities

Management of the Authority acknowledges and understands that they have responsibility for the preparation and fair presentation, in accordance with U.S generally accepted accounting principles, of the financial statements and all representations contained therein. Management also is responsible for identifying and ensuring that the Authority complies with laws, regulations, contracts, and grant agreements applicable to its activities, and for informing us of any known instances of noncompliance or suspected noncompliance with laws and regulations and provisions of contracts and grant agreements.

Management also is responsible for preventing and detecting fraud, including the design and implementation of programs and controls to prevent and detect fraud, for adopting sound accounting policies, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of the financial statements and to provide reasonable assurance against the possibility of misstatements that are material to the financial statements whether due to error or fraud. Management is also responsible for informing us, of which it has knowledge, of all material weaknesses and significant deficiencies in the design or operation of such controls. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Management of the Authority also acknowledges and understands that it is their responsibility to provide us with: i) access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements and the compliance requirements applicable to its programs such as records, documentation and other matters, ii) additional information that we may request from management for purposes of the audit, and iii) unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence. As required by auditing standards generally accepted in the United States of America, we will make specific inquiries of management and when appropriate, those charged with governance about the representations embodied in the financial statements and the effectiveness of internal control, and obtain a representation letter from management about these matters. The responses to our inquiries, the written representations, and the results of audit tests, among other things, comprise the evidential matter we will rely upon in forming an opinion on the financial statements.

To facilitate our audit planning, in accordance with *Government Auditing Standards*, management agrees to identify and provide copies of reports, if applicable, of previous audits, attestation engagements, or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented, prior to March 31, 2021.



New York State Energy Research and Development Authority June ___, 2020 Page 6 of 10

Management is responsible for adjusting the financial statements to correct material misstatements and for affirming to us in the representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements being reported upon taken as a whole. Because of the importance of management's representations to the effective performance of our services, the Authority will release KPMG LLP (KPMG) and its personnel from any claims, liabilities, costs and expenses relating to our services under this letter attributable to any misrepresentations in the representation letter referred to above. The provisions of this paragraph shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, tort (including but not limited to negligence) or otherwise.

Management is also responsible for providing us with written responses in accordance with *Government Auditing Standards* to the findings included in the GAGAS report within 30 days of being provided with draft findings. If such information is not provided on a timely basis prior to release of the report, the report will indicate the status of management's responses.

Management is responsible for the distribution of the reports issued by KPMG.

Dispute Resolution

Any dispute or claim between the parties shall be submitted first to non-binding mediation and if mediation is not successful within 90 days after the issuance by one of the parties of a request for mediation then to binding arbitration in accordance with the Rules for Non-Administered Arbitration of the International Institute for Conflict Prevention and Resolution ("IICPR"). Any issue concerning the extent to which any dispute is subject to arbitration, or any dispute concerning the applicability, interpretation, or enforceability of these dispute resolution procedures, including any contention that all or part of these procedures is invalid or unenforceable, shall be governed by the Federal Arbitration Act and resolved by the arbitrators. By operation of this provision, the parties agree to forgo litigation over such disputes in any court of competent jurisdiction.

Mediation shall take place at a location to be designated by the parties using Mediation Procedures of the IICPR, with the exception of paragraph 2 (Selecting the Mediator). Arbitration shall take place in New York, New York and shall be governed by the Federal Arbitration Act, 9 U.S.C. §§ 1, et seq. Party-selected arbitrators shall be selected from the lists of neutrals maintained by either the IICPR or by JAMS, Inc., but the chair of the arbitration panel does not have to be selected from those specific lists. The arbitration panel shall have no power to award non-monetary or equitable relief of any sort except as provided in IICPR Rule 13 (Interim Measures of Protection). Damages that are inconsistent with any applicable agreement between the parties, that are punitive in nature, or that are not measured by the prevailing party's actual damages shall be unavailable in arbitration or any other forum. In no event, even if any other portion of these provisions is held to be invalid or unenforceable, shall the arbitration panel have power to make an award or impose a remedy that could not be made or imposed by a court deciding the matter in the same jurisdiction.

Either party may seek to enforce any written agreement reached by the parties during mediation, or to confirm and enforce any final award entered in arbitration, in any court of competent jurisdiction, provided that any party moving to enforce, confirm or vacate any such agreement or award, as the case may be, will file such motion under seal unless prohibited under applicable court rules. Notwithstanding the agreement to such procedures, either party may seek equitable relief to enforce its rights in any court of competent jurisdiction.



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Other Matters

In the event that any term or provision of this Engagement Letter shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.

Except as permitted by law or as set forth in this paragraph, neither party shall acquire hereunder any right to use the name or logo of the other party or any part thereof, and any such use shall require the express written consent of the owner party. The Authority agrees that KPMG may list the Authority as a client in KPMG's internal and external marketing materials, including KPMG websites and social media, indicating the general services rendered (e.g., "The Authority is an Audit client of KPMG LLP"). Further, for purposes of the services described in this Engagement Letter only, the Authority hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of the Authority solely for presentations or reports to the Authority or for internal KPMG presentations and intranet sites.

The Authority and KPMG acknowledge and agree that each shall comply with all applicable United States export control laws and regulations in the performance of each party's respective responsibilities under the Engagement Letter. Unless requested by KPMG to allow it to complete its audit, the Authority will not provide KPMG, or grant KPMG access to, (a) information (including technical data or technology), verbally, electronically, or in hardcopy, (b) software or (c) hardware, that is controlled for export by the United States government under the Arms Export Control Act of 1976, Export Control Reform Act of 2018, the International Traffic in Arms Regulations ("ITAR"), Export Administration Regulations ("EAR"), Department of Energy Part 810 Regulations or Nuclear Regulatory Commission Part 110 Regulations, except information, software or hardware that is classified as EAR99 under the EAR ("Export Controlled Information"). If KPMG requests Export Controlled Information from the Authority, the Authority shall provide KPMG with notice of provision of Export Controlled Information at least 48 hours prior to providing such Export Controlled Information to KPMG.

KPMG is a limited liability partnership comprising both certified public accountants and certain principals who are not licensed as certified public accountants. Such principals may participate in the engagements to provide the services described in this Engagement Letter.

The audit documentation for this engagement is the property of KPMG. If KPMG receives a subpoena or other validly issued administrative, judicial, government or investigative regulatory demand/request ("Legal Demand") requiring it to disclose the Authority's confidential information, KPMG shall, unless prohibited by law or demand of a law enforcement agency, provide prompt written notice to the Authority of such demand. So long as KPMG gives notice as provided herein, KPMG shall be entitled to comply with such Legal Demand to the extent required by law, subject to any protective order or the like that may have been entered in the matter. In the event KPMG is requested or authorized by the Authority or is required by law, rule or regulation, Legal Demand, or other legal process to produce KPMG's documents or personnel as witnesses or for interviews, or otherwise to make information relating to the service under the Engagement Letter available to a third party or the Authority or its agents, the Authority shall reimburse KPMG for its professional time at its then-current standard hourly rates, and expenses, including reasonable attorney's fees and expenses, incurred in producing documents or personnel or providing information pursuant to such requests, authorizations or requirements.

Pursuant to *Government Auditing Standards*, and subject to applicable provisions of laws and regulations, we are required to make certain audit documentation available in a full and timely manner to others, including



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regulators, upon request. In addition, we may be requested to make certain audit documentation available to regulators pursuant to authority provided by law or regulation. If so requested, access to the requested audit documentation will be provided. Furthermore, regulators may obtain copies of selected audit documentation. Such regulators may intend, or decide, to distribute the photocopies or information contained therein to others, including other government agencies.

KPMG, as an accounting firm, has an obligation to comply with applicable professional standards. Certain professional standards, including AICPA Code of Professional Conduct Section 1.700, "Confidential Client Information Rule," adopted by the American Institute of Certified Public Accountants and similar rules adopted by the boards of accountancy of many states, prohibit the disclosure of client confidential information without client consent, except in limited circumstances. KPMG represents to the Authority that KPMG will treat the Authority's confidential information in accordance with applicable professional standards.

KPMG may work with and use the services of other members of the international KPMG network of independent firms and entities controlled by, or under common control with, one or more KPMG member firms (together with KPMG, the "KPMG Firms") to provide services to the Authority. In connection with the performance of services under this Engagement Letter, the KPMG Firms may, in their discretion, utilize the services of third party service providers within or outside of the United States to complete the services under this Engagement Letter. KPMG Firms and such third parties may have access to your confidential information from offshore locations. In addition, KPMG uses third party service providers within and outside of the United States to provide, at its direction, back-office administrative and clerical services to KPMG and these third party service providers may in the performance of such services have access to your confidential information. In particular, KPMG's audit technologies, software productivity tools and certain technology infrastructure and, necessarily, your confidential information, may be hosted in cloud environments operated by KPMG Firms or such third party service providers. In addition, for purposes of fulfilling our professional responsibilities, such as maintaining independence and performing conflict checks, NY Green Bank, a Division of NYSERDA, will be listed as a client in internal KPMG systems accessible on a need to know basis to certain professionals in KPMG International member firms. KPMG represents that it has technical, legal and/or other safeguards. measures and controls in place to protect your confidential information from unauthorized disclosure or use.

You also understand and agree that the KPMG Firms, with the assistance of third parties as outlined above, may use the Authority's confidential information for other purposes, consistent with our professional standards, such as improving the delivery of audit and other services or technology to you and to other clients, thought leadership projects, to allow you and other clients to evaluate various business transactions and opportunities, and for use in presentations to you, other clients and non-clients. When your information is used outside of the KPMG Firms or third parties assisting them as outlined above, the Authority will not be identified as the source of the information.

It may be necessary or convenient for the Authority to use KPMG-owned or -licensed software, software agents, scripts, technologies, tools or applications (collectively "KPMG Technology") designed to extract data from the Authority's electronic books and records systems or other systems (collectively, "Systems"), in connection with the audit. The Authority understands and agrees that it is solely responsible for following appropriate change management policies, processes and controls relating to use of such technology (including without limitation appropriate backup of the Authority information and Systems) (collectively, "Change Management Processes") before such KPMG Technology is utilized to extract data from the Systems. In the event the Authority fails to use such Change Management Processes or if such Change Management Processes prove to be inadequate, the Authority acknowledges that the Systems and/or KPMG Technology



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may not function as intended. In consideration of the foregoing, KPMG hereby grants the Authority the right to use KPMG Technology solely to facilitate the Authority's necessary or convenient provision of information to KPMG in connection with the audit, and this grant does not extend to any other purposes or use by third parties outside of your organization without our prior written approval, provided that third party contractors of the Authority having a need to know in order to perform their services to the Authority are permitted to use KPMG Technology to the extent necessary for such parties to perform such services, so long as the Authority has technical, legal and/or other safeguards, measures and controls in place to protect such KPMG Technology and the KPMG confidential information therein from unauthorized disclosure or use. Other than as expressly permitted hereby, the Authority agrees to keep KPMG Technology confidential, using no less than a reasonable standard of care to protect it from unauthorized disclosure or use, and to notify KPMG of any legal compulsions to disclose it, in accordance with the provisions governing legal demand of confidential information which appear in this engagement letter with respect to which the KPMG Technology is being used, mutatis mutandis. If the KPMG Technology is subject to any third party license terms and conditions before being provided to the Authority, the Authority may be required to accept such terms and conditions before using the KPMG Technology, in which case KPMG will provide such license terms and conditions to the Authority in writing before the Authority elects to use the KPMG Technology.

Except as otherwise provided for in this Engagement Letter, neither party may assign, transfer or delegate any of its rights, obligations, claims or proceeds from claims arising under or relating to this Engagement Letter (including by operation of law, in which case the assigning party will, to the extent legally permissible, give as much advance written notice as is reasonably practicable thereof) without the prior written consent of the other party, such consent not to be unreasonably withheld. Any assignment in violation hereof shall be null and void.

Other Government Auditing Standards Matters

As required by *Government Auditing Standards*, we have attached a copy of KPMG's most recent peer review report.

Additional Reports and Fees for Services

Appendix I to this Engagement Letter lists the additional reports we will issue and the services we will provide as part of this engagement and our fees for professional services to be performed under this Engagement Letter.

In addition, fees for any special audit-related projects, such as research and/or consultation on special business or financial issues, will be billed separately from the audit fees for professional services set forth in Appendix I and may be subject to written arrangements supplemental to those in this Engagement Letter.

* * * * * * *

Our engagement herein is for the provision of annual audit services for the financial statements and for the periods described in Appendix I, and it is understood that such services are provided as a single annual engagement. Pursuant to our arrangement as reflected in this Engagement Letter we will provide the services set forth in Appendix I as a single engagement for each of the Authority's subsequent fiscal years until expiration of our contract, or until the date of our agreement is extended or modified by mutual agreement. The annual fees for each subsequent year will be in accordance with our response to RFP 3243 Audit Services, unless otherwise amended.



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This Engagement Letter and any exhibits, attachments and appendices hereto, and amendments thereto agreed in writing by the parties, shall constitute the entire agreement between KPMG and the Authority with respect to the subject matter hereof and thereof, and supersedes all other previous oral and written representations, understandings or agreements relating to the subject matter of this agreement.

We shall be pleased to discuss this Engagement Letter with you at any time. For your convenience in confirming these arrangements, we enclose a copy of this Engagement Letter. Please sign and return it to us to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Very truly yours,	
KPMG LLP	
Martin R. Dunbar Partner	
ACCEPTED	
New York State Energy Research	h and Development Authority
Authorized Signature	
Title	
Date	

Fees for Services

Based upon our proposal dated April 7, 2016, our fees for services are as follows:

Audit of the financial statements and related notes to the financial statements of the New York Energy Research and Development Authority as of and for the year ended March 31, 2021

\$86,250

Other Reports:

The reports that we will issue as part of this engagement included in the fee above are as follows:

Independent Auditors' Report on the Authority's Financial Statements

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing* Standards

Report on Investment Compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York

The above estimates are based on the level of experience of the individuals who will perform the services. Circumstances encountered during the performance of these services that warrant additional time or expense could cause us to be unable to deliver them within the above estimates. We will endeavor to notify you of any such circumstances as they are assessed.

All fees, charges and other amounts payable to KPMG under the Engagement Letter do not include any sales, use, excise, value added, income or other applicable taxes, tariffs or duties, payment of which shall be the Authority's sole responsibility, excluding any applicable taxes based on KPMG's net income or taxes arising from the employment or independent contractor relationship between KPMG and its personnel.



KPMG LLP 515 Broadway Albany, NY 12207-2974 Telephone +1 518 427 4600 kpmg.com

June ___, 2020

Ms. Alicia Barton President and Chief Executive Officer New York State Energy Research and Development Authority 17 Columbia Circle Albany, New York 12203-6399

Dear Ms. Barton:

This letter (the Engagement Letter) confirms our understanding of our engagement to provide professional services to the New York State Energy Research and Development Authority (the Authority).

Objectives and Limitations of Services

Audit Services

You have requested that we audit the Authority's enterprise fund financial statements for NY Green Bank (the financial statements) as set forth in Appendix I.

We have the responsibility to conduct and will conduct the audit of the financial statements in accordance with auditing standards generally accepted in the United States of America and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, with the objective of expressing an opinion as to whether the presentation of the financial statements that have been prepared by management with the oversight of those charged with governance, conforms with U.S. generally accepted accounting principles.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. In conducting the audit, we will perform tests of the accounting records and such other procedures, as we consider necessary in the circumstances, based on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to error or fraud, to provide a reasonable basis for our opinion on the financial statements. We also will evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, and evaluate the overall financial statement presentation.

Our audit of the financial statements will be planned and performed to obtain reasonable, but not absolute, assurance about whether the financial statements are free from material misstatement, whether due to fraud or error. Absolute assurance is not attainable because of the nature of audit evidence and the characteristics of fraud. Because of the inherent limitations of an audit, together with the inherent limitations of internal control, there is an unavoidable risk that some material misstatements, fraud, and noncompliance with laws and regulations may exist and not be detected by an audit of financial statements even though the audit is properly planned and performed in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*. Also, an audit is not designed to detect matters that are immaterial to the financial statements, and because the determination of the abuse is subjective, *Government Auditing Standards* do not expect auditors to detect abuse.

We will also perform certain limited procedures to the required supplementary information as required by auditing standards generally accepted in the United States of America. However, we will not express an opinion



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or provide any assurance on the information. Our report relating to the financial statements will include our consideration of required supplementary information.

Subject to the remainder of this paragraph, we will issue a written report upon completion of our audit of the Authority's financial statements addressed to the Audit and Finance Committee of the Authority. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add emphasis-of-matter or other-matter paragraphs or withdraw from the engagement. If, during the performance of our audit procedures such circumstances arise, we will communicate to the Audit and Finance Committee our reasons for modification or withdrawal.

Internal Control over Financial Reporting and Compliance and Other Matters

In making our risk assessments as part of planning and performing our audit of the financial statements, we will consider the Authority's internal control relevant to the preparation and fair presentation of the financial statements in order to determine the nature, timing and extent of our audit procedures for the purpose of expressing an opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.

The objective of our audit of the financial statements is not to report on the Authority's internal control and we are not obligated to search for material weaknesses or significant deficiencies in internal control as part of our audit of the financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Authority's compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, our objective is not to provide an opinion on compliance with such provisions.

In accordance with Government Auditing Standards, we will prepare a written report, Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards (GAGAS report), on our consideration of internal control over financial reporting and tests of compliance made as part of our audit of the financial statements. This report will include any material weaknesses and significant deficiencies to the extent they come to our attention, and this report will also include instances of:

Fraud and noncompliance with provisions of laws or regulations that have a material effect on the financial statements or any other financial data significant to the audit objectives and any other instances that warrant the attention of those charged with governance;

Noncompliance with the provisions of contracts or grant agreements that has a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives; or

Abuse that is material, either quantitatively or qualitatively.

The report will describe its purpose and will state it is not suitable for any other purpose.



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In accordance with *Government Auditing Standards*, we will also issue a management letter to communicate instances of noncompliance with provisions of contracts or grant agreements or abuse that have an effect on the financial statements that is less than material but warrant the attention of those charged with governance.

In accordance with *Government Auditing Standards*, we are also required in certain circumstances to report fraud, noncompliance with the provisions of laws, regulations, contracts or grant agreements, or abuse directly to parties outside the auditee.

Offering Documents

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities, prior to our consenting to include or incorporate by reference our report(s) on such financial statements, we would consider our consent to the inclusion of our report and the terms thereof at that time. We will be required to perform procedures as required by the standards of the American Institute of Certified Public Accountants, including, but not limited to, reading other information incorporated by reference in the offering document and performing subsequent event procedures. Our reading of the other information included or incorporated by reference in the offering document will consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements. However, we will not perform procedures to corroborate such other information (including forward-looking statements). The specific terms of our future services with respect to future offering documents will be determined at the time the services are to be performed.

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities without obtaining our consent to include or incorporate by reference our report(s) on such financial statements, and we are not otherwise associated with the offering document, then the Authority agrees to include the following language in the offering document:

"KPMG LLP, our independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this official statement."

Our Responsibility to Communicate with the Audit and Finance Committee

We will report to the Audit and Finance Committee, in writing, the following matters:

- Material, corrected misstatements that were brought to the attention of management as a result of audit procedures.
- Uncorrected misstatements accumulated by us during the audit and the effect that they, individually or in the aggregate, may have on our opinion in the auditor's report, and the effect of uncorrected misstatements related to prior periods.
- Significant difficulties and disagreements with management, if any, encountered during our audit.
- Other matters required to be communicated by auditing standards generally accepted in the United States of America.

We will also read minutes, if any, of relevant committee meetings for consistency with our understanding of the communications made to the Audit and Finance Committee and determine that the Audit and Finance



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Committee has received copies of all material written communications between ourselves and management. We will also determine that the Audit and Finance Committee has been informed of i) the initial selection of, or the reasons for any change in, significant accounting policies or their application during the period under audit, ii) the methods used by management to account for significant unusual transactions, and iii) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative quidance or consensus.

To the extent they come to our attention, we will inform the appropriate level of management about any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements and any instances of fraud. Further, to the extent they come to our attention, we also will communicate directly to the Audit and Finance Committee any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements, and any instances of fraud that involve senior management that, in our judgment, cause a material misstatement of the financial statements.

Management Responsibilities

Management of the Authority acknowledges and understands that they have responsibility for the preparation and fair presentation, in accordance with U.S generally accepted accounting principles, of the financial statements and all representations contained therein. Management also is responsible for identifying and ensuring that the Authority complies with laws, regulations, contracts, and grant agreements applicable to its activities, and for informing us of any known instances of noncompliance or suspected noncompliance with laws and regulations and provisions of contracts and grant agreements.

Management also is responsible for preventing and detecting fraud, including the design and implementation of programs and controls to prevent and detect fraud, for adopting sound accounting policies, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of the financial statements and to provide reasonable assurance against the possibility of misstatements that are material to the financial statements whether due to error or fraud. Management is also responsible for informing us, of which it has knowledge, of all material weaknesses and significant deficiencies in the design or operation of such controls. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Management of the Authority also acknowledges and understands that it is their responsibility to provide us with: i) access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements and the compliance requirements applicable to its programs such as records, documentation and other matters, ii) additional information that we may request from management for purposes of the audit, and iii) unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence. As required by auditing standards generally accepted in the United States of America, we will make specific inquiries of management and when appropriate, those charged with governance about the representations embodied in the financial statements and the effectiveness of internal control, and obtain a representation letter from management about these matters. The responses to our inquiries, the written representations, and the results of audit tests, among other things, comprise the evidential matter we will rely upon in forming an opinion on the financial statements.

To facilitate our audit planning, in accordance with *Government Auditing Standards*, management agrees to identify and provide copies of reports, if applicable, of previous audits, attestation engagements, or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented, prior to March 31, 2021.



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Management is responsible for adjusting the financial statements to correct material misstatements and for affirming to us in the representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements being reported upon taken as a whole. Because of the importance of management's representations to the effective performance of our services, the Authority will release KPMG LLP (KPMG) and its personnel from any claims, liabilities, costs and expenses relating to our services under this letter attributable to any misrepresentations in the representation letter referred to above. The provisions of this paragraph shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, tort (including but not limited to negligence) or otherwise.

Management is also responsible for providing us with written responses in accordance with *Government Auditing Standards* to the findings included in the GAGAS report within 30 days of being provided with draft findings. If such information is not provided on a timely basis prior to release of the report, the report will indicate the status of management's responses.

Management is responsible for the distribution of the reports issued by KPMG.

Dispute Resolution

Any dispute or claim between the parties shall be submitted first to non-binding mediation and if mediation is not successful within 90 days after the issuance by one of the parties of a request for mediation then to binding arbitration in accordance with the Rules for Non-Administered Arbitration of the International Institute for Conflict Prevention and Resolution ("IICPR"). Any issue concerning the extent to which any dispute is subject to arbitration, or any dispute concerning the applicability, interpretation, or enforceability of these dispute resolution procedures, including any contention that all or part of these procedures is invalid or unenforceable, shall be governed by the Federal Arbitration Act and resolved by the arbitrators. By operation of this provision, the parties agree to forgo litigation over such disputes in any court of competent jurisdiction.

Mediation shall take place at a location to be designated by the parties using Mediation Procedures of the IICPR, with the exception of paragraph 2 (Selecting the Mediator). Arbitration shall take place in New York, New York and shall be governed by the Federal Arbitration Act, 9 U.S.C. §§ 1, et seq. Party-selected arbitrators shall be selected from the lists of neutrals maintained by either the IICPR or by JAMS, Inc., but the chair of the arbitration panel does not have to be selected from those specific lists. The arbitration panel shall have no power to award non-monetary or equitable relief of any sort except as provided in IICPR Rule 13 (Interim Measures of Protection). Damages that are inconsistent with any applicable agreement between the parties, that are punitive in nature, or that are not measured by the prevailing party's actual damages shall be unavailable in arbitration or any other forum. In no event, even if any other portion of these provisions is held to be invalid or unenforceable, shall the arbitration panel have power to make an award or impose a remedy that could not be made or imposed by a court deciding the matter in the same jurisdiction.

Either party may seek to enforce any written agreement reached by the parties during mediation, or to confirm and enforce any final award entered in arbitration, in any court of competent jurisdiction, provided that any party moving to enforce, confirm or vacate any such agreement or award, as the case may be, will file such motion under seal unless prohibited under applicable court rules. Notwithstanding the agreement to such procedures, either party may seek equitable relief to enforce its rights in any court of competent jurisdiction.



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Other Matters

In the event that any term or provision of this Engagement Letter shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.

Except as permitted by law or as set forth in this paragraph, neither party shall acquire hereunder any right to use the name or logo of the other party or any part thereof, and any such use shall require the express written consent of the owner party. The Authority agrees that KPMG may list the Authority as a client in KPMG's internal and external marketing materials, including KPMG websites and social media, indicating the general services rendered (e.g., "The Authority is an Audit client of KPMG LLP"). Further, for purposes of the services described in this Engagement Letter only, the Authority hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of the Authority solely for presentations or reports to the Authority or for internal KPMG presentations and intranet sites.

The Authority and KPMG acknowledge and agree that each shall comply with all applicable United States export control laws and regulations in the performance of each party's respective responsibilities under the Engagement Letter. Unless requested by KPMG to allow it to complete its audit, the Authority will not provide KPMG, or grant KPMG access to, (a) information (including technical data or technology), verbally, electronically, or in hardcopy, (b) software or (c) hardware, that is controlled for export by the United States government under the Arms Export Control Act of 1976, Export Control Reform Act of 2018, the International Traffic in Arms Regulations ("ITAR"), Export Administration Regulations ("EAR"), Department of Energy Part 810 Regulations or Nuclear Regulatory Commission Part 110 Regulations, except information, software or hardware that is classified as EAR99 under the EAR ("Export Controlled Information"). If KPMG requests Export Controlled Information from the Authority, the Authority shall provide KPMG with notice of provision of Export Controlled Information at least 48 hours prior to providing such Export Controlled Information to KPMG.

KPMG is a limited liability partnership comprising both certified public accountants and certain principals who are not licensed as certified public accountants. Such principals may participate in the engagements to provide the services described in this Engagement Letter.

The audit documentation for this engagement is the property of KPMG. If KPMG receives a subpoena or other validly issued administrative, judicial, government or investigative regulatory demand/request ("Legal Demand") requiring it to disclose the Authority's confidential information, KPMG shall, unless prohibited by law or demand of a law enforcement agency, provide prompt written notice to the Authority of such demand. So long as KPMG gives notice as provided herein, KPMG shall be entitled to comply with such Legal Demand to the extent required by law, subject to any protective order or the like that may have been entered in the matter. In the event KPMG is requested or authorized by the Authority or is required by law, rule or regulation, Legal Demand, or other legal process to produce KPMG's documents or personnel as witnesses or for interviews, or otherwise to make information relating to the service under the Engagement Letter available to a third party or the Authority or its agents, the Authority shall reimburse KPMG for its professional time at its then-current standard hourly rates, and expenses, including reasonable attorney's fees and expenses, incurred in producing documents or personnel or providing information pursuant to such requests, authorizations or requirements.

Pursuant to *Government Auditing Standards*, and subject to applicable provisions of laws and regulations, we are required to make certain audit documentation available in a full and timely manner to others, including regulators, upon request. In addition, we may be requested to make certain audit documentation available to regulators pursuant to authority provided by law or regulation. If so requested, access to the requested audit



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documentation will be provided. Furthermore, regulators may obtain copies of selected audit documentation. Such regulators may intend, or decide, to distribute the photocopies or information contained therein to others, including other government agencies.

KPMG, as an accounting firm, has an obligation to comply with applicable professional standards. Certain professional standards, including AICPA Code of Professional Conduct Section 1.700, "Confidential Client Information Rule," adopted by the American Institute of Certified Public Accountants and similar rules adopted by the boards of accountancy of many states, prohibit the disclosure of client confidential information without client consent, except in limited circumstances. KPMG represents to the Authority that KPMG will treat the Authority's confidential information in accordance with applicable professional standards.

KPMG may work with and use the services of other members of the international KPMG network of independent firms and entities controlled by, or under common control with, one or more KPMG member firms (together with KPMG, the "KPMG Firms") to provide services to the Authority. In connection with the performance of services under this Engagement Letter, the KPMG Firms may, in their discretion, utilize the services of third party service providers within or outside of the United States to complete the services under this Engagement Letter. KPMG Firms and such third parties may have access to your confidential information from offshore locations. In addition, KPMG uses third party service providers within and outside of the United States to provide, at its direction, back-office administrative and clerical services to KPMG and these third party service providers may in the performance of such services have access to your confidential information. In particular, KPMG's audit technologies, software productivity tools and certain technology infrastructure and, necessarily, your confidential information, may be hosted in cloud environments operated by KPMG Firms or such third party service providers. In addition, for purposes of fulfilling our professional responsibilities, such as maintaining independence and performing conflict checks, NY Green Bank, a Division of NYSERDA, will be listed as a client in internal KPMG systems accessible on a need to know basis to certain professionals in KPMG International member firms. KPMG represents that it has technical, legal and/or other safeguards, measures and controls in place to protect your confidential information from unauthorized disclosure or use.

You also understand and agree that the KPMG Firms, with the assistance of third parties as outlined above, may use the Authority's confidential information for other purposes, consistent with our professional standards, such as improving the delivery of audit and other services or technology to you and to other clients, thought leadership projects, to allow you and other clients to evaluate various business transactions and opportunities, and for use in presentations to you, other clients and non-clients. When your information is used outside of the KPMG Firms or third parties assisting them as outlined above, the Authority will not be identified as the source of the information.

It may be necessary or convenient for the Authority to use KPMG-owned or -licensed software, software agents, scripts, technologies, tools or applications (collectively "KPMG Technology") designed to extract data from the Authority's electronic books and records systems or other systems (collectively, "Systems"), in connection with the audit. The Authority understands and agrees that it is solely responsible for following appropriate change management policies, processes and controls relating to use of such technology (including without limitation appropriate backup of the Authority information and Systems) (collectively, "Change Management Processes") before such KPMG Technology is utilized to extract data from the Systems. In the event the Authority fails to use such Change Management Processes or if such Change Management Processes prove to be inadequate, the Authority acknowledges that the Systems and/or KPMG Technology may not function as intended. In consideration of the foregoing, KPMG hereby grants the Authority the right to use KPMG Technology solely to facilitate the Authority's necessary or convenient provision of information to KPMG in connection with the audit, and this grant does not extend to any other purposes or use by third parties



New York State Energy Research and Development Authority June ___, 2020 Page 8 of 9

outside of your organization without our prior written approval, provided that third party contractors of the Authority having a need to know in order to perform their services to the Authority are permitted to use KPMG Technology to the extent necessary for such parties to perform such services, so long as the Authority has technical, legal and/or other safeguards, measures and controls in place to protect such KPMG Technology and the KPMG confidential information therein from unauthorized disclosure or use. Other than as expressly permitted hereby, the Authority agrees to keep KPMG Technology confidential, using no less than a reasonable standard of care to protect it from unauthorized disclosure or use, and to notify KPMG of any legal compulsions to disclose it, in accordance with the provisions governing legal demand of confidential information which appear in this engagement letter with respect to which the KPMG Technology is being used, *mutatis mutandis*. If the KPMG Technology is subject to any third party license terms and conditions before being provided to the Authority, the Authority may be required to accept such terms and conditions before using the KPMG Technology, in which case KPMG will provide such license terms and conditions to the Authority in writing before the Authority elects to use the KPMG Technology.

Except as otherwise provided for in this Engagement Letter, neither party may assign, transfer or delegate any of its rights, obligations, claims or proceeds from claims arising under or relating to this Engagement Letter (including by operation of law, in which case the assigning party will, to the extent legally permissible, give as much advance written notice as is reasonably practicable thereof) without the prior written consent of the other party, such consent not to be unreasonably withheld. Any assignment in violation hereof shall be null and void.

Other Government Auditing Standards Matters

As required by Government Auditing Standards, we have attached a copy of KPMG's most recent peer review report.

Additional Reports and Fees for Services

Appendix I to this Engagement Letter lists the additional reports we will issue and the services we will provide as part of this engagement and our fees for professional services to be performed under this Engagement Letter.

In addition, fees for any special audit-related projects, such as research and/or consultation on special business or financial issues, will be billed separately from the audit fees for professional services set forth in Appendix I and may be subject to written arrangements supplemental to those in this Engagement Letter.

* * * * * * *

Our engagement herein is for the provision of annual audit services for the financial statements and for the periods described in Appendix I, and it is understood that such services are provided as a single annual engagement. Pursuant to our arrangement as reflected in this Engagement Letter we will provide the services set forth in Appendix I as a single engagement for each of the Authority's subsequent fiscal years until expiration of our contract, or until the date of our agreement is extended or modified by mutual agreement. The annual fees for each subsequent year will be in accordance with our response to RFP 3243 Audit Services, unless otherwise amended.

This Engagement Letter and any exhibits, attachments and appendices hereto, and amendments thereto agreed in writing by the parties, shall constitute the entire agreement between KPMG and the Authority with respect to the subject matter hereof and thereof, and supersedes all other previous oral and written representations, understandings or agreements relating to the subject matter of this agreement.



New York State Energy Research and Development Authority June ___, 2020 Page 9 of 9

We shall be pleased to discuss this Engagement Letter with you at any time. For your convenience in confirming these arrangements, we enclose a copy of this Engagement Letter. Please sign and return it to us to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Very truly yours,	
KPMG LLP	
Martin R. Dunbar Partner	
<u>ACCEPTED</u>	
New York State Energy Research	h and Development Authority
Authorized Signature	
Title	
Date	•

Fees for Service

Based upon our proposal dated April 7, 2016, as amended in October 2018 with the approval of management and the Audit and Finance Committee, our fees for services are as follows:

Audit of the financial statements and related notes to the financial statements of the Authority's enterprise fund, NY Green Bank, as of and for the year ended March 31, 2021

\$32,910

Other Reports:

The reports that we will issue as part of this engagement included in the fee above are as follows:

Independent Auditors' Report on the Financial Statements of NY Green Bank

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing* Standards

The above estimates are based on the level of experience of the individuals who will perform the services. Circumstances encountered during the performance of these services that warrant additional time or expense could cause us to be unable to deliver them within the above estimates. We will endeavor to notify you of any such circumstances as they are assessed.

All fees, charges and other amounts payable to KPMG under the Engagement Letter do not include any sales, use, excise, value added, income or other applicable taxes, tariffs or duties, payment of which shall be the Authority's sole responsibility, excluding any applicable taxes based on KPMG's net income or taxes arising from the employment or independent contractor relationship between KPMG and its personnel.

Resolution 1	No.
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RESOLVED, the Audit and Finance Committee recommends approval of a resolution authorizing the President and CEO to retain the firm of KPMG, LLP as independent auditors for the Authority and for NY Green Bank for the fiscal year ending March 31, 2021.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

ANNUAL BOND SALES REPORT

Fiscal Year Ended March 31, 2020

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List of issuances, refundings, and conversions

List of outstanding bonds as of March 31, 2020

ISSUANCES

Company/Series	Date Issued	Date of	Amount	Savings	Initial	Initial	M/WBE	
		Maturity	Issued	(\$000s)	Interest	Interest Rate	Participation	
		-	(\$000s)		Rate		-	
					Mode			
None								

REFUNDINGS

Company/Series	Date Issued	Date of Maturity	Amount Issued (\$000s)	Savings (\$000s)	Initial Interest Rate Mode	Initial Interest Rate	M/WBE Participation	
None								

CONVERSIONS

Company/Series	Date	Date of	Principal	Additional	Initial	Initial	M/WBE	
	Converted	Maturity	Amount	Savings	Interest	Interest Rate	Participation	
			(\$000s)	(\$000s)	Rate			
					Mode			
None								

							Amount	Amount
Company Central Hudson Gas & Electric Co.	Project description Pollution Control Refunding Revenue Bonds	Series 1999 B	<u>CUSIP</u> 649845 EW 0	<u>Date Closed</u> 8/3/1999	<u>Date Issued</u> 7/27/1999	Maturity 7/1/2034	<u>Issued (000's)</u> \$33,700	Outstanding (000's) \$33,700
Central Hudson Gas & Electric Co. Total							\$33,700	\$33,700
Consolidated Edison Company	Facilties Revenue Bonds	2004C-1	64984E DF9	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilties Revenue Bonds	2004C-2	64984E DE2	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilties Revenue Bonds	2004C-3	64984E DD4	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilities Revenue Bonds	2010A	64984E DN2	11/16/2010	11/9/2010	6/1/2036	\$224,600	\$224,600
Consolidated Edison Company	Facilities Revenue Bonds	2005 A-1	649848E DJ1	5/26/2005	5/26/2005	5/1/2039	\$42,100	\$42,100
Consolidated Edison Company Consolidated Edison Company	Facilities Revenue Bonds Facilities Revenue Bonds	2005 A-2 2005 A-3	649848E DG7 649848E DH5	5/26/2005 5/26/2005	5/26/2005 5/26/2005	5/1/2039 5/1/2039	\$42,100 \$42,100	\$42,100 \$42,100
Consolidated Edison Company Total	raciilles Revenue bonus	2005 A-3	049046E DH3	3/20/2003	3/20/2003	3/1/2039	\$449,900	\$449,900
KeySpan Generation LLC	Electric Facilities Revenue Bonds	1997 A	649841 CR 2	12/30/1997	12/30/1997	12/1/2027	\$24,880	\$24,880
KeySpan Generation LLC	Pollution Control Refunding Rev Bonds	1999A	649845 FA7	10/27/1999	10/20/1999	10/1/2028	\$41,125	\$41,125
KeySpan Generation LLC Total							\$66,005	\$66,005
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1988 A	649845 FE9	12/22/1988	12/22/1988	12/1/2023	\$69,800	\$69,800
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1985 B	649845 FT6		12/26/1985	12/1/2025	\$37,500	\$37,500
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1985 C	649845 FU3		12/26/1985	12/1/2025	\$37,500	\$37,500
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1986 A	649845 FS8	12/18/1986	12/18/1986	12/1/2026	\$50,000	\$50,000
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 A	649845 FV1	3/26/1987	3/26/1987	3/1/2027	\$25,760	\$25,760
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 B-1	649845 FK5	7/16/1987	7/16/1987	7/1/2027	\$68,200	\$68,200
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 B-2	649845 FM1	7/16/1987	7/16/1987	7/1/2027	\$25,000	\$25,000
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	2004 A	649845 GA6	5/27/2004	5/19/2004	7/1/2029	\$115,705	\$115,705
Niagara Mohawk Power Corporation Total							\$429,465	\$429,465
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2005 A	649845 GJ7	5/27/2005	5/18/2005	7/1/2026	\$65,000	\$65,000
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2004A	649845 GDO	8/26/2004	8/26/2004	12/1/2027	\$34,000	\$34,000
	Adj./Fixed Rate Pollution Control Refunding Revenue							
NYS Electric & Gas Corporation	Bonds Adj./Fixed Rate Pollution Control Refunding Revenue	1994 B	649845 DD 3	2/23/1994	2/23/1994	2/1/2029	\$37,500	\$37,500
NYS Electric & Gas Corporation	Bonds Adj./Fixed Rate Pollution Control Refunding Revenue	1994 C	649845 DK 7	6/15/1994	6/15/1994	6/1/2029	\$63,500	\$63,500
NYS Electric & Gas Corporation	Bonds	1994 D	649845 HD9	10/25/1994	10/25/1994	10/1/2029	\$74,000	\$74,000
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2004C	649845 HH0	8/26/2004	8/26/2004	4/1/2034	\$100,000	\$100,000
NYS Electric & Gas Corporation Total		20010	01001011110	0/20/2001	0/20/2001	17 17 200 1	\$374,000	\$374,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	2004A	649845 HG2	8/26/2004	8/26/2004	5/15/2032	\$10,500	\$10,500
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	2004B	649845 HJ6	8/26/2004	8/26/2004	5/15/2032	\$50,000	\$50,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997A	649845 HE7	8/19/1997	8/1/1997	8/1/2032	\$34,000	\$34,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997B	649845 HF4	8/19/1997	8/1/1997	8/1/2032	\$34,000	\$34,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997C	649845 HK3	8/19/1997	8/1/1997	8/1/2032	\$23,900	\$23,900
Rochester Gas & Electric Company Total							\$152,400	\$152,400
Subtotal - Conduit Utility Bonds							\$1,505,470	\$1,505,470
Green - Jobs Green New York Program Final	ncing:							
Residential Energy Efficiency Financing Rev	enue Ronde Series 2013A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013∆	64985LAA6	8/1/2013	8/1/2013	7/1/2014	\$2,195	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAB4	8/1/2013	8/1/2013	7/1/2014	\$2,080	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAC2	8/1/2013	8/1/2013	7/1/2016	\$2,105	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAD0	8/1/2013	8/1/2013	7/1/2017	\$1,930	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAE8	8/1/2013	8/1/2013	7/1/2017	\$1,775	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAF5	8/1/2013	8/1/2013	7/1/2019	\$1,775 \$1,755	\$0 \$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		6498LAG3	8/1/2013	8/1/2013	7/1/2020	\$1,800	\$1,800
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAH1	8/1/2013	8/1/2013	7/1/2021	\$1,780	\$1,780
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAJ7	8/1/2013	8/1/2013	7/1/2022	\$1,590	\$1,590
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAK4	8/1/2013	8/1/2013	7/1/2023	\$1,445	\$1,445
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013A	64985LAL2	8/1/2013	8/1/2013	7/1/2024	\$1,385	\$1,385
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2025	\$1,350	\$1,350
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2026	\$1,375	\$1,375
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2027	\$1,075	\$1,075
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	Residential Energy Efficiency Financing Revenue Bonds	∠u i3A	64985LAL2	8/1/2013	8/1/2013	7/1/2028	\$660 \$24,300	\$660 \$12,460
							•	•
Residential Energy Efficiency Financing Rev NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	20154	not applicable	8/6/2015	8/20/2015	7/1/2016	\$2,420	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2010	\$3,385	\$0 \$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2017	\$3,408	\$0 \$0
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							A	A
Company	Project description	Series	CUSIP	Date Closed	Date Issued	Maturity	Amount Issued (000's)	Amount Outstanding (000's)
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2019	\$3,410	S0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2020	\$3,305	\$3,305
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2021	\$3,120	\$3,120
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2022	\$3,100	\$3,100
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2023	\$3,160	\$3,160
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2024	\$3,200	\$3,200
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		not applicable not applicable	8/6/2015 8/6/2015	8/20/2015 8/20/2015	7/1/2025 7/1/2026	\$3,200 \$3,155	\$3,200 \$3,155
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2026	\$3,180	\$3,180
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2028	\$3,250	\$3,250
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2029	\$3,040	\$3,040
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2030	\$2,025	\$2,025
NYS Energy Res. & Development Auth. Total							\$46,358	\$33,735
Residential Solar Loan Revenue Bonds, Serie	ne 2015							
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	10/29/2015	10/29/2015	3/1/2026	\$12,812	\$5,508
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	2/10/2016	2/10/2016	6/1/2023	\$1,005	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	2/10/2016	2/10/2016	6/1/2026	\$6,058	\$4,694
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	4/8/2016	4/8/2016	9/1/2023	\$1,592	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	4/8/2016	4/8/2016	9/1/2026	\$6,136	\$4,781
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	7/11/2016	7/11/2016	12/1/2023	\$1,788	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	7/11/2016	7/11/2016	12/1/2026	\$7,017	\$5,560
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	9/28/2016	9/28/2016	3/1/2024	\$1,256	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	9/28/2016	9/28/2016	3/1/2027	\$5,011	\$4,005
NYS Energy Res. & Development Auth. Total							\$42,675	\$24,548
Residential Energy Efficiency Financing Reve	onue Bonde Series 2016A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016Δ	not applicable	9/22/2016	9/22/2016	7/1/2017	\$1,045	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2018	\$1,585	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2019	\$1,600	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2020	\$1,620	\$1,620
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2021	\$1,635	\$1,635
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2022	\$1,505	\$1,505
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2023	\$1,460	\$1,460
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2024	\$1,490	\$1,490
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2025	\$1,520	\$1,520
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2026	\$1,555	\$1,555
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2027	\$1,565	\$1,565
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2028	\$1,595	\$1,595
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2029	\$1,635	\$1,635
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2030	\$1,680	\$1,680
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2031	\$1,690 \$23,180	\$1,690 \$18,950
1410 Energy 163. & Development Addi. 10tal							\$25,100	\$10,500
Residential Solar Loan Green Revenue Bonds	s, Series 2018A							
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds	2018A		3/21/2018	3/21/2018	4/1/2020	\$1,600	\$580
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds	2018A		3/21/2018	3/21/2018	4/1/2021	\$1,500	\$1,500
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2022	\$1,500	\$1,500
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2023	\$1,300	\$1,300
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2024	\$1,100	\$1,100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2025	\$1,100	\$1,100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018 3/21/2018	3/21/2018 3/21/2018	4/1/2026 4/1/2034	\$1,000 \$9,400	\$1,000
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	NYSERDA Residential Financing Green Revenue Bonds	2016A		3/21/2016	3/21/2016	4/1/2034	\$9,400 \$18,500	\$7,615 \$15,695
N13 Ellergy Res. & Development Auth. Total							\$10,500	\$15,095
Residential Solar and Energy Efficiency Loan	Green Revenue Bonds, Series 2019A							
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energian	2019A	64986RAA2	31/21/19	3/21/2019	4/1/2020	\$1,165	\$1,165
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energian	2019A	64986RAB0	31/21/19	3/21/2019	4/1/2021	\$1,385	\$1,385
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy	2019A	64986RAC8	31/21/19	3/21/2019	4/1/2022	\$1,320	\$1,320
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAD6	31/21/19	3/21/2019	4/1/2023	\$1,255	\$1,255
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAE4	31/21/19	3/21/2019	4/1/2024	\$1,185	\$1,185
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAF1	31/21/19	3/21/2019	4/1/2025	\$1,095	\$1,095
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAG9	31/21/19	3/21/2019	4/1/2026	\$1,045	\$1,045
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAH7	31/21/19	3/21/2019	4/1/2027	\$995	\$995
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAJ3	31/21/19	3/21/2019	4/1/2028	\$820	\$820
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	NYSERDA Green Jobs Residential Solar Level and Energia	2019A	64986RAK0	31/21/19	3/21/2019	4/1/1935	\$5,245 \$15,510	\$5,245 \$15,510
1110 Energy Nes. & Development Auth. Total							φ13,310	\$15,510
Subtota - Green Jobs - Green New York Pro	gram Financing						\$170,522	\$120,898
Grand Total							\$1,675,992	\$1,626,368

RESOLVED, that the Authority's Annual Bond Sales Report for the fiscal year April 1, 2019 through March 31, 2020, and the information contained therein, as presented at this June 23, 2020 meeting is hereby recommended for approval by the Board for submission pursuant to Section 2800 of the Public Authorities Law.

AUDIT AND FINANCE COMMITTEE CHARTER

Established September 18, 1980

Purposes

Pursuant to Article V, Section 5, of the Authority's By-laws, the purposes of the Audit and Finance Committee are to recommend the hiring of a certified independent auditing firm, including the compensation to be paid, and provide direct oversight of the performance of the independent audit performed; review the annual financial statements of the Authority prior to submission for approval to the Members of the Authority; and may examine and consider such other matters in relation to the internal and external audit of the Authority's accounts, the Authority's financings, and in relation to the financial affairs of the Authority and its accounts as the Audit and Finance Committee may determine to be desirable.

Powers of the Committee

The Committee will:

- recommend appointment, including compensation, and oversee the work, of the independent auditors and, as appropriate, any other public accounting firm employed by the Authority;
- conduct or authorize investigations into any matters within its scope of responsibility;
- seek any information it requires from Authority employees; and
- meet with Authority staff and independent auditors, as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition of Committee and Selection of Members

The Committee shall be established as set forth in and pursuant to Article V, Section 5, of the Authority's By-laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members. The Committee shall consist of not less than three independent Members who shall constitute a majority on the Committee and who shall possess the necessary skills to understand the duties and function of the Committee, provided however, that in the event that there are less than three independent Members, the Members may appoint non-independent Members, provided that the independent Members constitute a majority of the Members of the Committee. In addition, the membership of

the Committee shall include the Chair of the Authority who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Committee members shall be familiar with corporate financial and accounting practices and at least one should be a financial expert. The financial expert should have: (a) an understanding of generally accepted accounting principles and financial statements; (b) experience in preparing or auditing financial statements of comparable entities; (c) experience in applying such principles in connection with the accounting for estimates, accruals and reserves; (d) experience with internal accounting controls; and (e) an understanding of audit committee functions.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the Bylaws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

The Committee will meet with the independent auditor at least annually to discuss the financial statements of the Authority.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings will be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting on significant material matters related to its: (a) oversight of the independent auditors and financial statements; (b) oversight of internal audit activities; (c) oversight of management's internal controls, compliance, and risk assessment practices; (d) review and approval or recommendations concerning approval of Authority financings; (e) review and recommendations concerning approval of investments and investment activities; (f) oversight of special investigations and whistle blower policies; and (g) review or

oversight of any other issues related to the audit and finance practices of the Authority as it deems appropriate.

Independent Auditors and Financial Statements. The Committee will:

- recommend appointment and approval of compensation and oversee independent auditors retained by the Authority and approve all audit services provided by the independent auditor;
- review the procedures for the selection of the independent auditor to ensure compliance with procurement guidelines, internal controls, and any other applicable requirements. The independent auditors will be prohibited from providing non-audit services unless having received previous written approval from the Committee (Non-audit services include tasks that directly support operations, such as bookkeeping or other services related to the accounting records or financial statements of the Authority, financial information systems design and implementation, appraisal or valuation services, actuarial services, investment banking services, and other tasks that may involve performing management functions or making management decisions);
- review audited financial statements and the associated management letter, and report on internal controls and all other auditor communications;
- review significant accounting and reporting issues, new accounting requirements and understand their impact on the financial statements;
- meet with the independent audit firm and discuss any significant issues that may have surfaced during the course of the audit; and
- review and discuss any significant risks reported in the independent audit findings and recommendations and assess the responsiveness and timeliness of management's follow-up activities.

Internal Audit and Other Activities. The Committee will:

- approve the Internal Audit Section of the Internal Control Manual and the risk-based audit plan on an annual basis;
- provide input to the Director of Internal Audit on the internal audit function's budget and resource plan;
- review with management and the Director of Internal Audit, the audit plans and

activities of the internal audit function.

- approve significant changes to the risk-based audit plan;
- receive communications from the Director of Internal Audit regarding internal audit's performance related to the audit plan and other matters;
- approve the appointment or removal of the Director of Internal Audit;
- ensure that the internal audit function is organizationally independent from operations and that the Director of Internal Audit confirms, at least annually, the organizational independence of the internal audit activity;
- make appropriate inquiries of management and the Director of Internal Audit to determine whether there are inappropriate scope or resource limitations;
- review the internal audit function's conformance with the Institute of Internal Auditors' International Professional Practices Framework, including the Definition of Internal Auditing, the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, and the International Standards for the Professional Practice of Internal Auditing (the Standards), and action plans to address any significant conformance issues;
- as permitted by law, meet separately with the Director of Internal Audit to discuss any matters that the Audit and Finance Committee or the Director of Internal Audit believes should be discussed privately;
- review the results of audit activities and approve procedures for implementing accepted recommendations of the internal auditor; and
- review the results of audits performed by the Office of the State Comptroller and any other federal or State agencies, and procedures for implementing accepted recommendations of the audit.

Internal Controls, Compliance, and Risk Assessment Practices. The Committee will:

- review internal controls policies and procedures; and
- review annually management's assessment of the effectiveness of internal controls; and review the report on compliance with internal controls by the independent auditors as a part of the financial audit engagement.

Authority Financings. The Committee will:

- review and approve declarations of intent;
- review Authority financings;
- review and make recommendations concerning proposals for issuance of debt; and
- review and make recommendations concerning approval of an annual bond sale report.

Investment Activities. The Committee will:

- require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under *Government Auditing Standards* issued by the Comptroller General of the United States;
- review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate; and
- review not less frequently than annually the Investment Guidelines, and recommend to the Members of the Authority such changes in the Investment Guidelines as it deems necessary or appropriate.

Special Investigations. The Committee will:

- ensure availability of an appropriate confidential mechanism for individuals to report suspected fraudulent activities, allegations of corruption, fraud, criminal activity, conflicts of interest or abuse by the directors, officers, or employees and any persons having business dealings with the Authority, and breaches of internal control;
- review and recommend approval of procedures for the receipt, retention, investigation and referral of complaints concerning accounting, internal controls, and auditing to the appropriate body;
- request and oversee special investigations as needed and refer specific issues to the appropriate body for further investigation; and
- review all reports delivered to it by the Inspector General and serve as a point of

contact with the Inspector General.

Other Responsibilities. The Committee will:

- report significant material issues to the Members;
- obtain information and assess training needs to enhance the Committee members' understanding of the role of internal audits and the independent auditor, the risk management process, internal controls, and familiarity with financial reporting standards;
- review the Committee's charter, reassess its adequacy, and recommend proposed changes, as it deems appropriate; and
- review and make recommendations concerning approval of the annual report required by the Public Authorities Law and such other guidelines, policies, procedures, and reports, as deemed appropriate.

RESOLVED, amendments to the Authority's Audit and Finance Committee Charter as presented for consideration at this June 23, 2020 meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, is recommended for adoption and approval by the Board.



ANDREW M. CUOMO Governor

RICHARD L. KAUFFMAN Chair

ALICIA BARTON President and CEO

NOTICE OF MEETING AND AGENDA

June 9, 2020

TO THE MEMBERS OF THE PROGRAM PLANNING COMMITTEE:

PLEASE TAKE NOTICE that the one hundred tenth (110th) meeting of the Program Planning Committee of the New York State Energy Research and Development Authority ("Authority") will be held via video conference, on Tuesday, June 23, 2020, commencing at 12:30 p.m., for the following purposes:

- 1. To consider and act upon the Minutes of the 109th meeting of the Program Planning Committee held on January 28, 2020.
- 2. To consider and act upon a resolution recommending approval of the Program Planning Committee Charter.
- 3. To receive an update on future directions for clean energy programs.
- 4. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting via the video conference which can be accessed at https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

Sara J.

New York City

1359 Broadway

(F) 518-862-1091

Secretary to the Program Planning Committee

(F) 716-842-0156

PROGRAM PLANNING COMMITTEE CHARTER

Established September 20, 1983

Purposes

Pursuant to Article V, Section 5 of the Authority's By-Laws, the purposes of the Committee are to: review the annual updating of the Authority's Strategic Program Plan; and preparation of the portions of the Authority's annual budget related to the energy research and innovation, market development, clean energy financing, and other related programs and initiatives; provide guidance to the Authority's officers and employees in the preparation of those plans and those portions of the budget; and shall consider such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee.

Powers of the Committee

The Committee will:

- review the annual update of the Authority's Strategic Program Plan;
- review preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives;
- consider such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee; and
- meet with and request information from Authority staff as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be established as set forth in and pursuant to Article V, Section 5 of the Authority's By-Laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members, who shall be elected from among the Members of the Authority other than the Chair. A majority of these committee members shall be other than Members of the Authority who serve ex-officio. In addition, the membership of the Committee shall include the Chair of the Authority, who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the

Chair, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

Notices of meetings will be prepared in accordance with the By-Laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) the annual updating of the Authority's Strategic Program Plan; (b) the preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives; (c) such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee;

Review the annual update of the Strategic Program Plan. The Committee will:

- review the process Authority staff uses to prepare the Strategic Program Plan;
- review a draft of the Strategic Program Plan document; and
- recommend such revisions to the process and document as the Members deem necessary.

Review the preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives. The Committee will:

- review drafts of the annual spending plan and the annual operating budget with respect to the program areas within its jurisdiction;
- recommend such revisions to these documents as the Members deem necessary;
- review any proposed revisions by the Officers to the operating budget with respect to the program areas within its jurisdiction.

<u>Provide guidance in the preparation of plans and budgets</u>. The Committee will:

- receive reports from Authority staff concerning progress in the various program areas within its jurisdiction;
- make such recommendations with respect to program direction and planning as the Members deem necessary.

Consider such other matters related to the Authority's programs within its jurisdiction as the officers of the Authority may refer to the Committee. The Committee will:

• receive reports on any other matters with respect to the program areas within its jurisdiction as the officers of the Authority may refer to the Committee and make such recommendations on such matters as the Members deem necessary.

Resolution No.	

RESOLVED, that the Charter of the Authority's Program Planning Committee as presented to the Members for consideration at this June 23, 2020 meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, are recommended for adoption and approval by the Board.

CLEAN ENERGY PROGRAM UPDATE ORAL REPORT



ANDREW M. CUOMO Governor

RICHARD L. KAUFFMAN

ALICIA BARTON President and CEO

NOTICE OF MEETING AND AGENDA

June 10, 2020

TO THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT **AUTHORITY:**

PLEASE TAKE NOTICE that the Annual Meeting (the 247th) of the New York State Energy Research and Development Authority will be held via video conference, on Tuesday, June 23, 2020, commencing at 2:30 p.m., for the following purposes:

I. **Discussion Agenda**

- 1. To receive a report from the President and CEO.
- 2. To consider and act upon a resolution appointing Commissioner Marie Therese Dominguez to the Program Planning Committee.
- 3. To receive information from the Governance Committee:
 - To consider and act upon a motion to enter into private session for the purpose of reviewing the results of the Annual Confidential Board Member Performance Evaluation; and
 - b. To consider and act upon a resolution approving the Annual Confidential Board Member Performance Evaluation Report.
- 4. To receive a report from the Waste and Facilities Management Committee.
- 5. To receive information from the Audit and Finance Committee:
 - a. To consider and act upon a resolution approving the Financial Statements of the Authority and NY Green Bank for fiscal year 2019-2020.
- 6. To receive a report from the Program Planning Committee.

(F) 716-842-0156

II. Consent Agenda

- 1. To consider and act upon resolutions approving:
 - a. a compensation schedule;
 - b. the Annual Investment Report of the Authority and the *Investment Guidelines*, *Operative Policy and Instructions (June 2020)*;
 - c. the Annual Investment Report for the NYSERDA OPEB (Other Post-Employment Benefits) Trust for the year ended March 31, 2020 and the Investment Policy Statement for the NYSERDA OPEB Trust (June 2020);
 - d. the appointment of the Authority's independent auditors for fiscal year 2020-2021;
 - e. an annual bond sales report;
 - f. Charters for each of the Authority's Committees;
 - g. the Operations and Accomplishments, and Mission Statement and Measurements Annual Report;
 - h. the Annual Report on Acquisition and Disposition of Real and Personal Property, the Real Property Acquisition Policy Guidelines (June 2020), and the Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2020);
 - i. the Annual Report on Contracts and the Procurement and Program Contract Guidelines, Operative Policy and Instructions (June 2020);
 - j. the periodic contracts report; and
 - k. the annual report on the implementation of the Authority's prompt payment policy.

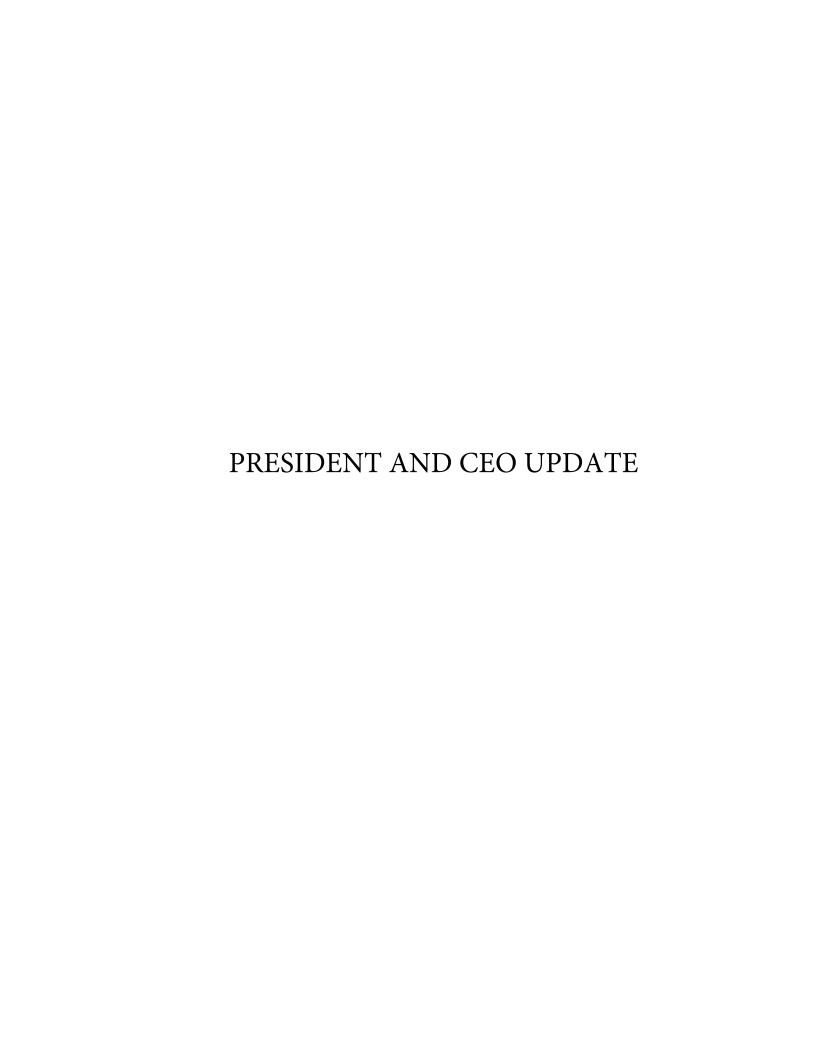
III. To transact such other business as may properly come before the meeting.

Members of the public may attend the meeting via the video conference which can be accessed at https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

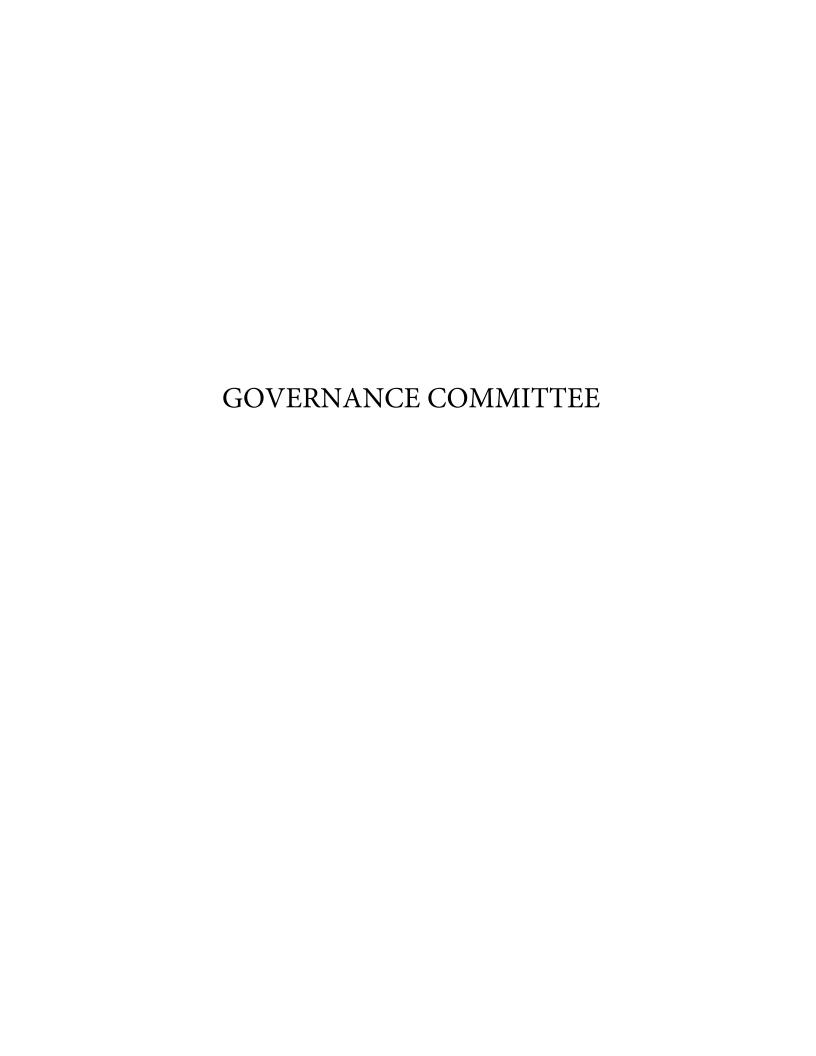
The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

Peter J. Costello Secretary

Pan Copullo



PROGRAM PLANNING COMMITTEE APPOINTMENT



Resolution	No.	

RESOLVED, that pursuant to Section 108 of the Public Officers Law and Section 2800 of the Public Authorities Law, the Members shall convene in private session on June 23, 2020 for the purpose of reviewing the Annual Confidential Board Member Performance Evaluation of the Authority.

CONFIDENTIAL BOARD MEMBER EVALUATION

To be provided under separate cover.

WASTE & FACILITIES MANAGEMENT COMMITTEE



NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances March 31, 2020

(Amounts in thousands)

1	March 31, 2020	March 31, 2019	Change from March 31, 2019
Cash and investments (current and non-current totals):			
NY-Sun	45,315	20,377	24,938
CEF	91,036	73,715	17,321
RGGI	135,851	127,231	8,620
Multi Funding Source Cash Management	35,649	29,615	6,034
GJGNY	56,994	59,735	(2,741)
CES	129,341	136,597	(7,256)
Other (individually less than 5% of total)	73,636	91,187	(17,551)
NY Green Bank	164,361	269,374	(105,013)
_	732.183	807.831	(75.648)

Analysis: NY-Sun and CEF balances increased primarily due to Bill-As-You-Go collections and transfers for projected working capital needs exceeding expenses. The increase in RGGI was the result of allowance auction proceeds in excess of expenditures and transfers. Other funds decreased principally due to the winding-down of the RPS and IPEC programs. Green Bank's decrease was primarily due to additional capital deployed.

New York State receivable

8.451

11.377

(2,926)

Analysis: The variance is primarily due to a decrease of \$3,900,000 in Zero-emission credit (ZEC) program receivables from State-affiliated load serving entities and a decrease of \$2,800,000 in unreimbursed Fuel NY program expenses. These decreases were partially offset by an increase in the receivable of \$2,524,000 for unreimbursed expenses funded from appropriations for Energy and Environmental programs.

Third-party billings receivable

14,459

5,820

8,639

Analysis: The variance is primarily due to an increase in the Zero-emission credit (ZEC) program receivables from various load serving entities of \$8,371,000 and an increase of \$1,523,000 across several co-funding projects.

Interest receivable on loans

3,746

2.830

916

Analysis: The variance is primarily due to a larger amount of capital deployed and the timing of due dates for interest payments on NY Green Bank loans and financing receivables.

Loans and financing receivables - current and non-current totals:

NY Green Bank	441,559	299,430	142,129
GJGNY	199,773	198,932	841
	641 332	498 362	142 970

Analysis: The GJGNY balance reflects little change from the previous fiscal year end amount. As of March 31, 2020, 93.1% of the GJGNY portfolio loan balance is current on payments, \$8,180,000 has been recorded as an allowance reserve for loans more than 120 days past due, and cumulative allowance reserves and write-offs have been recorded representing 2.8% of original loan principal. The NY Green Bank balance increased due to net loan activity, which included deploying capital on several deals executed in FY 2019-20.

Prepaid expense

2,706

2,713

Analysis: Minor variance.

Total assets

Other assets 6,962

14,236 (7,274)

Analysis: Variance primarily reflects a decrease in the value of the Down State Strategic Gasoline Reserve as a result of lower crude and spot prices at year end.

Capital assets, net of depreciation

14,235

15,918

(1,683)

Analysis: Decrease due to fixed asset additions of \$1,293,000 less depreciation expense of \$2,976,000.

1,424,074

1,359,087 64,987

Deferred outflows of resources

12,334

17,063

(4,729)

Analysis: Reflects amortization of actuarially-determined deferred outflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices), as well as amortization of the FY 2018-19 contributions subsequent to measurement date, addition of similar FY 2019-20 contributions, and addition of new balances determined from the actuarial updates to the new measurement date.

NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances March 31, 2020

(Amounts in thousands)

Change f	rom
----------	-----

<u>March 31, 2020</u> <u>March 31, 2019</u> <u>March 31, 2019</u>

Accounts payable 7,572 8,332 (760)

Analysis: Variance is principally due to timing of payments of vendor billings.

Accrued liabilities 174,547 179,144 (4,597)

Analysis: Variance is primarily due to a decrease in accrued liability for ZEC program payments for NYS Load Serving Entities and from a decrease in accrued payments to contractors under the RPS program.

Unearned revenue 3,251 3,522 (271)

Analysis: Variance is principally related to a decrease in deferred cofunding for the Clean Energy Communities program, offset in part by an increase in deferred cofunding revenue for the Heat Pump Campaign with the National Fuel Gas

 Deposits
 25,398
 23,246
 2,152

 Analysis: Increase primarily due to receipt of additional CES large scale renewable bid and contract security deposits.

Long-term liabilities- current and non-current totals:

•	142,017	151,361	(9,344)
Bonds and notes payable	120,900	135,404	(14,504)
Net OPEB liability	3,982	3,942	40
Compensated absences	9,536	8,648	888
Net pension liability	7,599	3,367	4,232

Analysis: The decrease in Bonds payable is due to scheduled payments and bond redemptions for the GJGNY program. The change in compensated absences is primarily due to an increase in the retiree sick leave portion of the liability due to an increase in both the number of retirees and an increase in the average value of their sick leave credits. The increases in Net OPEB liability and Net pension liability reflect the change in the acturially determined liability amounts.

Total liabilities 352,785 365,605 (12,820)

Deferred inflows of resources 4,492 12,893 (8,401)

Analysis: Reflects amortization of actuarially-determined deferred inflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices), and addition of new balances determined from the actuarial updates to the new measurement date.

Net position:

Net investment in capital assets	14,234	15,917	(1,683)
Restricted for specific programs	1,058,856	977,625	81,231
Unrestricted	6,041	4,110	1,931
Total net position	1,079,131	997,652	81,479

Analysis: Decrease in Net investment in capital assets primarily reflects the net effect of fixed asset purchases, less depreciation on current assets. Increase in Net position Restricted for specific programs is principally due to revenues exceeding expenses in the NYSUN, CEF & RGGI funds, plus an increase in NY Green Bank's capitalization from additional utility ratepayer funding, and from their FY 19-20 operating income. These Restricted net position increases were offset in part by CES fund expenses exceeding revenues. The increase in Unrestricted net position is primarily due to investment earnings as a result of the pooling of investments in the Multifunding Source Cash Management money market account.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousand	s)				
	Actual	Actual		Over (under) Budget		
	March 31, 2020	<u>Budget</u>		%		
REVENUES						
State appropriations:						
Energy & Environmental Programs	4,030	3,073	957	31.1%		
Brookhaven National Lab-X-ray Beam	8,607	7,971	636	8.0%		
Energy Analysis (Low Level Radioactive Waste)	150	150	-	0.0%		
West Valley	15,043	17,700	(2,657)	-15.0%		
Cleaner Greener Communities capital projects	1,602	5,679	(4,077)	- <u>71.8</u> %		
Total State appropriations	29,432	34,573	(5,141)	-14.9%		

Analysis: Revenues for Cleaner Greener Communities projects and West Valley capital appropriations were less than budgeted due to lower than anticipated program expenditures incurred during the year. The preceding was offset in part by higher than anticipated expenditures under Energy & Environmental Programs and the Brookhaven National Lab-X-ray Beam program.

Utility surcharge assessments

568,910

739.054

(170,144)

-23.0%

Analysis: Variance is primarily due to lower than expected CEF expenditures and an overstimate of NYSun expenditures in the FY19-20 Budget. This was partially offset by an unanticipated increase in program expenditures under the T&MD and SBC III programs pursuant to a PSC Order to transfer uncommitted funds to several utilities for the Electric Vehicle Direct Current Fast Charging initiative, as well as Green Bank liquidity requirements funded from utility receipts, whereas the budget did not anticipate any capital funding.

Renewable energy credit proceeds

5,613

5,260

3

6.7%

Analysis: Proceeds from the sale of quarterly renewable energy credits where slightly less than what was anticipated in the budget.

Zero-emission credit assessments

528,346

541,036

2,690)

2.3%

Analysis: Revenues are lower than anticipated primarily due to lower production by the nuclear generating facilities, which requires that NYSERDA make a pro-rata refund to the LSE's (in aggregate), and from uncollectible load not included in the budget.

Allowance auction proceeds

112,024

108,598

3,426

3 2%

Analysis: Average clearing prices for auctions were slightly higher than what was anticipated in the budget.

Third party reimbursements

36,896

44,051

(7.155)

(4,430)

(316)

-16.2%

Analysis: Principally due to Con Edison Indian Point Energy Center Reliability Contingency program revenues (based on expenditures) being less than anticipated in the budget, and because revenues anticipated pursuant to an expected MOU with National Fuel Gas for FY19-20 were not received. These decreases were partially offset by higher than expected revenues for the Clean Transportation Volkswagen Settlement and the Low Income Home Energy Assistance program.

Federal grants

2,910

7,340

-60

-60.4%

Analysis: Principally due to actual expenses (accrued as revenues on a cost reimbursement basis) under a Congestion Mitigation & Air Quality grant and a DOE Thermal Data Clearinghouse grant being less than anticipated in the budget.

QECB interest subsidy

402

399

0.8%

Analysis: Minor variance.

Project repayments

68

384

-82.3%

Analysis: Actual revenues for the year were much lower than historical levels used to establish the budget.

Rentals from leases

1,026

982

4.5%

Analysis: Minor variance is a combination of unanticipated cell tower lease income from West Valley, and lower STEP lease income as a result of pass-through cost expectations versus budget.

Fees and other income

6,125

3,526

73.7%

Analysis: Variance is primarily due to unanticipated CES program alternative compliance payments received from certain load serving entities to meet their REC obligations, as well as CES bid deposit fees not included in the FY 2019-20 budget.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousand	's)		
	Actual		Over (under) Budget	
	March 31, 2020	Budget	\$	%
Interest on loans				
GJGNY	7,739	8,053	(314)	-3.9%
NY Green Bank	18,612	18,741	(129)	- <u>0.7</u> %
Total Interest on Loans	26,351	26,794	(443)	-1.7%
Analysis: Insignificant variances as a percent of budget.				
Investment income	18.338	6.333	12.005	189.6%

Analysis: Variance is principally due to higher than expected yields, as well as higher average invested balances than anticipated.

TOTAL REVENUES	1,336,441	1,518,330	(181,889)	-12.0%
<u>EXPENSES</u>				
Salaries	39,683	39,488	195	0.5%
Fringe benefits	17,125	16,484	641	<u>3.9</u> %
Salaries and benefits	56,808	55,972	836	1.5%

Analysis: Fluctuation in salary expense versus budget is principally due to payment of a 2% general salary increase (as adopted by NYS for M/C employees), which was not included in the Budget since it had not yet been authorized. The fringe benefits variance is principally due to an increase in the retiree sick leave portion of compensated absences expense. OPEB expense was also greater than expected, but was offset by lower than anticipated costs for pension and heath insurance than were assumed in the budget.

Program expenditures:				
T&MD (SBCIV)	29,216	16,960	12,256	72.3%
Energy Analysis	4,856	1,500	3,356	223.7%
NY Green Bank	214	520	(306)	-58.8%
West Valley	14,126	15,976	(1,850)	-11.6%
CES	545,917	550,591	(4,674)	-0.8%
RPS	58,213	65,492	(7,279)	-11.1%
RGGI	69,865	100,208	(30,343)	-30.3%
CEF	215,211	270,496	(55,285)	-20.4%
Other (individually less than 5% of the total)	114,924	192,140	(77,216)	-40.2%
NY-Sun	111,779	244,532	(132,753)	- <u>54.3</u> %
	1,164,321	1,458,415	(294,094)	-20.2%

Analysis: The NY-Sun variance is principally due to an overstatement of budgeted expenses for project completions and incentive dollars anticipated to be paid. Progress towards meeting NY-Sun goals are not affected by the variance. The Other variance is principally due to expenses being lower than anticipated under the EEPS, Energy Storage and Indian Point Energy Center Reliability Contingency programs. The EEPS program was closed during the fiscal year, all unspent funds will be reported to DPS for future ratepayer benefit. The variance in CEF is generally due to the timing of program commencement, construction delays, and slower than anticipated market participation resulting in lower spending than budgeted. The RGGI variance is due to the timing of Cleaner Greener Community projects moving slower than anticipated, from lower Electric Vehicle participation rates than originally anticipated, from contractor delays, and timing of anticipated expenditures.

Investment related expenses	399	560	(161)	-28.8%

Analysis: Variance primarily due to lower transaction activity than anticipated.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

	(Amounts in Thousands) Actual		Over (under) Budget	
	March 31, 2020	<u>Budget</u>	<u>\$</u>	<u>%</u>
Program operating costs:				
Office Supplies, Equipment Rental, and Other	292	233	59	25.3%
Rent, Maintenance & Repairs, Utilities, Insurance	403	365	38	10.4%
Temporary Staffing, Outside Technical Reviewer	443	477	(34)	-7.1%
Training, Recruitment & Relocation	-	56	(56)	-100.0%
Computer Services and Software	313	382	(69)	-18.1%
Travel and Outreach Costs	440	588	(148)	-25.2%
Professional & Consulting Services	1,210	2,412	(1,202)	<u>-49.8%</u>
	3,101	4,513	(1,412)	-31.3%

Analysis: Variance in the Office Supplies line is primarily due to the purchase of several publications during the year that were not anticipated for in the budget. The variance in Professional & Consulting Services was principally due to NY Green Bank financial, technical consulting, legal, and fund administration costs being lower than were anticipated in the budget. All other cost categories were less than anticipated in the budget.

General and administrative expenses:				
Rent, Maintenance & Repairs, Utilities, Insurance	3,196	2,822	374	13.3%
Professional & Consulting Services	1,751	1,640	111	6.8%
Travel and Outreach Costs Office Supplies, Equipment Rental, and Other	263 202	268 216	(5) (14)	-1.9% -6.5%
Computer Services and Software	1,529	1,629	(100)	-6.1%
Temporary Staffing, Outside Technical Reviewer	2,478	2,645	(167)	-6.3%
Training, Recruitment & Relocation	110	297	(187)	- <u>63.0</u> %
	9.529	9 517	12	0.1%

Analysis: Variance in Rent and Maintenance & Repairs is due to the cost of additional office space being higher than anticipated, the timing of receipt and payment of facility cleaning costs as well as copier maintenance costs being higher that what was assumed in the budget. Professional and Consulting fees were incurred for projects not anticipated in the budget. All other cost categories have minor variances or were less than anticipated.

2,976	3,137	(161)	-5.1%
lanned capital asset additio	ns as compared to	budget expec	tations.
13,593	13,593	-	0.0%
4,235	3,729	506	13.6%
	olanned capital asset addition	olanned capital asset additions as compared to	olanned capital asset additions as compared to budget expect 13,593 -

Analysis: Variance over budget is primarily due to the Series 2019 Residential Solar and Energy Efficiency Financing Green Revenue bonds issuance which was not anticipated in the budget, but was offset in part by slightly lower than expected interest expense for certain of the other GJGNY bond issues due to redemptions from loan repayment receipts exceeding expectations.

TOTAL EXPENSES	1,254,962	1,549,436	(294,474)	-19.0%
Capital asset purchases:				
System development costs	795	1,000	(205)	-20.5%
Information technology upgrades	293	672	(379)	-56.4%
Buildings	=	628	(628)	-100.0%
Furniture, fixtures and equipment	185	76	109	143.4%
Leasehold Improvements	20	-	20	100.0%
Total Other uses	1,293	2,376	(1,083)	-45.6%

Analysis: Variances are generally related to timing, or capital projects budgeted but not proceeding.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (A Component Unit of the State of New York)

FINANCIAL STATEMENTS

March 31, 2020

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March 31, 2020

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RESPONSIBILITY FOR FINANCIAL REPORTING

DRAFT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the New York State Energy Research and Development Authority (the Authority), as well as all other information contained in the Authority's Annual Report. The financial statements of the Authority for the fiscal year ended March 31, 2020 were prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP). The Board of the Authority (the Board) adopted these financial statements and the Annual Report at a meeting on June 23, 2020.

The Authority maintains a system of internal controls, the objectives of which are to provide reasonable assurance as to the proper authorization and recording of transactions, the safeguarding of Authority assets, the compliance with applicable laws and regulations, and the reliability of financial records for preparing financial statements. The internal control structure is subject to periodic review by management, internal audit staff and the independent auditors. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such system should not exceed the benefits derived.

The Authority's financial statements have been audited by KPMG LLP, independent auditors appointed by the Members of the Authority. Management has made available to the independent auditors all the financial records and related data of the Authority, as well as provided access to all the minutes of the meetings of the Board and its standing committees. The independent auditors periodically meet directly with the Audit and Finance Committee of the Board, which is comprised of Members who are not employees of the Authority.

The independent audit included obtaining an understanding of the internal control structure, tests of accounting records, and other procedures which the independent auditors considered necessary in order to express opinions as to the fairness of the presentation of the financial statements. No material weaknesses in internal control or any condition of non-compliance with applicable laws, regulations or policy were noted by the independent auditors through the execution of their audit procedures. The unmodified independent auditors' report attests that the financial statements are presented fairly, in all material respects, in accordance with U.S. GAAP.

DRAFT

Alicia Barton

President and Chief Executive Officer

Jeffrey J. Pitkin

Treasurer and Chief Financial Officer



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report

Members of the Authority
New York State Energy Research and Development Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy Research and Development Authority (a component unit of the State of New York) (the Authority) as of and for the year ended March 31, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy Research and Development Authority as of March 31, 2020, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.

Report on Summarized Comparative Information

We have previously audited the 2019 financial statements of the New York State Energy Research and Development Authority, and we expressed unmodified audit opinions on those audited financial statements in our report dated June 27, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended March 31, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis and the required supplementary information on pages __ to __ be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The Responsibility for Financial Reporting section is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June _____, 2020 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

KPMG LLP

Albany, New York June ____, 2020

New York State Energy Research and Development Authority (A Component Unit of the State of New York) Management's Discussion and Analysis For the Year Ended March 31, 2020 Unaudited

The following Management's Discussion and Analysis (MD&A) of New York State Energy Research and Development Authority's (NYSERDA) financial performance provides an overview of NYSERDA's financial activities for the fiscal year ended March 31, 2020. The information contained in the MD&A should be considered in conjunction with the information presented as part of NYSERDA's basic financial statements. Following this MD&A are the basic financial statements of NYSERDA with the notes thereto that are essential to a full understanding of the data contained in the financial statements. NYSERDA's basic financial statements have the following components: (1) government-wide financial statements; (2) governmental fund financial statements; (3) proprietary fund financial statements; (4) fiduciary fund financial statements; and (5) notes to the basic financial statements.

The government-wide financial statements are designed to provide readers with a broad overview of NYSERDA's finances in a manner similar to a private-sector business. The *Statement of Net Position* presents information on all of NYSERDA's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, and the difference between these is reported as net position. The *Statement of Activities* presents information showing how NYSERDA's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in the Statement for some items that will result in cash flows in future fiscal periods, or which already resulted in cash flows in a prior fiscal period. The government-wide financial statements present information about NYSERDA as a whole. All activities of NYSERDA are considered to be governmental activities, with the exception of the activities of NY Green Bank, which are considered business-type activities.

Governmental fund financial statements focus on near-term inflows and outflows of resources, as well as on balances of resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements. Because the focus of governmental funds is narrower than that of the government-wide statements, it is useful to compare the information presented for governmental activities in the government-wide financial statements. By doing so, the reader may better understand the long-term impact of the government's near-term financing decisions. The governmental funds *Balance Sheet* and the governmental funds *Statement of Revenues, Expenditures, and Changes in Fund Balances* provide a reconciliation to facilitate the comparison between governmental funds and governmental activities.

Proprietary fund financial statements provide information for business-type activities where NYSERDA charges fees to customers to recover costs of providing services. NY Green Bank is reported as a proprietary fund. The proprietary fund financial statements include a *Statement of Net Position*, a *Statement of Revenues*, *Expenses and Charges in Fund Net Position*, and a *Statement of Cash Flows*.

The fiduciary fund financial statements report assets held by NYSERDA in a fiduciary capacity for others and consist of a *Statement of Fiduciary Net Position* and a *Statement of Changes in Fiduciary Net Position*. These funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support NYSERDA's programs.

The notes to the basic financial statements provide additional information that is essential for a full understanding of the information provided in the government-wide, governmental fund, proprietary fund, and fiduciary fund financial statements.

CONDENSED FINANCIAL INFORMATION

The following condensed financial information is presented from NYSERDA's government-wide financial statements:

(Amounts in thousands)

Summary of Net Position	Governmental <u>Activities</u>	Business-type <u>Activities</u>	Total March 31, <u>2020</u>	Total March 31, <u>2019</u>	% Change 2020-2019
Cash and investments	\$567,822	164,361	732,183	807,831	-9.4%
Capital assets	14,235	-	14,235	15,918	-10.6%
Loans and financing receivables, net	199,773	441,559	641,332	498,362	28.7%
Other assets	33,117	3,207	36,324	36,976	-1.8%
Total assets	814,947	609,127	1,424,074	1,359,087	4.8%
Deferred outflows of resources	10,807	1,527	12,334	17,063	-27.7%
Other liabilities	208,407	2,361	210,768	214,244	-1.6%
Non-current liabilities	140,604	1,413	142,017	151,361	-6.2%
Total liabilities	349,011	3,774	352,785	365,605	-3.5%
Deferred inflows of resources	4,006	486	4,492	12,893	-65.2%
Net Position:					
Net investment in capital assets	14,234	-	14,234	15,917	-10.6%
Restricted	452,462	606,394	1,058,856	977,625	8.3%
Unrestricted	6,041	-	6,041	4,110	47.0%
Total net position	\$472,737	606,394	1,079,131	997,652	8.2%

Total assets increased \$65.0 million (4.8%). Cash and investments decreased \$75.7 million (9.4%) primarily due to Loans and financing receivables deployed by NY Green Bank, offset in part by an increase in NY-Sun program receipts in excess of expenses. Loans and financing receivables increased \$143.0 million (28.7%) primarily due to an increase in NY Green Bank Loans and financing receivables outstanding. Other assets decreased \$0.7 million (-1.8%) primarily due to a decrease in the value of the Strategic Gasoline Reserves as a result of lower crude and spot prices at year end, offset in part by an increase in Zero-Emissions Credit (ZEC) program payments owed by load serving entities.

Deferred outflows of resources decreased by \$4.7 million (27.7%) due to a decrease in the actuarially-determined deferred outflows related to pension and other post-employment benefits (OPEB), and the net change in contributions subsequent to measurement date, principally for OPEB, where the prior year's now-amortized contribution had been greater than the Annual Required Contribution due to the decision to fund the cumulative effect of adoption of GASB No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

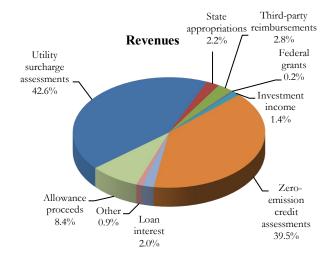
Total liabilities decreased \$12.8 million (-3.5%). Non-current liabilities decreased \$9.3 million (-6.2%) primarily due to a decrease in Bonds and notes payable as a result of scheduled principal payments and bond redemptions, offset in part by an increase in the net pension liability. Other liabilities decreased by \$3.5 million (-1.6%); primarily a result of a decrease in accounts payable related to the ZEC program, offset in part by an increase in bid deposits received in connection with the Renewable Energy Credit (REC) program.

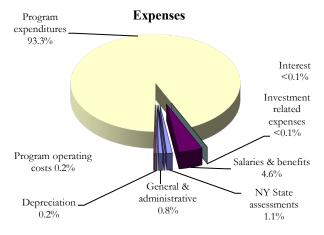
Deferred inflows of resources decreased by \$8.4 million (-65.2%) due to a decrease in the actuarially-determined deferred inflows related to pension and OPEB.

Net position increased \$81.5 million (8.2%) principally due to revenues exceeding expenditures in the RGGI program, and an increase in NY Green Bank's funded capitalization and from its operating income exceeding expenses.

(Amounts in thousands)

	·	•	Total	Total	
	Governmental	Business-type	March 31,	March 31,	% Change
Summary of Changes in Net Position	<u>Activities</u>	<u>Activities</u>	<u>2020</u>	<u>2019</u>	2020-2019
Revenues:					
State appropriations	\$29,432	-	29,432	25,190	16.8%
Utility surcharge assessments	548,232	20,678	568,910	556,603	2.2%
Renewable energy credit assessments	5,613	-	5,613	1,138	393.2%
Zero-emission credit assessments	528,346	-	528,346	451,560	17.0%
Allowance proceeds	112,024	-	112,024	100,839	11.1%
Third-party reimbursements	36,896	-	36,896	38,881	-5.1%
Federal grants	2,910	-	2,910	16,351	-82.2%
Interest subsidy	402	-	402	436	-7.8%
Loans and financing receivables interest	7,739	18,612	26,351	22,427	17.5%
Investment income	12,114	6,224	18,338	15,792	16.1%
Other program revenue	3,872	3,347	7,219	8,300	-13.0%
Total revenues	1,287,580	48,861	1,336,441	1,237,517	8.0%
Expenses:					
Salaries and benefits	49,324	7,484	56,808	52,041	9.2%
Program expenditures	1,164,107	214	1,164,321	1,020,270	14.1%
Investment related expenses	-	399	399	456	-12.5%
Program operating costs	1,824	1,277	3,101	2,733	13.5%
General & administrative costs	8,282	1,247	9,529	8,957	6.4%
Depreciation	2,787	189	2,976	2,863	3.9%
NY State assessments	13,481	112	13,593	13,593	0.0%
Interest	4,235	-	4,235	4,146	2.1%
Total expenses	1,244,040	10,922	1,254,962	1,105,059	13.6%
Change in net position	43,540	37,939	81,479	132,458	-38.5%
Net position, beginning of year	429,197	568,455	997,652	868,086	n/a
Cumulative effect of change in accounting principle (GASB 75)	-	-	-	(2,892)	n/a
Net position, end of year	\$472,737	606,394	1,079,131	997,652	8.2%





Total revenue increased \$98.9 million (8.0%). State appropriation revenue increased by \$4.2 million (16.8%) due to an increase in reimbursable expenditures across various program initiatives. Utility surcharge assessments revenue increased by \$12.3 million (2.2%) principally as a result of billings to utilities for reimbursable expenditures and required working capital balances, pursuant to the Bill-As-You-Go funding mechanism. REC proceeds increased by \$4.5 million (393.2%) due to an increase in proceeds from the sale of RECs. ZEC proceeds increased by \$76.8 million (17.0%) consistent with Public Service Commission ordered assessments. Allowance proceeds increased by \$11.2 million (11.1%) due to the average quarterly auction sale prices being higher than in the prior fiscal year. Third-party reimbursements decreased by \$2.0 million (-5.1%), principally due to lower revenues in the Con Edison Indian Point Energy Center Reliability Contingency (IPEC) and National Fuel Gas EmPower programs, offset in part by an increase in reimbursable funding from the Clean Transportation Volkswagen Settlement Agreement and the Clean Energy Fund (CEF) program's cofunding revenues. Federal grants revenue decreased \$13.4 million (-82.2%) primarily due to a reduction in reimbursable expenses for several Federal grants. Loans and financing receivables interest income increased \$3.9 million (17.5%) principally as a result of additional NY Green Bank loans outstanding. Total investment income increased \$2.5 million (16.1%) primarily due to higher yields.

Total expenses increased \$149.9 million (13.6%). Program expenditures increased \$144.1 million (14.1%) primarily due to higher expenditures in the Clean Energy Standard (CES), CEF and NY-Sun programs, offset in part by lower expenditures in the Regional Greenhouse Gas Initiative (RGGI) program. Salaries and benefits expense increased \$4.8 million (9.2%) primarily due to approved cost-of-living general salary increases, a slight increase in staffing levels, increases in pension and other post-employment actuarially determined expense, and an increase in compensated absences costs. Program operating and General and administrative expenses increased by \$0.9M (8.0%) based on additional New York City office space and from a slight increase in spending levels as compared to the prior year.

FINANCIAL ANALYSIS OF FUNDS

Total fund balances for the governmental funds increased from \$561.3 million to \$593.4 million as further described below:

- The CEF fund balance increased from \$61.9 million to \$79.9 million principally due to an increase in the
 estimated two-month working capital to be maintained pursuant to the BAYG funding mechanism, as the
 rate of expenditure increased.
- The CES fund balance decreased from (\$2.7) million to (\$8.0) million primarily due to ZEC expenditures made to the nuclear generation facilities exceeding assessments revenue.
- The RGGI fund balance increased from \$121.7 million to \$134.4 million principally as a result of revenues exceeding expenditures and transfers.
- The GJGNY fund balance decreased from \$261.6 million to \$259.2 million principally due to the timing of bond financing activity; debt service payments were made on pre-existing bonds payable, however no new bond proceeds were received in the current fiscal year.
- The aggregated Other funds fund balance increased from \$118.8 million to \$128.0 million principally due
 to revenues received in advance of expenditures for the Clean Transportation Volkswagen Settlement
 Agreement.

Total net position for the proprietary fund was \$606.4 million at March 31, 2020, as described below:

NY Green Bank's net position increased by \$37.9 million (6.7%) primarily due to additional capitalization
of \$20.7 million paid by electric utilities pursuant to BAYG, as well as operating revenues exceeding
operating expenses by \$11.3 million. Operating revenues increased by \$3.1 million primarily due to an
increase in interest earned on Loans and financing receivables. Operating expenses increased by \$1.7
million primarily due to an increase in staffing levels and associated fringe benefit costs, as well as
payment of general salary increases.

CAPITAL ASSET AND DEBT ADMINISTRATION

NYSERDA maintains land, buildings, and furniture and equipment in various locations for its corporate purposes. Total capital assets as of March 31, 2020 were \$14.2 million, net of accumulated depreciation. Capital asset additions for the fiscal year ended March 31, 2020 were \$1.3 million, primarily for information technology systems development costs.

Total non-current liabilities decreased from \$151.4 million to \$142.0 million primarily due to debt service payments made on bonds payable, partially offset by an increase in the net pension liability.

NYSERDA also issues tax-exempt bonds on a conduit basis on behalf of utility companies to finance certain eligible projects. As of March 31, 2020, approximately \$1.5 billion of bonds are outstanding. These bonds are non-recourse bonds and, as such, are not included in NYSERDA's financial statements.

ECONOMIC FACTORS

On behalf of the State, NYSERDA manages the Western New York Nuclear Service Center in West Valley, New York, the site of a former plant for reprocessing used nuclear fuel. Depending upon the clean-up options selected and agreement on cost sharing with the federal government, these costs could be substantial. It is anticipated that New York State's share of future costs for the West Valley site will be provided by New York State to NYSERDA and will not impact NYSERDA's current funding. As permitted by Governmental GASB Statement No. 49, Accounting and Financial Reporting for Pollution Remediation Obligations, no liability has been recorded in NYSERDA's financial statements for this contingency due to the expected recoveries from New York State.

NYSERDA's programs are impacted by a number of factors including, but not limited to, general economic conditions, energy prices, energy system reliability, and energy technology advancements. Revenues in the RGGI program in particular can be highly sensitive to some of the aforementioned factors.

COVID-19 IMPACTS

In response to the COVID-19 health crisis, NYSERDA moved its workforce to work remotely effective March 16, 2020 and was able to maintain effective communications and carry out its activities without any disruption through March 31, 2020. NYSERDA's program activities are largely carried out through agreements with more than 1,900 clean energy companies, consultants, and contactors, many of whom were impacted by the "New York State on Pause" Executive Order which directed non-essential businesses in New York State to close in-office personnel functions effective March 22. These organizations were eligible to resume operations after March 31, 2020 in accordance with Federal, State and local government guidelines. Given the timing of the suspension of programmatic activities, this did not materially impact programmatic activities and accomplishments for the fiscal year ending March 31, 2020. The COVID-19 health crisis had limited impacts on certain financial performance for the fiscal year ended March 31, 2020, but has not had a material impact on the financial condition of NYSERDA as of March 31, 2020.

CONTACT FOR NYSERDA'S FINANCIAL MANAGEMENT

This report is designed to provide a general overview of the finances of NYSERDA for interested parties. Questions concerning any information within this report or requests for additional information should be addressed to Jeffrey J. Pitkin, Treasurer and Chief Financial Officer, NYSERDA, 17 Columbia Circle, Albany, NY 12203.

(A Component Unit of the State of New York)

Statement of Net Position

March 31, 2020

(with summarized comparative totals for March 31, 2019)

(Amounts in thousands)

(Amou	ilis ili tilousalius)			
	_		Total	Total
	Governmental	Business-type	March 31,	March 31,
	Activities	Activities	2020	2019
ASSETS:				
Current assets:				
Cash and investments	\$567,822	164,361	732,183	703,158
New York State receivable	8,451	-	8,451	11,377
Third-party billings receivable	14,424	35	14,459	5,820
Interest receivable on loans	574	3,172	3,746	2,830
Loans and financing receivables due within one year, net	16,601	55,823	72,424	49,371
Prepaid expense	2,706	-	2,706	2,713
Other assets	6,962		6,962	14,236
Total current assets	617,540	223,391	840,931	789,505
Non-current assets:				
Investments	-	-	-	104,673
Loans and financing receivables- long-term, net	183,172	385,736	568,908	448,991
Capital assets, net of depreciation	14,235	-	14,235	15,918
Total non-current assets	197,407	385,736	583,143	569,582
Total assets	814,947	609,127	1,424,074	1,359,087
DEFERRED OUTFLOWS OF RESOURCES:	10,807	1,527	12,334	17,063
LIABILITIES:				
Current liabilities:				
Non-current liabilities due within one year	13,275	-	13,275	10,286
Accounts payable	7,543	29	7,572	8,332
Accrued liabilities	174,320	227	174,547	179,144
Unearned revenue	3,251	-	3,251	3,522
Deposits	23,293	2,105	25,398	23,246
Total current liabilities	221,682	2,361	224,043	224,530
Non-current liabilities:				· · · · · · · · · · · · · · · · · · ·
Bonds and notes payable	111,408	-	111,408	128,639
Other non-current liabilities	15,921	1,413	17,334	12,436
Total non-current liabilities	127,329	1,413	128,742	141,075
Total liabilities	349,011	3,774	352,785	365,605
				,
DEFERRED INFLOWS OF RESOURCES:	4,006	486	4,492	12,893
NET POSITION:				
Net investment in capital assets	14,234	-	14,234	15,917
Restricted for specific programs	452,462	606,394	1,058,856	977,625
Unrestricted	6,041	-	6,041	4,110
Total net position	\$472,737	606,394	1,079,131	997,652
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(A Component Unit of the State of New York)

Statement of Activities

For the year ended March 31, 2020

For the year ended March 51, 2020											
(with summarized comparative totals for M	arch 31, 2019)							Duainese time	Total	Total
(Amounts in thousands)				Governmenta	al Activities				Business-type Activities	March 31, 2020	March 31, 2019
-			Func	tions/Progra					Activities	2020	2019
-			T UITC	nons/i rograi	Energy	West			NY Green		
	CEF	NY-Sun	CES	RGGI	Analysis	<u>Valley</u>	Other	Total	Bank		
EXPENSES:	<u>92.</u>	111 0411	<u>020</u>	1.00.	<u>/ 11 (01 / 01 0</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
Salaries and benefits	\$22,677	2,453	3,404	2,900	3,728	2,608	11,554	49,324	7,484	56,808	52,041
Program expenditures	215,211	111,779	545,917	69,865	4,856	14,126	202,353	1,164,107	214	1,164,321	1,020,270
Investment related expenses	· -	, -	· -	· -	_	· -	· -	-	399	399	456
Program operating costs	362	72	59	26	555	128	622	1,824	1,277	3,101	2,733
General & administrative expenses	3,800	413	572	485	621	442	1,949	8,282	1,247	9,529	8,957
Depreciation	1,309	363	260	73	94	80	608	2,787	189	2,976	2,863
NY State assessments	2,283	1,172	5,714	789	102	181	3,240	13,481	112	13,593	13,593
Interest	_	-	· -	-	-	_	4,235	4,235	-	4,235	4,146
Total expenses	245,642	116,252	555,926	74,138	9,956	17,565	224,561	1,244,040	10,922	1,254,962	1,105,059
REVENUES:											
Operating grants and contributions											
State appropriations	-	-	-	1,602	150	15,043	12,637	29,432	-	29,432	25,190
Utility surcharge assessments	226,809	126,197	-	-	7,551	-	187,675	548,232	20,678	568,910	556,603
Renewable energy credit proceeds	-	-	5,613	-	-	-	-	5,613	-	5,613	1,138
Zero-emission credit assessments	-	-	528,346	-	-	-	-	528,346	-	528,346	451,560
Allowance auction proceeds	-	-	-	112,024	-	-	-	112,024	-	112,024	100,839
Third-party reimbursements	20,212	-	34	-	-	2,515	14,135	36,896	-	36,896	38,881
Federal grants	-	-	-	-	2,538	-	372	2,910	-	2,910	16,351
Interest subsidy	-	-	-	-	-	-	402	402	-	402	436
Charges for services											
Project repayments	-	-	-	-	-	-	68	68	-	68	616
Rentals from leases	-	-	-	-	-	7	1,019	1,026	-	1,026	978
Fees and other income	-	-	2,488	-	-	-	290	2,778	3,347	6,125	6,706
Loans and financing receivables interest	_	_	_	_	_	_	7,739	7,739	18,612	26,351	22,427
Other											
Investment income	1,594	1,197	2,422	2,931	-	-	3,970	12,114	6,224	18,338	15,792
Total revenues	248,615	127,394	538,903	116,557	10,239	17,565	228,307	1,287,580	48,861	1,336,441	1,237,517
Increase (decrease) in net position											
before transfers	2,973	11,142	(17,023)	42,419	283	-	3,746	43,540	37,939	81,479	132,458
Transfers	13,539	11,658	11,395	(29,941)	_	_	(6,651)	_	_	_	_
Change in net position	16,512	22,800	(5,628)	12,478	283	-	(2,905)	43,540	37,939	81,479	132,458
Net position, beginning of period	63,173	14,274	(1,603)	121,645	2,911	_	228,797	429,197	568,455	997,652	868,086
Cumulative effect of change in accounting principle (GASB 75)	-	-	-	-	-	_	-, -:-				(2,892)
Net position, end of period	\$79,685	37,074	(7,231)	134,123	3,194	-	225,892	472,737	606,394	1,079,131	997,652
1	7,- 30	,	(' , ' /	,	-,		,	,		.,	

(A Component Unit of the State of New York)

Balance Sheet - Governmental Funds

March 31, 2020

(with summarized comparative totals for March 31, 2019) (Amounts in thousands)

Major Funds							
	<u>CEF</u>	<u>CES</u>	<u>RGGI</u>	<u>GJGNY</u>	Other <u>Funds</u>	Total March 31, <u>2020</u>	Total March 31, <u>2019</u>
ASSETS:							
Cash and investments	\$91,036	129,341	135,851	56,994	154,600	567,822	538,457
Receivables:							
New York State	1,087	-	1,167	-	6,197	8,451	11,377
Third-party billings	2,306	8,398	-	3,099	621	14,424	5,646
Interest on loans	-	-	-	574	-	574	566
Loans	-	-	-	199,773	-	199,773	198,932
Prepaid expense	1,000	-	-	-	1,706	2,706	2,713
Other assets	-	-	-	-	6,962	6,962	14,236
Due from other funds	2,266	-	196	1,275	-	3,737	2,528
Total assets	\$97,695	137,739	137,214	261,715	170,086	804,449	774,455
LIABILITIES AND FUND BALANCES: Liabilities:							
Accounts payable	\$1,771	33	1,139	1,196	3,404	7,543	8,332
Accrued liabilities	14,193	122,380	1,551	1,239	33,843	173,206	178,473
Unearned revenue	1,827	-	205	79	1,141	3,252	3,522
Deposits	-	22,782	-	-	511	23,293	21,423
Due to other funds	-	568	-	-	3,221	3,789	1,445
Total liabilities	17,791	145,763	2,895	2,514	42,120	211,083	213,195
Fund Balances:							
Nonspendable-not in spendable form	1,000	-	-	-	1,706	2,706	2,713
Restricted	78,904	-	134,319	259,201	121,928	594,352	558,855
Unassigned	-	(8,024)	-	-	4,332	(3,692)	(308)
Total fund balances	79,904	(8,024)	134,319	259,201	127,966	593,366	561,260
Total liabilities and fund balances	\$97,695	137,739	137,214	261,715	170,086	804,449	774,455
Following is a reconciliation of amounts reported differently in the Statement of Net Position: Total fund balances for governmental funds \$593,366 Capital assets used in governmental activities are not current financial resources and							561,260
therefore are not reported in the funds Long-term liabilities are not due and payable in the current period						14,398	15,987
and therefore are not reported in the funds						(140,714)	(150,867)
Pension & OPEB related deferred outflo	ws and inflows	are not reporte	ed in goverme	ntal funds		6,801	3,744
Accrued interest expense						(1,114)	(927)
Net position of governmental activities					_	\$472,737	429,197

(A Component Unit of the State of New York)

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds For the year ended March 31, 2020

(with summarized comparative totals for March 31, 2019) (Amounts in thousands)

					Other	Total March 31,	Total March 31,
	<u>CEF</u>	CES	<u>RGGI</u>	GJGNY	<u>Funds</u>	2020	<u>2019</u>
REVENUES:							
State appropriations	\$ -	-	1,602	-	27,830	29,432	25,190
Utility surcharge assessments	226,803	-	-	-	321,429	548,232	436,721
Renewable energy credit proceeds	-	5,613	-	-	-	5,613	1,138
Zero-emission credit assessments	-	528,346	-	-	-	528,346	451,560
Allowance auction proceeds	-	-	112,024	-	-	112,024	100,839
Third-party reimbursements	20,212	34	-	-	16,650	36,896	38,881
Federal grants	-	-	-	-	2,910	2,910	16,351
Interest subsidy	-	-	-	402	-	402	436
Project repayments	-	-	-	-	68	68	616
Rentals from leases	-	-	-	-	1,026	1,026	978
Fees and other income	-	2,488	-	59	231	2,778	2,759
Loan interest	-	-	-	7,739	-	7,739	7,562
Investment income	1,594	2,422	2,931	1,087	4,080	12,114	8,569
Total revenues	248,609	538,903	116,557	9,287	374,224	1,287,580	1,091,600
EXPENDITURES:							
Current expenditures	243,738	555,576	73,988	5,325	356,928	1,235,555	1,089,182
Debt service:	210,700	000,070	70,000	0,020	000,020	1,200,000	1,000,102
Principal	_	_	_	14,505	_	14,505	13,654
Interest	_	_	_	4,049	_	4,049	3,837
Bond issuance costs	_	_	_	167	_	167	862
Capital outlay	404	43	37	9	705	1,198	1,339
Total expenditures	244,142	555,619	74,025	24,055	357,633	1,255,474	1,108,874
Total experiultures	244,142	333,019	74,023	24,000	337,033	1,233,474	1,100,074
OTHER FINANCING SOURCES (USES):							
Residential Solar Loan revenue bonds issued	-	-	-	-	-	-	-
Transfers in	20,575	13,135	-	12,400	8,776	54,886	140,212
Transfers out	(7,036)	(1,740)	(29,941)	-	(16,169)	(54,886)	(87,286)
Net other financing sources (uses)	13,539	11,395	(29,941)	12,400	(7,393)		68,436
Net change in fund balances	18,006	(5,321)	12,591	(2,368)	9,198	32,106	51,162
Fund balances, beginning of year	61,898	(2,703)	121,728	261,569	118,768	561,260	510,098
Fund balances, end of year	\$79,904	(8,024)	134,319	259,201	127,966	593,366	561,260
Following is a reconciliation of amounts reported diff	=	tement of Activ	vities:				
Net change in fund balances for govenmental fund						\$32,106	51,162
Capitalization and depreciation of capital outlays, r						(1,589)	(1,339)
Expenses for compensated absences in the Stater	ment of Activities	do not require	the use				
of current financial resources and therefore are	not reported as e	xpenditures in	governmental	funds		(774)	(207)
Expenses for accrued bond interest in the Stateme	ent of Activities do	not require th	ne use				
of current financial resources and therefore are not reported as expenditures in governmental funds							(309)
Pension contributions are not an expense in the Statement of Activities, and GASB 68							
pension expense is not a use of current financial resources in the governmental funds							167
OPEB contributions are not an expense in the Statement of Activities, and GASB 75 OPEB expense is not a use of current financial resources in the governmental funds							2,536
Bond proceeds are a current financial resource in the governmental funds but are not							
reported as revenues in the Statement of Activit	=					-	(15,510)
Repayment of principal is an expenditure in the go		but the repay	ment reduces				
long-term liabilities in the Statement of Net Posi	tion					14,505	13,654
Change in net position of governmental activities					_	\$43,540	50,154
-					=	-	

(A Component Unit of the State of New York)

Statement of Net Position

Proprietary Fund

March 31, 2020

(with comparative totals for March 31, 2019) (Amounts in thousands)

	March 31, 2020	March 31, 2019
ASSETS:	2020	2010
Current assets:		
Cash and investments	\$164,361	\$174,576
Third-party billings receivable	35	174
Interest receivable on loans	3,172	2,264
Loans and financing receivables due within one year, net	55,823	33,310
Total current assets	223,391	210,324
Non-current assets:	•	,
Investments	-	94,798
Loans and financing receivables - long term, net	385,736	266,120
Total non-current assets	385,736	360,918
Total assets	609,127	571,242
DEFERRED OUTFLOWS OF RESOURCES:	1,527	1,955
LIABILITIES: Current liabilities:		
Accounts payable	29	-
Accrued liabilities	227	671
Escrow deposits	2,105	1,823
Total current liabilities	2,361	2,494
Non-current liabilities:		
Net pension liability	885	234
Net OPEB liability	528	485
Total non-current liabilities	1,413	719
Total liabilities	3,774	3,213
DEFERRED INFLOWS OF RESOURCES:	486	1,529
NET POSITION:		
Net position restricted for specific programs	\$606,394	568,455
	_	

(A Component Unit of the State of New York)

Statement of Revenues, Expenses and Changes in Fund Net Position Proprietary Fund

For the year ended March 31, 2020

(with comparative totals for March 31, 2019)
(Amounts in thousands)

	March 31, 2020	March 31, 2019
OPERATING REVENUES:		
Closing fees	\$2,528	2,993
Undrawn fees	572	382
Administrative fees	103	68
Other fees	144	504
Loans and financing receivables interest	18,612	15,253
Provision for losses on loans and financing receivables		(388)
Total operating revenues	21,959	18,812
OPERATING EXPENSES:		
Salaries and benefits	7,484	6,421
Investment related expenses	399	456
Program operating costs	1,277	765
General & administrative expenses	1,247	1,100
Depreciation	189	184
NY State assessments	112	125
Total operating expenses	10,708	9,051
OPERATING INCOME	11,251	9,761
NON-OPERATING REVENUES:		
Capital contributions	20,678	119,882
Investment income	6,224	7,223
Total non-operating revenues	26,902	127,105
NON-OPERATING EXPENSES:		
Capital expansion	44	1,425
Program evaluation	170	211
Total non-operating expenses	214	1,636
INCOME BEFORE TRANSFERS	37,939	135,230
Transfers- capital contributions (redemptions)	-	(52,926)
Change in net position	37,939	82,304
Net position, beginning of period	568,455	486,151
Net position, end of period	\$606,394	568,455

(A Component Unit of the State of New York)

Statement of Cash Flows

Proprietary Fund

For the year ended March 31, 2020 (with comparative totals for March 31, 2019)

(Amounts in thousands)

	March 31,	March 31,
	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Closing fees collected	\$2,588	\$2,993
Undrawn fees collected	581	450
Administrative fees collected	93	68
Other fees collected	210	475
Loans and financing receivables interest collected	17,694	14,862
Disbursement of counterparty deposits	-	(50)
Receipt of escrow deposits	282	1,798
Payments to employees & employee benefit providers	(7,405)	(6,444)
Payments to suppliers	(3,508)	(2,367)
Payment for allocated depreciation	(189)	(184)
Payments to NYS	(112)	(125)
Loans and financing receivables deployed	(258,384)	(184,150)
Loans and financing receivables principal repayments	116,279	179,674
Net cash (used in) provided by operating activities	(131,871)	7,000
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:	20.070	110 000
Capital contributions Transfers- capital contributions (redemptions)	20,678	119,882 (52,926)
Capital expansion	(44)	(1,425)
Net cash provided by non-capital financing activities	20,634	65,531
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(412,379)	(810,281)
Proceeds from sale of investments	507,973	739,942
Investment income	5,895	4,891
Net cash provided by (used in) investing activities	101,489	(65,448)
Net change in cash & cash equivalents	(9,748)	7,083
Cash and cash equivalents, beginning of year	24,279	17,196
Cash and cash equivalents, end of year	14,531	24,279
RECONCILIATION OF OPERATING INCOME TO NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES:		0.704
Operating income Adjustments to reconcile operating income to net cash used in (provided by) operating activities:	\$11,251	9,761
Decrease in third party billings receivable	139	38
Increase in interest receivable	(908)	(393)
Increase in loans and financing receivables	(142,129)	(4,088)
Increase in accounts payable	29	-
(Decrease) increase in accrued liabilities	(444)	168
Decrease in counterparty deposits	<u>.</u>	(50)
Increase in escrow deposits	282	1,798
Net change in pension & OPEB related accounts	79 (170)	(23)
Non-operating expenses unrelated to financing activities Net cash (used in) provided by operating activities	(170) (\$131,871)	7,000
The Sast (asea iii) provided by operating activities	(ψ101,071)	7,000

(A Component Unit of the State of New York)
Statement of Fiduciary Net Position
March 31, 2020
(Amounts in thousands)

	OPEB Trust Fund	Custodial Fund
ASSETS:		
Cash and investments	\$50,522	\$34,905
LLRW assessment billings receivable		
Total assets	\$50,522	\$34,905
LIABILITIES:		
Accrued expenses	155	-
Payable to New York State	-	968
LLRW escrow funds	-	2,223
Perpetual care of nuclear waste	-	31,711
Federal Energy Regulatory Commission		3
Total liabilities	155	\$34,905
NET POSITION:		
Held in trust for other postemployment		
benefits	\$50,367	

(A Component Unit of the State of New York)
Statement of Changes in Fiduciary Net Position
For the year ended March 31, 2020
(Amounts in thousands)

ADDITIONS:	OPEB Trust Fund	Custodial Fund
Employer contributions	\$2,608	\$ -
Utility assessments	-	661
Investment (loss) income	(3,602)	1,341
Less investment management expenses	(10)	
Net investment (loss) income	(3,612)	1,341
Total (losses) additions, net	(1,004)	\$2,002
	<u> </u>	
DEDUCTIONS:		
Benefits	1,582	-
Reimbursement to NYS	-	2,906
Administrative fees	18_	
Total deductions	1,600	\$2,906
	<u> </u>	
Change in net position	(2,604)	
NET POSITION:		
Net position, beginning of year	52,971	
Net position, end of year	\$50,367	
,		

Notes to Basic Financial Statements March 31, 2020

(1) GENERAL

The New York State Energy Research and Development Authority (NYSERDA) is a public benefit corporation established in 1975 pursuant to Title 9 of Article 8 of the Public Authorities Law of the State of New York (the State). NYSERDA is included in the State's basic financial statements as a component unit. NYSERDA's significant functions and programs reported in the Statement of Activities are summarized below; those which are reported as major funds in the Governmental Fund Financial Statements are noted parenthetically.

Clean Energy Fund (CEF) Market Development/Innovation & Research (Major fund)
Pursuant to a January 2016 Order (CEF Order), the State Public Service Commission (Commission) authorized a ten-year commitment through 2025 of approximately \$5.3 billion to clean energy programs through a CEF. The CEF is designed to meet four primary objectives: greenhouse gas emission reductions; energy affordability; statewide penetration and scale of energy efficiency and clean energy generation; and growth in the State's clean energy economy.

The CEF Market Development activities are designed to reduce costs, accelerate customer demand, and increase private investment for energy efficiency and other behind-the-meter clean energy solutions through strategies including financial support, technical knowledge, data, education to customers and service providers, and advanced workforce training. The CEF Innovation & Research activities are designed to invest in cutting-edge technologies that will meet increasing demand for clean energy including: smart grid technology, renewables and distributed energy resources, high performance buildings, transportation, and clean tech startup and innovation development.

The CEF Order provided for a ten-year funding authorization of \$3.4 billion, as amended, for the Market Development and Innovation & Research activities, and also provided additional funding authorization of \$781.5 million for NY Green Bank, \$960.6 million for NY-Sun, and \$150.0 million for the RPS Program for a 2016 Main Tier solicitation. The NY Green Bank, and NY-Sun programs are presented as separate Programs/Functions in the financial statements as further described below.

The CEF Order authorized the continuation of previously authorized ratepayer collections for calendar years 2016 through 2024 for previous program authorizations for the New York Energy \$mart, Energy Efficiency Portfolio Standard, Technology and Market Development, and RPS programs (the Previously Approved Programs).

To reimburse NYSERDA for actual CEF program expenses, the CEF Order established a "Bill-As-You-Go" (BAYG) approach for revenue collection effective January 1, 2016. Under this approach, CEF ratepayer collections are held by the electric and gas utilities and used to reimburse NYSERDA monthly, provided that the reimbursement allows NYSERDA to maintain a sufficient cash balance based on projected expenses for the subsequent two-month period, subject to the collection amounts approved in the CEF Order.

NY-Sun

Approved through a 2012 Commission Order, the NY-Sun program is designed to develop a sustainable and subsidy-free solar electric industry through a megawatt block approach. The NY-Sun program was initially funded through \$216 million reallocated under the Renewable Portfolio Standard (RPS) program. The CEF Order established the incremental collection schedule and reallocation of uncommitted funds to support program activities approved through the 2012 Order.

Notes to Basic Financial Statements March 31, 2020

Clean Energy Standard (CES) (Major fund)

Pursuant to an August 2016 and subsequent Orders, the Clean Energy Standard was established, adopting a State Energy Plan goal that 70% of New York's electricity is to be generated by renewable sources by 2030 as part of a strategy to reduce statewide greenhouse gas emissions by 40% by 2030. The CES is comprised of a series of deliberate and mandatory actions to enhance opportunities for customer choice necessary to achieve the State Energy Plan goal. The mandated actions are divided into two categories, a Renewable Energy Standard (RES) and a Zero-Emissions Credit (ZEC) requirement. The RES consists of an obligation on Load Serving Entities (LSEs) in New York State to invest in new renewable generation resources to serve their retail customers evidenced by the procurement of qualifying renewable energy credits; an obligation on distribution utilities on behalf of all retail customers to continue to invest in the maintenance of existing at-risk renewable generation attributes; and a program to maximize the value potential of new offshore wind resources. As part of the RES component of the program, NYSERDA will offer for sale to the LSEs at various times Renewable Energy Credits (RECs) produced from, and received under, contracts with qualifying renewable energy facilities to meet the LSEs' mandatory compliance requirements. Alternatively, NYSERDA may receive Alternative Compliance Payments from LSEs in lieu of their purchasing RECs from NYSERDA. The ZEC requirement consists of an obligation on LSEs in New York State to invest in the preservation of existing at-risk nuclear zero-emissions attributes to serve their retail customers, evidenced by the procurement of qualifying ZECs. As part of the ZEC component, NYSERDA provides support payments for specified nuclear generating facilities in amounts prescribed by the Commission's Order based on each facility's output. The funding for these payments is collected through ZECs sold to each LSE in amounts calculated for each LSE's proportionate share of the statewide energy load. The RES component and the ZEC component are interrelated but the goals are additive; that is, the carbon benefits of preserving the nuclear zero-emissions attributes will not count toward achieving the required number of renewable resources to satisfy the 70% by 2030 goal. The RES and ZEC components will, however, in combination, contribute toward the State's comprehensive greenhouse gas reduction goals.

NYSERDA is leading the coordination of offshore wind opportunities in New York State and is supporting the development of 9,000 megawatts of offshore wind energy by 2035 in a responsible and cost-effective manner. In July 2018, the Commission issued an Order Adopting the Offshore Wind Standard. The Offshore Wind Standard authorized solicitations by NYSERDA, in consultation with the Long Island Power Authority and New York Power Authority, for first phase of offshore wind procurements. In October of 2018, NYSERDA issued its first solicitation for offshore wind to stimulate the development of the domestic offshore wind industry, reduce the cost of later offshore wind procurements, and allow New York State to realize the direct benefits associated with the construction, operation, and maintenance of offshore wind resources.

Regional Greenhouse Gas Initiative (RGGI) (Major fund)

RGGI is an agreement among nine Northeastern and Mid-Atlantic States to reduce greenhouse gas emissions from power plants. The RGGI states (Participating States) have committed to cap and then reduce the amount of carbon dioxide that certain power plants are allowed to emit, limiting the region's total contribution to atmospheric greenhouse gas levels. The Participating States have agreed to implement RGGI through a regional cap-and-trade program whereby the Participating States have agreed to auction annual regional emissions. Rules and regulations promulgated by the NYS Department of Environmental Conservation (DEC) call for NYSERDA to administer periodic auctions for annual emissions. Pursuant to these regulations, the proceeds will be used by NYSERDA to administer energy efficiency, renewable energy, and/or innovative carbon abatement programs, and to cover the costs to administer such programs.

Notes to Basic Financial Statements March 31, 2020

Green Jobs-Green New York (GJGNY) (Major fund)

GJGNY is a statewide program created by legislation enacted in October 2009 to promote energy efficiency retrofits in residential, multifamily, small business and not-for-profit buildings, and authorizes NYSERDA to establish innovative financing approaches through revolving loan funds to finance such projects. The program will also support sustainable community development and create opportunities for green jobs. The legislation funded the program with \$112.0 million from RGGI auction proceeds and restricts the use of interest earnings and revolving loan proceeds for additional programmatic spending. NYSERDA subsequently allocated \$94.6 million in additional RGGI funds to support program activities.

Energy Analysis

Through this program, NYSERDA provides objective and credible analyses of energy issues to various stakeholders. The program also includes activities for energy-related emergency planning and response, and support for State energy planning. These program activities are funded primarily by a State assessment on the intrastate gas and electricity sales of the State's investor-owned utilities.

Furthermore, Energy Analysis staff provide oversight activities pursuant to the State Low-Level Radioactive Waste (LLRW) Management Act of 1986, whereby NYSERDA is responsible for ultimately constructing and operating the State's LLRW disposal facilities, collecting information, and providing regular reports to the Governor and Legislature on LLRW generation in the State. These activities are funded annually by State appropriations through a sub-allocation from the New York State Department of Health.

NYSERDA is also responsible for the coordination of nuclear material matters, including serving as the State liaison with the Nuclear Regulatory Commission.

West Valley

NYSERDA manages, on behalf of the State, the Western New York Nuclear Service Center (West Valley), which is the site of a former plant for reprocessing used nuclear fuel. Through 1972, the former plant operator, Nuclear Fuel Services, Inc., generated as a by-product of its reprocessing operations, more than 600,000 gallons of liquid, high-level radioactive waste, which was stored at the site. In 1980, Congress enacted the West Valley Demonstration Project Act (West Valley Act). Pursuant to the West Valley Act, the U.S. Department of Energy (DOE) is carrying out a demonstration project to: (1) solidify the liquid high-level radioactive waste at West Valley; (2) transport the solidified waste to a permanent federal repository; and (3) decontaminate and decommission the reprocessing plant and the facilities, materials, and hardware used in the project.

NYSERDA also maintains, on behalf of the State, the State-Licensed Disposal Area (SDA), which is a shut-down commercial low-level radioactive waste disposal facility at West Valley. NYSERDA is evaluating how to remediate and close this facility in accordance with regulatory requirements.

Other

Other represents an aggregate of smaller Programs/Functions. These activities are primarily funded through Commission Orders, Memorandums of Understanding with various utilities pursuant to Commission Orders, various third-party reimbursement agreements, and federal energy grants.

NY Green Bank

NY Green Bank, a division of NYSERDA accounted for as a proprietary fund, is a \$1.0 billion, statesponsored, specialized financial entity working in partnership with the private sector to increase investments into New York's clean energy markets, creating a more efficient, reliable, and sustainable

Notes to Basic Financial Statements March 31, 2020

energy system. NY Green Bank's mission is to accelerate clean energy deployment in New York State by working in partnership with the private sector to transform financing markets.

To date, NY Green Bank has participated in transactions by providing: construction and longer-term post-construction financing and investment, financing to enable developers to aggregate smaller distributed assets into portfolios at scale, and credit enhancements.

NY Green Bank works to increase the size, volume, and breadth of clean energy investment activity throughout the State, expand the base of investors focused on New York State clean energy, and increase clean energy participants' access to capital. To do so, NY Green Bank collaborates with the private sector to develop transaction structures and methodologies that overcome typical clean energy investment barriers, such as challenges in evaluating risk and addressing the needs of distributed energy and efficiency projects where underwriting may be geared more towards larger and/or groups of somewhat homogeneous investment opportunities.

NY Green Bank focuses on opportunities that create attractive precedents, standardized practices, and roadmaps that capital providers can willingly replicate and scale. As funders "crowd in" to a particular area within the clean energy landscape, NY Green Bank moves on to other areas that have attracted less investor interest.

As a key component of New York's CEF, NY Green Bank is structured to be self-sustaining in that it must ultimately cover its own costs of operation.

Pursuant to various Orders of the Commission, the Commission authorized a total of \$1 billion in funded capitalization for NY Green Bank. As of March 31, 2020, total ratepayer funded capitalization provided to NY Green Bank was \$618.8 million, resulting in an unfunded amount of \$381.2 million that will be subsequently provided through the BAYG funding approach.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

The basic financial statements include government-wide financial statements, governmental fund financial statements, proprietary fund financial statements, and fiduciary fund financial statements.

The government-wide financial statements report information on governmental and business-type activities, and consist of a Statement of Net Position and a Statement of Activities. These statements exclude information about fiduciary activities where NYSERDA holds assets in a trustee or agency capacity for others since such assets cannot be used to support NYSERDA's own programs.

Net position classifications used in the government-wide financial statements are as follows:

- <u>Net investment in capital assets</u> amount of capital assets, net of accumulated depreciation, reduced by the outstanding balances of debt attributable to the acquisition, construction, or improvement of those assets, and deferred outflows of resources less deferred inflows of resources, that are attributable to the acquisition, construction, or improvement of those assets or related debt, excluding any significant unspent related debt proceeds or deferred inflows of resources
- Restricted for specific programs amount of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets
- <u>Unrestricted</u> amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of Net investment in capital assets or the Restricted for specific programs components of net position

Notes to Basic Financial Statements March 31, 2020

The governmental fund financial statements report governmental activities and consist of a Balance Sheet and a Statement of Revenues, Expenditures, and Changes in Fund Balances. The funds presented in the governmental funds financial statements are categorized as either major or non-major funds (the latter are aggregated within "Other") as required by U.S. generally accepted accounting principles (U.S. GAAP).

Fund balance classifications used in the governmental fund financial statements are as follows:

- Nonspendable amounts that cannot be spent because they are not in spendable form
- Restricted amounts with constraints placed on the use of resources that are legally imposed by creditors, grantors, contributors, or laws or regulations of other governments that may be imposed by law through constitutional provisions or enabling legislation
- <u>Committed</u> amounts that can only be used for specific purposes pursuant to constraints imposed
 by formal action of the government's highest level of decision making. Amounts cannot be used for
 any other purposes unless the government removes the specified use
- <u>Assigned</u> amounts are constrained by the government's intent to be used for specific purposes, but are neither restricted or committed
- <u>Unassigned</u> residual balance is the amount not meeting other fund balance classifications

NYSERDA had no Committed or Assigned Fund Balances as of March 31, 2020.

NYSERDA administers certain programs on behalf of the Commission and others whereby the terms of the program sponsor or enabling legislation limit the use of funds to certain program purposes, and as such, the funds are reported as restricted. Since NYSERDA has multiple constraints on its resources, restricted funds are considered spent first, committed funds second, assigned funds third, and unassigned funds last.

As of March 31, 2020, a fund deficit was reported in the Clean Energy Standard Fund. The deficit is the result of differences in cash flow timing relating to the receipts of cash and disbursements under the program.

The proprietary fund financial statements, based on an enterprise type fund, report business-type activities for which a fee is charged to external users for goods or services, and consist of a Statement of Net Position; a Statement of Revenues, Expenses and Changes in Fund Net Position; and a Statement of Cash Flows. NY Green Bank is presented in the proprietary fund financial statements.

The fiduciary fund financial statements report assets held by NYSERDA in a fiduciary capacity for others and consist of a Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position. NYSERDA's fiduciary funds include: (1) funds held for reimbursement to the State for costs associated with the Low-Level Radioactive Waste Management Act of 1986; (2) funds that, pursuant to a Cooperative Agreement, must be turned over to the U.S. Department of Energy upon delivery of the solidified high-level radioactive waste from West Valley to a permanent federal disposal repository to provide for perpetual care and management of the waste; and (3) funds held in an irrevocable trust maintained by a third-party trustee to receive employer contributions for NYSERDA's health insurance premiums for benefits provided to NYSERDA employees and/or their eligible spouses and dependent children after active employment ends (postemployment).

The basic financial statements include certain prior-year summarized comparative information in total, but not by separate governmental activities and major funds. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with NYSERDA's financial statements as of and for the year ended March 31, 2019, from which the summarized information was derived.

Notes to Basic Financial Statements March 31, 2020

(b) Basis of accounting

The government-wide financial statements are prepared using the economic resources measurement focus and accrual basis of accounting, as are the proprietary fund and the fiduciary fund financial statements. Revenues resulting from exchange transactions are recognized when the exchange takes place. Revenues resulting from non-exchange transactions, such as program funding in the form of grants, contributions, utility surcharge assessments, and State appropriations, are recognized when all eligibility requirements (if any) have been met. Resources received in advance of meeting all eligibility requirements are recorded as unearned revenue. Expenses in the government-wide financial statements are recognized when incurred. NYSERDA's administrative overhead charges are included as program direct expenses in the Statement of Activities.

Financial statements for governmental funds are presented using the current financial resources measurement focus and the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recorded when they become measurable and available (expected to be collected in the next 12 months) and have met eligibility requirements (if any). Expenditures, rather than expenses, are recognized in governmental fund financial statements. Only transactions that require the use of current financial resources are recognized. Expenses related to non-current liabilities are not recorded; however, certain expenses that are recognized over time in the government-wide financial statements are recognized as expenditures in the governmental fund financial statements in the period in which the underlying transaction takes place.

The governmental fund financial statements include a reconciliation of total fund balance and the changes therein, to total net position and the changes therein that are reflected in the government-wide financial statements. The reconciling items are the result of the above described differences in measurement focus and basis of accounting.

(c) Indirect cost allocation method

NYSERDA incurs certain indirect costs (e.g., administrative salary expense, fringe benefit expense, and general and administrative expense) that are not directly associated with a specific function/program. Therefore, these costs are allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank. Net pension and OPEB liabilities are also allocated proportionately to NY Green Bank, as required for Proprietary funds.

(d) Investments

Investments are recorded at fair value, which reflects quoted market prices for U.S. government obligations, mutual funds, and exchange-traded funds.

(e) Loans and financing receivables

Loans and financing receivables are recorded at their cost basis, less any provision for losses. For NY Green Bank, a provision for losses is established on any individual loan and financing receivable which: (i) is delinquent by more than 120 days on payment of principal or interest obligations; and (ii) indicates a deficiency in the present value of expected cash flows discounted at its effective interest rate, or a deficiency in the valuation of its collateral, as compared to its outstanding balance plus any accrued interest receivable. For the GJGNY program, an allowance for doubtful accounts is recorded at the amount of the outstanding principal balance of all loans over 120 days past due.

(f) Capital assets

Assets with a cost of more than \$2,500 and an estimated useful life in excess of two years are capitalized and reported at historical cost in the government-wide financial statements. Depreciation is calculated using the straight-line method over the estimated useful life of the capital assets, which

Notes to Basic Financial Statements March 31, 2020

ranges from three to fifty years and is reported in the government-wide and proprietary fund financial statements. Capital asset purchases are recorded as expenditures in the governmental funds financial statements.

(g) Unearned revenue

Unearned revenue consists of funds received or receivable in advance of revenue recognition conditions having been met for the underlying exchange transactions.

(h) <u>Deferred outflows of resources and deferred inflows of resources</u>

Deferred outflows of resources as presented in the government-wide and proprietary fund financial statements represent a consumption of net assets applicable to a future reporting period. Deferred inflows of resources as presented are defined as an acquisition of net assets applicable to a future reporting period. Deferred outflows of resources and deferred inflows of resources include differences between expected projected results and actual results related to NYSERDA's net pension and net OPEB liabilities, as well as contributions subsequent to the measurement date for each post-retirement/post-employment benefit plan. Deferred outflows of resources and deferred inflows of resources are also allocated proportionately to NY Green Bank, as required for Proprietary funds.

(i) Compensated absences

NYSERDA employees are granted vacation and sick leave in varying amounts. In the event of termination or retirement, an employee is reimbursed for accumulated vacation leave up to the equivalent of 45 days, and sick leave up to a maximum of five days. Retired employees may use additional accumulated sick leave to pay for the employee share of health insurance premiums.

NYSERDA's accrual for compensated absences, as reported in the government-wide financial statements within other non-current liabilities, includes fringe benefits on compensated absences and estimated costs to use employee sick leave for post-retirement health benefits. Compensated absences are not accrued in the governmental funds financial statements.

(j) NY State assessments

NY State assessments for the year ended March 31, 2020 consisted of \$12.7 million in fees assessed by the State under Section 2975 of the Public Authorities Law (Governmental Cost Recovery System) for general governmental services, and \$0.9 million paid to the State under a budget bill pursuant to Article VII of the New York State Constitution.

(k) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies. Estimates also affect the reported amounts of revenues and expenditures/expenses during the reporting period. Actual results could differ from those estimates.

(I) Income taxes

NYSERDA is a component unit of the State and therefore is generally exempt from federal, state, and local income taxes.

(m) Adoption of new accounting pronouncements

NYSERDA implemented GASB Statements No. 84 Fiduciary Activities (GASB 84) and No. 88, Certain disclosures Related to Debt, including Direct Borrowings and Direct Placements (GASB 88), for the fiscal year ended March 31, 2020.

GASB 84 directed that fiduciary funds previously entitled "Agency" funds be titled as "Custodial" funds in the Fiduciary Funds financial statements, and further required that Custodial funds be

Notes to Basic Financial Statements March 31, 2020

included on the Statement of Changes in Fiduciary Net Position.

GASB 88 requires enhanced notes disclosures (see note 8).

(n) Reclassifications

Certain amounts reported as of and for the fiscal year ended March 31, 2019 have been reclassified to conform with the amounts presented as of and for the fiscal year ended March 31, 2020.

(3) CASH AND INVESTMENTS

Pursuant to Public Authorities Law Section 1859(1), the Commissioner of the New York State Department of Taxation and Finance (Fiscal Agent) serves as fiscal agent for NYSERDA's cash and investments, maintaining such funds on NYSERDA's behalf and implementing investments subject to the Fiscal Agent's policies and with direction and authorization from NYSERDA. NYSERDA has a written investment policy that applies to all of its investments. The policy permits deposits with financial institutions approved by the Fiscal Agent and permits investments in: certificates of deposit of bank or trust companies located in New York State, obligations of New York State and the United States government and certain of their agencies, repurchase agreements subject to certain limitations, and money market funds subject to certain limitations.

Cash and investments of the OPEB Trust are held with the Bank of New York Mellon Trust Company. All OPEB Trust investments are made consistent with the investment policy based on target percentages established for each asset class.

The following schedule presents cash and investments as of March 31, 2020. Fair value is measured using quoted market prices for U.S. government obligations, mutual funds, and exchange traded funds. GASB Statement No. 72, *Fair Value Measurement and Application*, prescribes three approaches to measuring fair value and requires a government to use valuation techniques consistent with one or more of these approaches. The standard establishes a fair value hierarchy that categorizes the inputs to valuation techniques used to measure fair value into three levels. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs—other than quoted prices included within Level 1—that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. All NYSERDA investments are valued based on Level 1 inputs.

			Weighted
	Fair Value		Average
	(Amounts in	% of	Maturity
	<u>thousands)</u>	<u>Total</u>	(months)
Governmental funds			
Cash and cash equivalents	\$202,307	35.6	n/a
U.S. Treasury Bills	355,436	62.6	1.4
U.S. Treasury Notes	7,801	1.4	6.1
U.S. Treasury Strips	<u>2,278</u>	<u>0.4</u>	<u>10.7</u>
Total	<u>\$567,822</u>	<u>100.0</u>	<u>1.2</u>
Current portion thereof	<u>\$567,822</u>		

Notes to Basic Financial Statements March 31, 2020

Proprietary fund Cash and cash equivalents U.S. Treasury Bills U.S. Treasury Notes Total Current portion thereof	\$14,53 53,73 <u>96,10</u> <u>\$164,36</u> <u>\$164,36</u>	0 32.7 <u>0 58.5</u> <u>1 100.0</u>	5.6
Fiduciary funds Cash and equivalents Mutual funds Exchange traded funds U.S. Treasury Bills U.S. Treasury Notes Total	\$1,459	1.7	n/a
	42,374	49.6	n/a
	7,691	9.0	n/a
	3,219	3.8	2.0
	30,684	35.9	<u>10.7</u>
	\$85,427	100.0	<u>9.9</u>

Interest Rate Risk. NYSERDA's investment policy limits investment maturities to no longer than five years as a means of managing its exposure to fair value losses arising from increasing interest rates. Investment maturities are selected based on anticipated cash flow needs.

The OPEB Trust's risk tolerance is understood by the Plan Administrator such that achieving the Plan's investment objectives is not guaranteed and there will be time periods for which these objectives will not be met. The Plan Administrator also recognizes that some risk must be assumed to achieve the Trust's long-term investment objectives and accepts the inevitable fluctuations in returns that will occur. While it is understood that a certain level of risk is expected in the Trust's portfolio, the ability to withstand short and intermediate term variability was specifically considered in the development of the Investment Policy Statement risk tolerances. The debt instruments held within the above table's Mutual funds and Exchange traded funds are shown in the below table.

Credit Risk. Money market fund investments consist of non-rated funds whose investments are restricted to U.S. government obligations. As of March 31, 2020, debt instruments other than those of the U.S. government were held only by the OPEB Trust and were as follows:

	Investment policy range (% of	Fair Value (Amounts in	Morningstar 5- star rating scale
<u>Investment type</u>	<u>portfolio)</u>	<u>thousands)</u>	<u>rating</u>
Mutual funds:			
Short term bonds	1%-6%	\$1,682	4
Intermediate term bond	9%-19%	\$7,545	3
Inflation protected securities	5%-15%	\$5,515	3
Long term bond	1%-11%	\$3,004	4
High yield bond	7%-17%	\$5,867	4
Global bond	1%-6%	\$494	4

Concentration of Credit Risk. NYSERDA's investment policy limits investments with any single eligible banking institution to no more than 35% of its total investment portfolio, except as otherwise required by any policies and practices of the Fiscal Agent. As of March 31, 2020, NYSERDA did not have any investments with institutions that were individually in excess of 5% of total investments.

The OPEB Trust's investment policy places limitations on the concentration of investments in certain industries, with certain companies, and among asset classes and within investment policy ranges.

Notes to Basic Financial Statements March 31, 2020

Custodial Credit Risk for Deposits. Deposits are exposed to custodial credit risk if the deposits are not covered by depository insurance or deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging institution's trust department or agent, but not in the name of NYSERDA.

In accordance with existing policies and procedures, the Fiscal Agent of NYSERDA monitors deposit balances for the purpose of determining collateralization levels. Collateral sufficient to cover all uninsured deposits is held at the Department's custodial bank.

Custodial Credit Risk for Investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of NYSERDA, and are held either by the counterparty or the counterparty's trust department or agent, but not in the name of NYSERDA.

Fixed income investments owned directly by NYSERDA, which trade in the U.S. markets, are held at NYSERDA's Fiscal Agent's custodian, in separate accounts, in the name of the Comptroller of the State of New York in Trust for NYSERDA. These securities are typically held in electronic form through the Federal Book Entry System and by the Depository Trust Company (DTC) and its subsidiaries acting as an agent of NYSERDA's Fiscal Agent's custodian bank.

Foreign Currency Risk. As of March 31, 2020, only the OPEB Trust portfolio (reported within Fiduciary funds) held any foreign investments. Foreign mutual fund holdings at March 31, 2020 were \$15.1 million (comprised of \$14.6 million of equity funds and \$494,000 of fixed income funds).

(4) RECEIVABLE FROM NEW YORK STATE

As of March 31, 2020, the amount due from New York State is \$8.5 million, which represents appropriation and grant receivables.

(5) LOANS AND FINANCING RECEIVABLES

Loans receivable exist under the Green Jobs-Green New York program to finance energy efficiency retrofits and renewable energy system installments in residential, multifamily, small business, and not-for-profit buildings. The residential component, and certain small business/not-for-profit loans, offers loans originated by a third-party loan originator using pre-established loan underwriting criteria, which are funded by NYSERDA and serviced by a third-party loan servicer. Multifamily and small business/not-for-profit loans are provided through participating lenders with NYSERDA providing 50% of the principal, subject to certain limits.

For the fiscal years ended March 31, 2020 and March 31, 2019, provision for losses were \$1.8 million and \$2.1 million, respectively, and are included in Program/Current expenditures, respectively, for the Program/Major Fund.

NY Green Bank loans and financing receivables consist of sustainable infrastructure investments made by it into eligible technologies, consistent with its mission and investment criteria. These loans and financing transactions aim to mobilize private sector capital during the lifecycle of each investment, accelerate the deployment of economically and technically feasible clean energy projects in the State, provide financial returns to NY Green Bank, and contribute to New York's clean energy policy outcomes. NY Green Bank offers the following categories of capital solutions: construction finance, construction finance & term loan, term loans & investments (which may be debt or equity), warehousing/aggregation, and credit enhancements. NY Green Bank prices its products to reflect its credit underwriting, its risk position in the capital structure and pricing for

Notes to Basic Financial Statements March 31, 2020

comparable transactions, as well as internal portfolio return needs taking into account current market rates as well as commercial expectations of rates.

For the fiscal years ended March 31, 2020 and March 31, 2019, provision for losses were \$0.0 million and \$0.4 million, respectively, and are reflected as a reduction of Loans and financing receivables interest on the Statement of Activities.

Loans and financing receivables at March 31, 2020 include the following:

(Dollar amounts in thousands)

	Number of	Loans and
	loans and	financing
Governmental activities/funds	financing	receivables
	<u>receivables</u>	<u>Outstanding</u>
Residential	21,440	\$206,204
Small Business/Not-for-Profit	54	1,517
Multifamily Building	7	232
Total governmental activities/funds	<u>21,501</u>	207,953
Allowance for doubtful accounts		<u>(8,180)</u>
Net total governmental activities/ funds		<u>\$199,773</u>

(Dollar amounts in thousands)

	Number of loans and	Loans and financing
	financing	receivables
Business-type activities/proprietary fund	<u>receivables</u>	<u>Outstanding</u>
Construction Finance	8	\$93,300
Construction Finance & Term Loan	6	34,191
Term Loans & Investments	18	247,391
Warehousing/Aggregation	<u>5</u>	<u>66,677</u>
Total business-type activities/proprietary fund	<u>37</u>	\$ <u>441,559</u>

Loans and financing receivables at March 31, 2020 mature as follows:

Governmental activities/funds

	(Amounts in thousands)			
	Residential	Small		
Fiscal year ending	Energy	Business/	Multifamily	
March 31,	<u>Efficiency</u>	Not-for-Profit	<u>Building</u>	<u>Total</u>
2021	\$16,868	246	167	17,281
2022	16,523	228	62	16,813
2023	16,720	213	3	16,936
2024	17,111	206	-	17,317
2025	17,565	203	-	17,768
2026-2030	88,387	421	-	88,808
2031-2035	32,986	-	-	32,986
2036-2040	44		_	44
Total governmental activities/funds	<u>\$206,204</u>	<u>1,517</u>	<u>232</u>	<u>207,953</u>

Notes to Basic Financial Statements March 31, 2020

Business-type activities/proprietary fund

(Amounts in thousands)

		Construction		,	
Fiscal year ending	Construction	Finance &	Term Loan &	Warehousing/	
March 31,	<u>Finance</u>	<u>Term Loan</u>	<u>Investments</u>	<u>Aggregation</u>	<u>Total</u>
2021	\$33,632	1,088	3,366	17,737	55,823
2022	32,371	1,232	66,675	8,923	109,201
2023	1,072	1,381	36,604	12,034	51,091
2024	12,142	1,503	8,255	20,478	42,378
2025	40	1,636	16,172	7,505	25,353
2026-2030	14,043	20,557	104,736	-	139,336
2031-2035	-	6,794	11,100	-	17,894
2036-2040	<u>-</u> _	Ξ	<u>483</u>	<u>-</u> _	<u>483</u>
Total business-type activities/ proprietary					
fund	<u>\$93,300</u>	<u>34,191</u>	<u>247,391</u>	<u>66,677</u>	<u>441,559</u>

(6) OTHER ASSETS

As of March 31, 2020, the other assets balance of \$7.0 million represents the lower of cost or market value of the Upstate and Downstate New York State Strategic Gasoline Reserves, which were established to provide an emergency supply of finished motor gasoline in case of a significant disruption to petroleum fuels supply or distribution.

(7) CAPITAL ASSETS

Capital asset activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	Beginning Balance	Additions	Retirements/ Reclasses	Ending Balance
Land	\$685			685
Land improvements	5,844	-	-	5,844
Buildings	8,979	-	(48)	8,931
Machinery and equipment	19,630	1,272	(565)	20,337
Leasehold improvements	2,990	20	_	3,010
·	38,128	1,292	(613)	38,807
<u>Less accumulated depreciation</u> for:				
Land Improvements	(1,992)	(202)	-	(2,194)
Buildings	(5,592)	(290)	48	(5,834)
Machinery and equipment	(13,513)	(2,264)	565	(15,212)
Leasehold improvements	(1,113)	(219)		(1,332)
	(22,210)	(2,975)	<u>613</u>	(24,572)
Capital assets, net	<u>\$15,918</u>	<u>(1,683)</u>	<u> </u>	<u>14,235</u>

Notes to Basic Financial Statements March 31, 2020

(8) NON-CURRENT LIABILITIES

Non-current liability activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	(7 timodinto in ti	1100001100)			Amounts
	Beginning <u>Balance</u>	<u>Additions</u>	Reductions	Ending <u>Balance</u>	Due within One Year
Governmental activities Compensated					
absences	\$ 8,648	5,349	(4,459)	9,538	3,785
Bonds payable	135,404	-	(14,506)	120,898	9,490
Net pension liability	3,133	12,848	(9,267)	6,714	-
Net OPEB liability	<u>3,457</u>	<u>5,544</u>	(5,547)	<u>3,454</u>	
Non-current liabilities	<u>\$150,642</u>	<u>23,741</u>	(33,779)	<u>140,604</u>	<u>13,275</u>
Business-type activities Net pension liability	\$234	1,873	(1,222)	885	-
Net OPEB liability	<u>485</u>	<u>677</u>	(634)	<u>528</u>	
Non-current liabilities	<u>\$719</u>	<u>2,550</u>	<u>(1,856)</u>	<u>1,413</u>	<u>=</u>

Bonds payable includes various bonds issued and secured by loan repayments from loans issued under the GJGNY program. Following is a schedule of bonds issued and outstanding at March 31, 2020:

(Amounts	in thousands)		
	Principal Balance <u>Outstanding</u>	Final Maturity <u>Date</u>	Interest <u>Rate</u>
Residential Energy Efficiency Financing Revenue Bonds,	_		
Series 2013A	\$12,460	July 1, 2028	2.8% to 4.1%
Series 2015A	33,735	July 1, 2030	2.3% to 3.8%
Series 2016A	18,950	March 1, 2027	1.4% to 2.8%
Residential Solar Loan Revenue Bonds, Series 2015	24,548	March 1, 2027	4.6% to 5.2%
Residential Solar Financing Green Revenue Bonds, Series 2018A	15,695	April 1, 2034	3.0% to 4.8%
Residential Solar and Energy Efficiency Financing Green Revenue Bonds, Series 2019A Total	_15,510 \$120,898	April 1, 2035	3.2% to 4.6%

Notes to Basic Financial Statements March 31, 2020

The Series 2013A, Series 2015A, and Series 2016A Bonds were issued under a master Indenture of Trust (Indenture), as supplemented, which requires that NYSERDA maintain cash and future scheduled pledge loan payments in each bond year of not less than 110% of annual debt service for each series of bonds. Payment of principal and interest on the Series 2013A bonds are guaranteed by the New York State Environmental Facilities Corporation (EFC) through the Clean Water State Revolving Fund (SRF). The Residential Energy Efficiency Financing Revenue Bonds Series 2015A and Series 2016A were issued to EFC in connection with SRF bonds issued by EFC. The Series 2015A bonds include an interest subsidy credit from EFC provided compliance with provisions of the EFC financing agreements. Under the terms of agreements with EFC, NYSERDA has on deposit with an escrow agent as of March 31, 2020, approximately \$4.7 million in a Collateral Reserve Account, which may be used by EFC to fund or reimburse its guarantee. Any funds held by the Trustee under the Indenture may be withdrawn by NYSERDA provided that cash and scheduled pledged loan payments are not less than 120% of annual debt service and provided that the balance of the Collateral Reserve Account and any Debt Service Reserve Fund are not less than 15% of aggregate bonds outstanding under the Indenture.

Bonds payable also includes Residential Solar Loan Revenue Bonds (Series 2015). The bonds are secured with a pledge of payments from consumer loans issued through the GJGNY program to finance the installation of residential photovoltaic systems (Solar Loans) in an amount which provides scheduled debt service coverage of 125% based on a 15 year structuring amortization schedule. The bonds originally included a variable rate component, but pursuant to the terms of the borrowing, pledged Solar Loan payments received in excess of structuring scheduled payments were applied on a quarterly basis first to the redemption of outstanding variable rate bonds, and then to outstanding fixed rate bonds, and as of March 31, 2020 no variable rate principal balance remained outstanding. The remaining principal outstanding bears interest at a fixed rate determined at the time each series was issued, and mature approximately 10 years from the date issued, ranging from March 1, 2026 to March 1, 2027.

Also included in Bonds Payable are Residential Solar Loan Revenue Bonds (Series 2018) issued to finance or refinance loans residential solar loans for under the GJGNY program for one to four family residential structures. The Series 2018A Bonds are limited obligations of the Authority, payable solely from and secured by Pledged Loan Payments held by the Trustee under the Indenture and all money, revenues and receipts to be received under the Indenture.

Bonds Payable further includes Residential Solar and Energy Efficiency Financing Green Revenue Bonds (Series 2019). The Series 2019A Bonds are limited obligations of the Authority, payable solely from and secured by the Pledged Revenues pursuant to the Indenture of Trust.

For each of the Series of bonds outstanding at March 31, 2020, failure of the Authority to cause to be made by the Trustee, the scheduled payment of principal and/or interest amounts still outstanding at such maturity date, would result in the Authority becoming responsible for, but only from pledged loan payments, all reasonable collection and similar fees, plus interest on overdue installments of interest at the rate borne by the Bonds. The remedy of acceleration shall not be available to the Owners of the bonds.

Notes to Basic Financial Statements March 31, 2020

As of March 31, 2020, future debt service requirements of the bonds are:

(Amounts in thousands)

Fiscal year	•		,
ending	Bonds pa	ayable	
March 31,	<u>Principal</u>	Interest	<u>Total</u>
2021	9,490	3,874	13,364
2022	9,420	3,652	13,072
2023	9,015	3,423	12,438
2024	8,620	3,197	11,817
2025	8,360	2,962	11,322
2026-30	58,758	7,151	65,909
2031-35	<u> 17,235</u>	2,343	<u> 19,578</u>
Total	<u>\$120,898</u>	<u> 26,602</u>	<u>147,500</u>

In the above table, certain bonds with principal payments that are dependent on the amount of pledged loan receipts are shown in the period in which final maturity of such amounts occur, though pre-payment without penalty could occur. In addition, interest payments for those same bonds include the maximum amount assuming no principal pre-payments are made.

(9) RETIREMENT PLAN

There are two retirement plans for NYSERDA employees: the New York State and Local Retirement System (the System), and the New York State Voluntary Defined Contribution Plan (VDC). Nearly all employees of NYSERDA participate in one of these two plans.

The System is a cost-sharing, multiple-employer, defined benefit public employee retirement plan. The State Comptroller is sole trustee and administrative head of the System. The System issues a publicly available financial report including financial statements and required supplementary information located on the Internet at

http://www.osc.state.ny.us/retire/word_and_pdf_documents/reports/financial_statements/fs_2019.pdf or by writing to the New York State and Local Retirement System, 110 State Street, Albany, New York 12244. The System provides retirement benefits, as well as death and disability benefits. Retirement benefits are established by the New York State Retirement and Social Security Law. Retirement benefits, contributory requirements and vesting depend on the point in time at which an employee first joined the System (membership "tier"). Members of the System who joined before July 27, 1976 are enrolled in a noncontributory plan; NYSERDA contributes the entire amount determined to be payable to the System for those members. Personnel who joined the System after July 27, 1976 through January 1, 2010 and who have less than 10 years of accredited service are required by law to contribute three percent of their gross salary; NYSERDA contributes the balance payable to the System during that period, and the full amount determined to be payable thereafter. Members who joined the System between January 1, 2010 and March 31, 2012 contribute three percent of their gross salary during the full term of employment. Members who joined the System after April 1, 2012 contribute between three percent and six percent, depending on their salary. during the full term of employment. Retirement benefits vest after five to 10 years of accredited service, depending on the applicable tier.

Notes to Basic Financial Statements March 31, 2020

As of the fiscal years ended March 31, 2020 and 2019, NYSERDA's proportionate share of the System's net pension liability was approximately 0.11% and 0.10%, respectively, determined based on the ratio of NYSERDA's total projected long-term contributions to the total System projected long-term contributions from all employers. NYSERDA, in turn, allocated a share of its pension liability and deferred outflows and deferred inflows to NY Green Bank, its proprietary fund, based on a proportional allocation methodology using direct salary expenses. The governmental activities represent approximately 91% and the proprietary fund represents approximately 9% of the proportionate share of the balances of System pension-related amounts consistent with NYSERDA's current allocation methodology. NYSERDA's net pension liability, which includes that of NY Green Bank, is as follows:

	(Amount in thousands)
Measurement date	03/31/2019
Actuarial valuation date	04/01/2018
Net pension liability	\$7,599

Update procedures were used to roll forward the total pension liability from the actuarial valuation date to the measurement date. The significant actuarial assumptions included in the actuarial valuation included an inflation factor of 2.5%, projected salary increases of 4.2%, and investment rate of return of 7.0%. The System also assumed a COLA of 1.3% annually. Annuitant mortality rates are based on the System's 2015 experience study of the period April 1, 2010 – March 31, 2015, with adjustments for mortality improvements based on Society of Actuaries Scale MP-2014. The discount rate used to calculate the total pension liability was 7.0%. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to NYSERDA's participation in the System, as well as the related pension expense, information about the fiduciary net position of the System, and additions to/deductions from NYSERDA's fiduciary net position, have been determined on the same basis as they are reported by the System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the statutes governing the System. Investments are reported at fair value.

Pension expense for the fiscal year ended March 31, 2020 was \$4.4 million. NYSERDA's contribution to the System for the fiscal year ended March 31, 2020 was \$3.8 million, representing 100% of the required contribution.

The following table portrays the sensitivity of NYSERDA's proportionate share of the net pension liability due to changes in the discount rate:

	(Amounts in thousands)			
	Current Discount 1% Decrease Rate 1% Increase			
	(6.0%)	<u>(7.0%)</u>	(8.0%)	
Governmental activities Net pension liability/(asset)	\$29,355	\$6,714	(\$12,306)	
Business type-activities/proprietary fund Net pension liability/(asset)	\$3,869	\$885	(\$1,622)	

Notes to Basic Financial Statements March 31, 2020

Balances of System pension-related deferred outflows of resources and deferred inflows of resources as of the measurement date were as follows:

	(Amounts in thousands)	
	Deferred	Deferred
	Outflows of	Inflows of
	<u>Resources</u>	Resources
Differences between expected and actual		
experience	\$1,496	(510)
Changes of assumptions	1,910	-
Net difference between projected and actual		
investment earnings on pension plan		
investments	-	(1,950)
Changes in proportion and differences		
between employer contributions and		
proportionate share of contributions	127	(1,058)
Employer contributions subsequent to the		
measurement date	<u>3,844</u>	
Total	<u>\$7,377</u>	<u>(\$3,518)</u>

The amount of employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended March 31, 2020.

The deferred outflows of resources and deferred inflows of resources to be recognized in pension expense in each of the next five years and in the aggregate thereafter is as follows:

	(Amounts in thousands)		
		Business-type	
	Governmental	activities/proprietary	
Fiscal year Ending March 31:	<u>activities</u>	fund	<u>Total</u>
2021	\$970	144	1,114
2022	(1,609)	(148)	(1,757)
2023	(312)	(1)	(313)
2024	844	127	971
2025	-	-	-
Thereafter		<u></u>	<u>_</u>
Totals	<u>\$(107)</u>	<u>122</u>	<u>15</u>

The VDC is a multiple-employer, defined contribution plan administered by the Director of University Benefits for the State University of New York (SUNY); TIAA-CREF serves as the third-party administrator. On July 1, 2013, the VDC option was made available to NYSERDA employees hired on or after that date whose annual salary is \$75,000 or more. Those employees voluntarily electing the VDC plan are prohibited from joining the System (defined benefit plan) at a later date (and the opposite also applies; plan participation elections are irrevocable). VDC provides benefits through annuity contracts and provides retirement and death benefits to those employees who elected to participate in the VDC. Employees have the ability to choose from a variety of investment providers for the VDC. Benefits are determined by the amount of individual accumulations and the retirement income option selected. All benefits generally vest after the completion of one year of service if the employee is retained thereafter. Employees electing to participate in the VDC plan are required to contribute between 5.75% and 6% of gross earnings, dependent upon their salary, for their entire working career; NYSERDA contributes 8%.

One hundred ten employees have vested in the VDC as of March 31, 2020. NYSERDA's

Notes to Basic Financial Statements March 31, 2020

contribution to the VDC for the year ended March 31, 2020 was \$1,001,935.

(10) LEASES

NYSERDA has multi-year operating leases expiring May 31, 2021; October 31, 2022; June 30, 2024; and October 30, 2027, for office space in West Valley, Buffalo, Albany, and New York City, respectively. For the year ended March 31, 2020, rental expense for all office facilities was \$2.0 million

The following is a schedule, by year, of future minimum rental payments for NYSERDA's office space as of March 31, 2020:

\$2,444
2,413
2,376
2,391
2,047
<u>4,911</u>
<u>\$16,582</u>

NYSERDA is also the lessor of certain equipment comprising a cooling water structure at the Indian Point Energy Center in Buchanan, New York under a lease that expires on March 31, 2027, with annual minimum lease rental payments of \$816,000 for the fiscal years ending March 31, 2021-2027.

(11) CONTINGENCIES

(a) Western New York Nuclear Service Center

Under the federal West Valley Demonstration Project Act and an implementing Cooperative Agreement between DOE and NYSERDA, the federal government pays 90 percent of the West Valley Demonstration Project (WVDP) costs, and NYSERDA, on behalf of the State of New York. pays the remaining 10 percent. In addition, in 2010, the U.S. District Court for the Western District of New York approved an agreement between New York State and the federal government that resolved most of the claims asserted in a 2006 lawsuit filed by NYSERDA and New York State against the federal government and DOE regarding the financial responsibility for cleaning up certain facilities at West Valley. The agreement defines a specific cost share for the cleanup of a number of facilities that had long been in dispute between NYSERDA and DOE. For example, under this agreement, the federal government will pay a 30 percent share of costs associated with the State Licensed Disposal Area (SDA), which is solely owned and managed by NYSERDA, and NYSERDA, on behalf of the State, will pay the remaining 70 percent. Remediation costs for the North Plateau Groundwater Plume will be split equally between the State and federal government, and costs for remediating the Nuclear Regulatory Commission Licensed Disposal Area will also be a 50/50 split. The two governments agreed that other facilities are covered by the WVDP Act, such as the Main Process Plant building, and thus the federal government will pay 90% of the cleanup costs.

In January 2010, NYSERDA and DOE issued a final Environmental Impact Statement, which identifies and assesses the potential environmental impacts of a range of reasonable alternatives proposed to meet DOE's responsibilities under the WVDP Act and options for the State of New York, acting through NYSERDA, for management of West Valley. In April and May 2010,

Notes to Basic Financial Statements March 31, 2020

respectively, DOE and NYSERDA issued decision documents that formally selected the Phased Decision Making alternative for continuing the cleanup. Under Phased Decision making, decommissioning work will be conducted in two phases. During Phase 1, the Main Process Plant building and several other highly contaminated facilities will be removed at an estimated cost of approximately \$1.0 billion. As the Phase 1 cleanup work is proceeding, DOE and NYSERDA will are conducting additional studies to reduce uncertainties in the decisions for the Phase 2 portion of the cleanup, which will be detailed in a Supplemental Environmental Impact Statement currently being developed. The 2010 Environmental Impact Statement states that the Phase 1 work would take 10 years and cost approximately \$1.0 billion based on a federal funding level of \$75.0 million per year. Since 2010, actual federal funding levels have generally ranged between \$60.0 million and \$68.0 million, although the Federal Fiscal Year 2020 Congressional appropriation for the WVDP came in at \$79.4 million. The total cost and duration of the Phase 1 cleanup work will be in part impacted by the funding amounts appropriated annually in the federal budget.

The Phase 2 decisions, which will be made in the 2023 timeframe, will address the remaining facilities, including the High-Level Waste Tanks, the SDA, the NRC-Licensed Disposal Area, and the main body of a plume of contaminated groundwater. Total estimated costs for completing the Phase 2 work range from over \$700.0 million to \$9.1 billion, and are dependent on the alternative selected for the remaining facilities.

In accordance with GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, no liability has been included in NYSERDA's financial statements as of March 31, 2020 for this contingency because NYSERDA expects to continue to be reimbursed from State appropriations for the State's share of the costs of the Demonstration Project, any costs NYSERDA may incur in relation to the SDA, and any other costs allocated to NYSERDA under the agreement resolving the lawsuit referenced above.

(b) Energy Analysis- Low-Level Radioactive Waste

Pursuant to the Low-Level Radioactive Waste (LLRW) Management Act of 1986, NYSERDA annually assesses licensees of operating nuclear power plants an amount sufficient to reimburse the State for the LLRW disposal facilities development activities of the Departments of Health and Environmental Conservation, and must provide nuclear power plant licensees with a user-fee reduction, when the disposal facilities are operational, equal to the statutory assessments collected plus interest at a fair market rate. During the year ended March 31, 2020, NYSERDA paid, from the agency fund, a total of \$2.9 million to reimburse the State for such costs pursuant to Public Authorities Law Section 1854-d(2)(a).

(c) Bond Financing Program

The principal and interest on obligations issued for participating gas and electric utility companies and other private purpose users are payable solely from payments made by participating companies. They are not general obligations of NYSERDA nor do they constitute an indebtedness of or a charge against the general credit of NYSERDA, or cause any monetary liability to NYSERDA. These bonds and notes are not a debt of the State of New York.

The bonds and notes issued bear the name of NYSERDA and the participating company. NYSERDA assigns most of its rights and obligations to a trustee who is responsible for, among other things, disbursing bond and note proceeds and handling principal and interest payments. As of March 31, 2020, the principal totaled \$1.5 billion.

(d) Risk management

NYSERDA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. NYSERDA maintains commercial insurance coverage for each of those risks of loss. Management believes such coverage is sufficient to preclude any significant uninsured losses to NYSERDA. NYSERDA has not

Notes to Basic Financial Statements March 31, 2020

experienced any reductions in coverage and has not had any insurance settlements exceeding the coverage in the past three years.

(e) Contractual obligations in excess of cash and investment balances

As of March 31, 2020, NYSERDA has aggregate outstanding contractual obligations in excess of cash and investments of governmental activities/funds totaling \$11.3 billion, which will be reimbursed for qualifying program costs from monies held by utilities pursuant to BAYG agreements, from future revenues generated through Commission Orders, Memorandums of Understanding, Third-party agreements, and from federal energy grants.

(f) NY Green Bank

As of March 31, 2020, NY Green Bank has entered into three credit contracts which, consistent with their terms, have not been funded but contain contingent obligations. NY Green Bank capital is only drawn if a contingent obligation under the respective agreement is triggered. The amount of contingent obligations as of March 31, 2020 totaled approximately \$2.6 million.

Any draws made on the above contingent obligations would be due to be repaid pursuant to the terms of their respective agreements.

(12) POSTEMPLOYMENT HEALTHCARE BENEFITS

Plan Description

The New York Civil Service Law, Section 163(2) provides for health insurance coverage for retired employees of New York State, including their spouses and dependent children. The law extends to public benefit corporations. NYSERDA maintains a single-employer defined benefit plan (the "Plan"), providing this benefit to eligible retirees and/or their spouses and dependent children. Eligibility is determined by membership in the System and New York State Voluntary Defined Contribution (VDC) Program, enrollment in the New York State Health Insurance Program at the time of retirement, and the completion of a minimum number of years of service as required by the System and VDC program. The Plan provides that members that retired prior to January 1, 2013 pay the percentage share of the health insurance premiums that active NYSERDA employees paid as of December 31, 2012. Members that retired on or after January 1, 2013 pay the same percentage share of the health insurance premiums as that charged for active State management confidential employees (as of March 31, 2020 the shares were 16% of the premium for individual coverage and 31% of the incremental premium for family coverage). NYSERDA is billed by the New York State Department of Civil Service monthly for pay-as-you-go funding requirements; however, payments are made from an irrevocable OPEB Trust account established in March 2010. The purpose of the OPEB Trust is for the accumulation of funds to pay future benefit costs. The Trust's funds are held by a third-party trustee. The Trust is managed by the Officers of NYSERDA, in consultation with an independent Investment Consultant

As of March 31, 2020, there were 121 retirees and dependent survivors actively receiving benefits and 302 active Plan members. NYSERDA's OPEB Trust is recorded as a fiduciary fund within NYSERDA's financial statements.

Net OPEB Liability and disclosures required by GASB Statement No. 75 (Employer Reporting):

The Total OPEB liability at March 31, 2020 was determined using the January 1, 2018 actuarial valuation, and was then projected forward to the measurement date of March 31, 2019.

NYSERDA allocates a share of its Net OPEB liability and related deferred outflows and deferred inflows to NY Green Bank, its proprietary fund, based on a proportional allocation methodology

Notes to Basic Financial Statements March 31, 2020

using direct salary expenses. The governmental activities represent approximately 87% and the proprietary fund represents approximately 13% of the proportionate share of the balances of OPEB-related amounts consistent with NYSERDA's current allocation methodology.

The following table summarizes changes in the net OPEB Liability of NYSERDA, which includes that of NY Green Bank:

(Amounts in thousands)

Fiscal year ended March 31, 2019 (Measurement date March 31, 2018)	Total OPEB Liability (a) \$52,709	Plan Fiduciary Net Position (b) 48,767	Net OPEB Liability (a) – (b) 3,942
Changes for the year:			
Service cost	2,031		2,031
Interest	3,512		3,512
Differences between expected	•		,
and actual experience .	140		140
Benefit payments	(1,439)	(1,439)	-
Contributions-employer	-	4,963	(4,963)
Net investment income	-	727	(727)
Administrative expenses Fiscal year ended March 31, 2020	<u>-</u> \$56,953	<u>(47)</u> <u>52,971</u>	47 3,982
(Measurement date March 31, 2019)			

Sensitivity Analysis:

Discount rate

The Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the long-term expected rate of return.

	1% Decrease (5.5%)	(Amounts in thousands) Current Discount Rate (6.5%)	1% Increase (7.5%)
Governmental activities Net OPEB liability (asset)	\$11,962	\$3,454	(\$3,345)
Business type- activities/proprietary fund Net OPEB liability (asset)	\$1,829	\$528	(\$511)

Healthcare cost trend rates

The following presents the net OPEB liability of NYSERDA, calculated using the current healthcare cost trend rates as well as what the Authority's net OPEB liability would be if it were calculated using trend rates that are 1 percentage point lower or 1 percentage point higher than the current trend rates.

Notes to Basic Financial Statements March 31, 2020

	1% Decrease	Current Trend Rate	1% Increase
Governmental activities Net OPEB liability (asset)	(\$4,522)	\$3,454	\$13,729
Business type- activities/proprietary fund Net OPEB liability (asset)	(\$691)	\$528	\$2,099

OPEB expense for the fiscal year ended March 31, 2020 was \$2.6 million Balances of OPEB-related deferred outflows of resources and deferred inflows of resources as of March 31, 2020 were as follows:

	(Amounts in thousands)	
	Deferred Outflows of <u>Resources</u>	Deferred Inflows of <u>Resources</u>
Differences between expected and actual experience	\$ 305	(180)
Changes of assumptions	-	(183)
Net difference between projected and actual investment earnings on Trust investments	2,044	(611)
Employer contributions subsequent to the measurement date	<u>2,608</u>	-
Total	<u>\$4,957</u>	<u>(974)</u>

The deferred outflows of resources and deferred inflows of resources to be recognized in OPEB expense in each of the next five years and in the aggregate thereafter is as follows:

	(Amounts in thousands)		
	Business-type		
	Governmental	activities/proprietary	
Fiscal year Ending March 31:	<u>activities</u>	<u>fund</u>	<u>Total</u>
2021	\$258	41	299
2022	258	41	299
2023	258	41	299
2024	437	66	503
2025	(7)	(1)	(8)
Thereafter	<u>(15)</u>	<u>(2)</u>	<u>(17)</u>
Totals	<u>\$1,189</u>	<u>186</u>	<u>1,375</u>

Projections of benefits for financial reporting purposes are based on the Plan as understood by NYSERDA and Plan members and include the types of benefits provided at the time of valuation and the historical pattern of sharing benefit costs between NYSERDA and Plan members. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential of legal or contractual funding limitations on the pattern of cost sharing between the employer and Plan members in the future.

Notes to Basic Financial Statements March 31, 2020

The significant assumptions used in the most recent actuarial valuation were as follows:

Retirement— All employees assumed to be covered under Tier 4 of the System, with early retirement available at age 55 with 5 years of service, and unreduced benefits at age 62 with 5 years or age 55 with 30 years of service. Based on assumptions used under the System, since eligibility for NYSERDA employees covered under this plan is based on membership in that system. The System assumptions were based on extensive analysis of their covered populations.

Marital status – Assumed 60% of active male employees who choose coverage will have covered spouses at retirement, and 50% for active female employees. Male spouses were assumed to be three years older than female spouses.

Mortality Tables – Sex-distinct RP-2006 Base Healthy Annuitant/Employee with Projection Scale MP-2018.

Withdrawal—Rates were based on age and length of service for the first 10 years and age thereafter as the basis for assigning active members a probability of remaining employed until the assumed retirement age. Based on assumptions used under the System, since eligibility for NYSERDA employees covered under this plan is based on membership in that system. The System assumptions were based on extensive analysis of their covered populations.

Healthcare cost trend rate – The expected rate of increase in healthcare premiums was based on projections developed by the actuary's healthcare specialists. Rates of 5.5% and 8.4% for the two health insurers with the highest enrollment of Plan members were assumed initially, trending to an ultimate rate of 4.0% for both carrier's plans.

Health insurance premiums – Calendar year 2019 health insurance premiums for the two health insurers with the highest enrollment of Plan members were used as the basis for the projected valuation year premiums.

Investment return – As of March 31, 2020, Plan benefit payments are pre-funded in a segregated Trust, and a discount rate of 6.5% was used, representing the long-term anticipated earnings potential of investments in the Trust.

The actuarial funding method used was the Entry Age Normal Cost method, under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost (for purposes of GASB 75, the term normal cost is the equivalent of service cost). The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability (for purposes of GASB 75, the term actuarial accrued liability is the equivalent of total OPEB liability).

The Plan also provides that the dollar value, subject to certain limitations, of members' accumulated sick leave credits at the time of retirement may be used to offset the portion of health insurance premiums paid by retirees. NYSERDA's estimated liability associated with sick leave credits is recorded as a Compensated Absence within Other non-current liabilities in accordance with the requirements of GASB Statement No. 16, *Accounting for Compensated Absences*. The Trust does not accumulate resources for the purpose of paying this portion of the health insurance premiums, nor does it pay any benefits for this purpose. NYSERDA's liability for that portion of the premiums is not included in the actuarially determined liabilities of the Plan, the net OPEB liability, or the OPEB expense calculations.

Notes to Basic Financial Statements March 31, 2020

The cost of third-party administrators, actuarial reports, audits, and similar costs incurred exclusively for the Trust are paid from resources of the Trust. Routine daily administrative costs of administering the benefit plans, accounting services and similar costs are absorbed by NYSERDA.

The Trust has no legally required reserves.

Additional information can be found in the Required Supplementary Information section of these financial statements.

Net OPEB Liability and Disclosures required by GASB Statement No. 74 (Plan Reporting)

The Total OPEB Liability at March 31, 2020 was determined using the January 1, 2020 actuarial valuation, and was then projected forward to March 31, 2020, calculated using the actuarial assumptions changes described below.

	<i>(Amounts in thousands)</i> Plan			
	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability	
-	(a)	(b)	(a) – (b)	
Fiscal year ended March 31, 2019	\$56,953	52,971	3,982	
Changes for the year: Service cost	2,154		2,154	
Interest	3,791		3,791	
Effect of economic/demographic gains	•		,	
or losses	(8,075)		(8,075)	
Effect of assumptions changes or inputs	(1,878)		(1,878)	
Benefit payments	(1,582)	(1,582)	` <u>-</u>	
Contributions-employer	-	2,608	(2,608)	
Net investment income	-	(3,612)	3,612	
Administrative expenses		<u>(18)</u>	(18)	
Fiscal year ended March 31, 2020	<u>\$51,363</u>	<u>50,367</u>	<u>996</u>	

The actuarial assumptions were the same as those noted above (for the GASB Statement No. 75 valuation) with the exception of:

Mortality Tables – Sex-distinct Pub-2010 General Employee/Retiree with Projection Scale MP-2019.

 $\label{eq:healthcare} \textit{Least trend rate} - \text{The expected rate of increase in healthcare premiums was based on projections developed by the actuary's healthcare specialists. Rates of 5.6% and 3.0% for the two health insurers with the highest enrollment of Plan members were assumed initially, trending to an ultimate rate of 3.8% for both carrier's plans.}$

Sensitivity Analysis:

Discount rate

The Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total OPEB liability is equal to the long-term expected rate of return.

Notes to Basic Financial Statements March 31, 2020

(An	nounts in	thousands)	
_			

	1% Decrease	Current Discount Rate	1% Increase
	<u>(5.25%)</u>	<u>(6.25%)</u>	<u>(7.25%)</u>
Net OPEB liability	\$9,305	\$996	(\$5,697)

Healthcare cost trend rates

(Amounts in thousands)

1% DecreaseCurrent Trend Rate1% IncreaseNet OPEB liability(\$6,512)\$996\$10,556

Money-Weighted Rate of Return:

For the year ended March 31, 202020, the annual money-weighted rate of return on investments, calculated as the internal rate of return on Plan investments, net of investment expense, was (6.76%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Long-term expected rate of return:

Long term expected rat	o or rotarii.		Long- Term	Long- Term
			Expected Arithmetic	Expected Geometric
		Target	Real Rate	Real Rate
Asset Class	<u>Index</u>	Allocation	of Return	of Return
US Cash	BAML 3-Mon Tbill	1.00%	0.06%	0.07%
US Short Bonds	Barclays 1-3 Yr Gvt/Credit	3.00%	0.85%	0.83%
US Interm Bonds	Barclays IT Gvt/Credit	14.00%	1.30%	1.23%
US Long Bonds	Barclays LT Gvt/Credit	6.00%	2.94%	2.55%
US Inflation-Indexed				
Bonds	Barclays US TIPs	10.00%	0.82%	0.72%
US High Yield Bonds	BAML High Yield	12.00%	3.32%	2.87%
Non-US Bonds	JPM GBI Global xUS	1.00%	0.61%	0.18%
US Large Caps	S&P 500	15.00%	4.37%	3.24%
US Small Caps	Russell 2000	6.00%	5.71%	3.85%
US Mid Caps	Russell MidCap	1.00%	4.76%	3.31%
Foreign Developed				
Equity	MSCI EAFE NR	15.00%	6.01%	4.49%
Emerging Markets Equity	MSCI EM NR	15.00%	8.14%	5.34%
Global REITs	FTSE EPRA/NAREIT Developed	1.00%	5.56%	3.84%
J. J. J. J. I. L. I. I. J.		1.0070	0.0070	0.0170

Additional information can be found in the Required Supplementary Information section of these financial statements.

Notes to Basic Financial Statements March 31, 2020

(13) INTERFUND BALANCES AND TRANSFERS

The balances reflected in Due to other funds and Due from other funds reflect the timing difference of when expenditures are incurred and when interfund reimbursement occurs.

Transfers consist of amounts transferred between various Functions/Programs and Funds pursuant to various Orders of the Commission, NYSERDA's approved RGGI operating plan, and to fund expenditures and working capital balances pursuant to the CEF Order's "Bill-As-You-Go" process, as summarized below:

(Amounts in thousands)

		Transfer	rs To		
<u>Transfers</u> <u>From</u>	CEF	CES	<u>GJGNY</u>	Other <u>Funds</u>	<u>Total</u>
CEF	\$ -	-	-	7,036	7,036
CES	-	-	-	1,740	1,740
RGGI	17,541	-	12,400	-	29,941
Other Funds	3,034	<u>13,135</u>	-	=	<u>16,169</u>
Total Governmental Funds	<u>\$20,575</u>	<u>13,135</u>	<u>12,400</u>	<u>8,776</u>	<u>54,886</u>

(14) SUBSEQUENT EVENTS

The COVID-19 outbreak is disrupting supply chains and affecting operations and the financial condition across a range of industries, including the clean energy sector. The extent of the impact of COVID-19 on NYSERDA's operational and financial performance will depend on certain developments, including but not limited to the duration and spread of the outbreak, impact on our employees, impact on program partners and contractors, State policy directives, and actions by the Commission which may adjust current program activities, all of which are uncertain and cannot be predicted. As of June 23, 2020, the issuance date of the financial statements, the extent to which COVID-19 may impact NYSERDA's future programmatic activities and accomplishments is uncertain, and is likely to impact future financial performance against previously established budgets, but is not likely to have a materially adverse impact on NYSERDA's future financial condition.

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

NYSERDA's Contributions to the System Pension Plan

(Amounts in thousands)

		(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Fiscal year ended March 31,	2020	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Actuarially determined contribution	\$3,844	\$3,808	\$3,805	\$3,866	\$3,993
Contributions in relation to the actuarially determined contribution	\$3,844	\$3,808	\$3,805	\$3,866	\$3,993
Contribution deficiency (excess)	-	<u>φο,σσσ</u> -	<u>φο,σσσ</u> -	-	-
, , , , , , , , , , , , , , , , , , ,					
Covered- payroll	\$27,760	\$27,362	\$26,088	\$25,854	\$26,153
Contributions as a percentage of covered-employee payroll	13.8%	13.9%	14.6%	15.0%	15.3%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

NYSERDA's Proportionate Share of the System's Net Pension Liability

	(Amounts in thousands)				
Fiscal year ended March 31,	<u> 2020</u>	2019	<u>2018</u>	<u>2017</u>	<u> 2016</u>
(Measurement date March 31,)	2019	2018	2017	2016	2015
Proportion of the net pension liability	0.11%	0.10%	0.11%	0.11%	0.12%
Proportionate share of the net pension liability	\$7,599	\$3,367	\$10,279	\$17,556	\$4,004
Covered- payroll	\$27,362	\$26,088	\$25,854	\$26,153	\$25,135
Proportionate share of the net pension liability as a % of its covered payroll	27.8%	12.9%	39.8%	67.1%	15.9%
Ratio of fiduciary net position to total pension liability	96.27%	98.24%	94.7%	90.7%	97.9%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

Schedule of Changes in Net OPEB Liability and Related Ratios

Fiscal year ended March 31, Employer Reporting: Plan Reporting:	(Ar. n/a <u>2020</u>	nounts in thousan 2020 <u>2019</u>	2019 2018
Total OPEB liability Total OPEB liability- beginning (Measurement date March 31,)	\$56,953	\$52,709	\$49,081
	2019	2018	2017
Changes for the year: Service Cost Interest Effect of economic/demographic gains or losses Effect of assumptions changes or inputs Benefit payments	2,154	2,031	1,887
	3,791	3,512	3,260
	(8,075)	350	(233)
	(1,878)	(210)	-
	(1,582)	(1,439)	(1,286)
Total OPEB liability- ending (a) (Measurement date March 31,)	\$51,363	\$56,953	\$52,709
	2020	2019	2018
Plan fiduciary net position Plan fiduciary net position- beginning (Measurement date March 31,)	\$52,971	\$48,767	\$43,176
	2019	2018	2017
Changes for the year: Benefit payments Employer contributions Net investment income Administrative expenses Plan fiduciary net position- ending (b) (Measurement date March 31,)	(1,582) 2,608 (3,612) (18) \$50,367	(1,439) 4,963 727 (47) \$52,971 2019	(1,286) 3,013 3,879 (15) <u>\$48,767</u> 2018
Net OPEB liability Net OPEB liability- beginning Net OPEB liability- ending (a) – (b)	\$3,982	\$3,942	\$5,905
	\$996	\$3,982	\$3,942
Fiduciary net position as a % of total OPEB liability	98.06%	93.01%	92.52%
Covered payroll	\$39,320	\$37,638	\$35,757
Net OPEB liability as a % of covered payroll	2.53%	10.58%	11.02%

Notes to schedule: "n/a" indicates the ending Net OPEB liability (and respective columnar data presented which tabulates it), is not yet reportable by the Employer, NYSERDA, on its Statement of Net Position, due to NYSERDA's allowable (by GASB Statement No. 75) one-year lag in Employer vs. Plan reporting.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

Schedules of Required Supplementary Information (Unaudited) March 31, 2020

Schedule of Employer Contributions for OPEB (Employer and Plan Reporting)

	(Amounts in thousands)		
Fiscal year ended March 31,	2020	2019	
Actuarially determined contribution	\$2,608	\$2,071	
Actual employer contribution	<u>2,608</u>	4,963	
Contribution deficiency (excess)	<u>(\$-)</u>	(\$2,892)	
Covered payroll	\$39,320	\$37,638	
Contribution as a % of covered payroll	6.63%	13.19%	

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Investment Returns- OPEB Trust (Plan Reporting)

Fiscal year ended	Net annual money-weighted
March 31,	rate of return
2020	(6.76)
2019	1.45%
2018	8.84%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report

(Amounts in thousands)

Change from

March 31, 2020 March 31, 2019 March 31, 2019

Cash and investments (current and non-current totals):	164,361	269,374	(105,013)
Analysis: Variance was primarily due to additional capital deployed, principally committed capital not yet deployed totaled \$143.4 million; the balance of cash received on prior capital committed and deployed, and will be used to fund add	and investments primarily re-		
Third-party billings receivable	35	174	(139)
Analysis: Decrease due to timing of outstanding fees and receivables due beir	ng collected.		
Interest receivable on loans Analysis: Variance is the result of the timing of receipt for interest payments ar	3,172 and a larger amount of capital	2,264 deployed.	908
Loans and financing receivables - current and non-current totals:	441.559	299.430	142.129
Analysis: Increase due to net loan activity (new loans issued as well as additio payments received).	,		
Total assets	609,127	571,242	37,885
Deferred outflows of resources	1,527	1,955	(428)
Analysis: Reflects amortization of actuarially-determined deferred outflows of ractuarial smoothing practices), as well as amortization of the FY 2018-19 cont FY 2019-20 contributions, and addition of new balances determined from the a	ributions subsequent to meas	surement date, add	lition of similiar
Accounts Payable	29	-	29
Analysis: Reflects an increase due to additional vendor payments due but not	yet paid.		
Accrued Liabilities	227	671	(444)
Analysis: Reflects a decrease in legal and consulting expenses as compared trendered negating the need to accrue a liability.	o prior year, as well timely re	ceipt of invoices fo	r services
Escrow deposits	2,105	1,823	282
Analysis: Increase is due to deposits on future NYGB loans to potential counte	erparties.		
Long-term liabilities: Net pension liability Net OPEB liability	885 528	234 485	651 43
Total non-current liabilities	1,413	719	694
Analysis: The net pension and OPEB liability variances reflect actuarially deter of their respective deferred inflows and outflows of resources.	rmined accrued pension and	OPEB expense an	d amortization
Total liabilities	3,774	3,213	561
Deferred inflows of resources	486	1,529	(1,043)
Analysis: Reflects amortization of actuarially-determined deferred inflows of re actuarial smoothing practices).	sources (deferred pension &	OPEB expense re	sulting from
Net position: Funded Capitalization Capital Redemption	619,291 (52,926)	598,613 (52,926)	20,678

Analysis: Increase is due to an increase in funded capitalization of \$20.7 million and increase in cumulative revenues in excess of expenses of \$17.3 million.

40,029

606,394

22,768

568,455

17,261

37,939

Cumulative revenues in excess of expenses

Net position

NY Green Bank Comparison of Revenues/Expenses to Budget For the year ended March 31, 2020

To the year chaed material, 2020	(Amounts in Thousands Actual)	(for compari Over (unde	
	March 31, 2020	Budget	\$	<u>%</u>
REVENUES		<u> </u>		
Fees (Closing, Undrawn, Administrative & Other)	3,347	3,384	(37)	-1.1%
Analysis: Minor variance.				
Loans and financing receivables interest	18,612	18,740	(128)	-0.7%
Analysis: Minor variance when compared to budgetary assumption	,	10,740	(120)	-0.7 70
Subtotal: Operating revenues	21,959	22,124	(165)	-0.7%
Investment income	6 224	2 224	2.000	97 20/
Investment income Analysis: Increase is primarily due to higher yields and balances	6,224	3,324	2,900	87.2%
, wanty old. Into dadd to printarily dad to riighter yields and balaness	man antioipatoa in the ba	ago		
Capital contribution revenue	20,678	-	20,678	100.0%
Analysis: Variance is due to higher loan commitments than was a	anticipated in the budget	(no capital con	tributions wer	e
budgeted during FY 2019-20).				
Subtotal: Non-operating revenues	26,902	3,324	23,578	14.1%
Total operating and non-operating revenues	48,861	25,448	23,413	92.0%
<u>EXPENSES</u>				
Salaries	5,242	4,904	338	6.9%
Fringe benefits	2,242	2,048	194	<u>9.5</u> %
Salaries and benefits Analysis: Variance is due to differences in vacancy levels from but	7,484	6,952	532	7.7%
2% general salary increase (as adopted by NYS for MC employe in fringe benefits is the result of NY Green Bank picking up a grelabor costs and from the Authority's fringe benefit cost pool being	es) which was not compte ater allocation than what	emplated in the was budgeted	e budget. The due to higher	variance
Investment related expenses	399	560	(161)	-28.8%
Analysis: Variance due to lower costs incurred and from higher c			\ /	-20.0 /0
, manyotor variation and to forter to the mountain and mountain migricine	<u> </u>			
Other operating costs				
Travel and Outreach Costs	21	36	(15)	-41.7%
Training, Development, Recruitment & Relocation	-	72	(72)	-100.0%
Professional & Consulting Services	1,256	1,568	(312)	- <u>19.9</u> %
Analysis: Variances due to lower costs than entisinated in the hu	1,277	1,676	(399)	-23.8%
Analysis: Variances due to lower costs than anticipated in the bu	agei.			
General and administrative expenses	1,247	1,188	59	5.0%
Analysis: Variance due to adjustments to actual allocation vs. wh				3.070
	•	<u> </u>		
Depreciation	189	196	(7)	-3.6%
Analysis: Minor variance due to lower allocable cost from NYSEF	RDA resulting primarily fro	m the differen	ce in planned	capital
asset additions as compared to budget expectations.				
New York State assessments	112	100	12	12.0%
Analysis: Variance due to difference in actual allocation vs. what				
, manyotor variation and to amoretice in actual anomalier for minus	Trac annopatou in ano ba	<u></u>		
Subtotal: Operating expenses	10,708	10,672	36	0.3%
Non-operating expenses				
Capital expansion	44	750	(706)	-94.1%
Program evaluation	170	520	(350)	<u>-67.3%</u>
	214	1,270	(1,056)	-83.1%
Analysis: Variance in capital expansion and evaluation activities resulting in lower costs than anticipated in the budget.	s due to the lower amour	nt of acutal acti	vity during the	e year,
Total operating and non-operating expenses	10,922	11,942	(1,020)	-8.5%

FINANCIAL STATEMENTS

March 31, 2020

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March 31, 2020

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RESPONSIBILITY FOR FINANCIAL REPORTING

DRAFT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the New York State Energy Research and Development Authority (the Authority), as well as all other information contained in the Authority's Annual Report. The financial statements of the Authority for the fiscal year ended March 31, 2020 were prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP). The Board of the Authority (the Board) adopted these financial statements and the Annual Report at a meeting on June 23, 2020.

The Authority maintains a system of internal controls, the objectives of which are to provide reasonable assurance as to the proper authorization and recording of transactions, the safeguarding of Authority assets, the compliance with applicable laws and regulations, and the reliability of financial records for preparing financial statements. The internal control structure is subject to periodic review by management, internal audit staff and the independent auditors. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such system should not exceed the benefits derived.

The Authority's financial statements have been audited by KPMG LLP, independent auditors appointed by the Members of the Authority. Management has made available to the independent auditors all the financial records and related data of the Authority, as well as provided access to all the minutes of the meetings of the Board and its standing committees. The independent auditors periodically meet directly with the Audit and Finance Committee of the Board, which is comprised of Members who are not employees of the Authority.

The independent audit included obtaining an understanding of the internal control structure, tests of accounting records, and other procedures which the independent auditors considered necessary in order to express opinions as to the fairness of the presentation of the financial statements. No material weaknesses in internal control or any condition of non-compliance with applicable laws, regulations or policy were noted by the independent auditors through the execution of their audit procedures. The unmodified independent auditors' report attests that the financial statements are presented fairly, in all material respects, in accordance with U.S. GAAP.

Alicia Barton

President and Chief Executive Officer

DRAFT

Jeffrey J. Pitkin

Treasurer and Chief Financial Officer



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report

Members of the Authority
New York State Energy Research and Development Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of NY Green Bank, an enterprise fund of the New York State Energy Research and Development Authority (the Fund), which comprise the statement of net position as of March 31, 2020, and the related statements of revenue, expenses and changes in fund net position and cash flows for the year then ended, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Fund as of March 31, 2020, and the changes in its financial position and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in Note 2(a) to the financial statements, the financial statements present only the NY Green Bank Fund and do not purport to and do not present fairly the financial position of the New York State Energy Research and Development Authority as of March 31, 2020, the changes in its financial position, or, where applicable, its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Report on Comparative Information

We have previously audited the 2019 financial statements of NY Green Bank, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 27, 2019. In our opinion, the comparative information presented herein as of and for the year ended March 31, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that management's discussion and analysis be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the Fund's basic financial statements. The Responsibility for Financial Reporting section is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June _____, 2020 on our consideration of the Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control over financial reporting and compliance.

KPMG LLP

Albany, New York June ____, 2020



(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

The following Management's Discussion and Analysis (MD&A) of NY Green Bank's financial performance provides an overview of NY Green Bank's financial activities for the fiscal year ended March 31, 2020. The information contained in the MD&A should be considered in conjunction with the information in the accompanying financial statements and related notes. Following this MD&A are the basic financial statements of NY Green Bank with the notes thereto that are essential to a full understanding of the data contained in the financial statements. NY Green Bank's basic financial statements have the following components: (1) proprietary fund financial statements and (2) notes to the basic financial statements.

Proprietary fund financial statements are designed to provide readers with a broad overview of NY Green Bank's finances in a manner similar to a private-sector business. The *Statement of Net Position* presents information on NY Green Bank's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, and the difference between these is reported as net position. The *Statement of Revenues*, *Expenses and Changes in Fund Net Position* presents information showing how NY Green Bank's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses that are reported for some items will result in cash flows in future fiscal periods. The *Statement of Cash Flows* shows how changes in balance sheet and income accounts affect cash balances at year end. The notes to the basic financial statements provide additional information that is essential for a full understanding of the information provided in the proprietary fund financial statements.

NY Green Bank is a division of the New York State Energy Research and Development Authority (NYSERDA). The financial statements present the financial results of NY Green Bank and not the overall financial results of NYSERDA. A complete set of NYSERDA's audited financial statements is available upon request.

CONDENSED FINANCIAL INFORMATION

The following condensed financial information is presented from NY Green Bank's financial statements.

	(Amounts in		
Summary of Net Position	March 31, <u>2020</u>	March 31, <u>2019</u>	% Change <u>2020-2019</u>
Cash and investments	\$164,361	\$269,374	(39.0)%
Loans and financing receivables, net	441,559	299,430	47.5%
Other assets	3,207	2,438	31.5%
Total assets	609,127	571,242	6.6%
Deferred outflows of resources	1,527	1,955	(21.9)%
Net pension liability	885	234	278.2%
Net OPEB liability	528	485	8.9%
Other liabilities	2,361	2,494	(5.3)%
Total liabilities	3,774	3,213	(-17.5)%
Deferred inflows of resources	486	1,529	(68.2)%
Net position - restricted	\$606,394	\$568,455	6.7%

For the year ended March 31, 2020, NY Green Bank continued its focus on execution and asset management across all aspects of its sustainable infrastructure investment business, consistent with comparable established entities with analogous investment activities. This was reflected in additional transaction execution activity in the period, increasing NY Green Bank's Loans and Financing

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

Receivables (hereinafter referred to as "Portfolio Investment(s)"), ongoing business development to maintain a robust pipeline of potential Portfolio Investments, as well as focus on implementing and maintaining operational platforms, policies and practices consistent with industry best practice.

NY Green Bank has received over \$4.1 billion in Portfolio Investment proposals from inception through March 31, 2020. Its active pipeline of potential Portfolio Investments proceeding towards closing was \$757.4 million as of March 31, 2020, continuing to be diversified across technology, location, and enduser segments. During the past fiscal year, NY Green Bank closed fifteen new Portfolio Investment transactions totaling \$222.3 million, facilitating clean energy development in New York State with an aggregate estimated total project cost in the range of \$2.1 billion to \$2.6 billion. Through March 31, 2020, NY Green Bank's overall sustainable infrastructure investments since inception totaled \$959.9 million. At the same date, NY Green Bank's current portfolio (representing the aggregate dollar value of its sustainable infrastructure investments and comprising deployed as well as committed amounts on that date) was \$584.7 million. This is net of all permanent repayments of principal received by NY Green Bank in accordance with the terms of its Portfolio Investments that occurred within the year in the amount of \$59.4 million (i.e., does not include paydowns against revolving facilities that remain available for redraw, which aggregated \$56.9 million in the fiscal year), and includes capitalized items (e.g., interest and/or fees) to the extent capitalized within the period (i.e., not amounts on account of interest and/or fees that may be capitalized in future periods). Principal repaid, together with net income generated by NY Green Bank becomes immediately available for recycling into further investments, amplifying the positive effects of each dollar of NY Green Bank capital on clean energy markets within the State for the benefit of all New Yorkers.

The 39.0% decrease in Cash and Investments reflects that NY Green Bank's Portfolio is more established with a 47.5% increase to loans and financing receivables as well as recycled capital being committed for new Portfolio Investment transactions. NY Green Bank's cash and invested capital balances reflect \$619.3 million in funded capitalization received to date. NY Green Bank receives incremental capital contributions through NYSERDA as capital is committed (taking into account projected liquidity needs) and an additional \$381.2 million in capitalization is authorized to be provided based on the New York State Public Service Commission's (Commission) authorization of \$1.0 billion in total funded capitalization. In turn, NYSERDA funds these contributions either from a transfer of existing cash and investment balances (of certain Commission authorized programs), or from the Clean Energy Fund (CEF) ratepayer collections held by the electric utilities under the "Bill-As-You-Go" (BAYG) approach, consistent with the Commission Order establishing the CEF. NY Green Bank's forecasted liquidity needs are fully addressed through these funded capital contributions, or through the use of a credit facility, if and when required.

As part of U.S. generally accepted accounting principles (U.S. GAAP), the Governmental Accounting Standards Board (GASB) requires capital contributions made to NY Green Bank from NYSERDA's available cash and investment balances to be treated as transfers, while those derived directly from the BAYG approach be accounted for as non-operating revenues to NY Green Bank. As a result, additions to NY Green Bank's capital during the fiscal year equal the sum of "Capital contributions" under Non-operating revenues and "Transfers In-Capital Contributions (Redemptions)" on NY Green Bank's Statement of Revenues, Expenses and Changes in Fund Net Position.

The variance in Deferred Outflows and Inflows of Resources and Net Pension and OPEB Liabilities results from changes in the actuarially-determined amounts determined through separate actuarial valuations, of which NY Green Bank, as a proprietary fund of NYSERDA, is required to record its proportionate share of NYSERDA actuarially determined amounts. Other Liabilities decreased (5.3)% during the fiscal year, primarily from a decrease in operating liabilities offset by an increase in borrower deposits.

(A Division of the New York State Energy Research and Development Authority) Management's Discussion and Analysis For the Year Ended March 31, 2020 Unaudited

It is important to note that, consistent with its business model, not all funds that NY Green Bank commits to sustainable infrastructure and clean energy development in the State are intended to be deployed and disbursed immediately, or in some cases, at all, pursuant to executed contractual arrangements. Many NY Green Bank Portfolio Investments relate to distributed generation or energy efficiency finance, which are most commonly focused on funding portfolios of projects. Once a Portfolio Investment of these types closes, developers begin implementing projects and drawing down on capital over time. These financings are "delayed draw" by design in that funds are not deployed until project sponsors meet certain development milestones over a time period necessary to originate, develop and construct a large number of smaller, distributed clean energy projects. NY Green Bank also enters into transactions that are not expected to be funded, such as those involving credit enhancements that comprise a contingent obligation for NY Green Bank, and where NY Green Bank capital is only drawn if a contingency is triggered.

Total Assets and Net Position both increased by \$37.9 million during the current fiscal year. NY Green Bank's Net Position as of March 31, 2020 was \$606.4 million, reflecting the total capitalization of \$619.3 million funded through the end of the period (including \$17.5 million as part of its initial funded capitalization authorized for start-up administration expense until such costs could be funded from revenues), less \$52.9 million of NYSERDA capital redemptions, plus \$40.0 million in cumulative revenues in excess of cumulative expenses. The \$52.9 million capital redemption reflects a portion of NY Green Bank's initial capitalization funded from Regional Greenhouse Gas Initiative revenues repurposed by NYSERDA to provide funding to support NYSERDA's statewide energy storage initiative.

	(Amounts in thousands) March 31, March 31, % Ch		
Summary of Changes in Net Position	2020	2019	% Change <u>2020-2019</u>
Operating revenues:			
Fees	\$3,347	\$3,947	(15.2)%
Loans and financing receivables interest	18.612	15,253	22.0%
Provisions for losses on loans and financing receivables	-	(388)	(100)%
Total operating revenues:	21,959	18,812	16.7%
Operating expenses:			
Salaries and benefits	7,484	6,421	16.6%
Investment related expenses	399	456	(12.5)%
Other operating costs	1,277	765	66.9%
General and administrative expenses	1,247	1,100	13.4%
Depreciation	189	184	2.7%
NY State assessments	112	125	(10.4)%
Total operating expenses	10,708	9,051	18.3%
Operating income	11,251	9,761	15.3%
Non-operating revenues:			
Capital contributions	20,678	119,882	(82.8)%
Investment income	6,224	7,223	(13.8)%
Total non-operating revenues	26,902	127,105	(78.8)%
Non-operating expenses:			
Capital expansion	44	1,425	(96.9)%
Program evaluation	170	211	(19.4)%
Total non-operating expenses	214	1,636	(86.9)%
Income before transfers	37,939	135,230	(71.9)%
Transfers - capital contributions (redemptions)		(52,926)	100.0%
Change in net position	37,939	82,304	53.9%
Net position, beginning of year	568,455	486,151	16.9%
Net position, end of year	\$606,394	\$568,455	6.7%

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

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Total Operating Revenues increased \$3.1 million (16.7)% from the prior year. While NYGB closed the same number of transactions during the fiscal year as in the prior year, total dollar commitments were lower, which drove a 15.2% decrease in fees. An increase in loans and financing receivables interest of 22.0% reflects the increased number of transactions in NYGB's Investment Portfolio over the prior year.

Total Operating Expenses increased \$1.7 million (18.3)%, most significantly driven by increases in Salaries and Benefits; these and other costs are discussed below.

Salaries and Benefits, which include NY Green Bank staff salary expenses (\$3.62 million), NYSERDA allocated administrative salary expenses (\$1.62 million), and allocated fringe benefit expenses (\$2.24) million), increased \$1.10 million (16.6%) from the prior year. This occurred due to an increase in NY Green Bank's staffing consistent with plan as well as an increase in the overall pool of allocable expenses of which NY Green Bank pays its pro rata share (which is calculated based on NY Green Bank's direct staffing costs as a proportion of NYSERDA's program staffing costs).

Investment Related Expenses, which include legal and other costs incurred for various Portfolio Investments, were 12.5% less than the previous year, which generally reflects transaction volumes and counterparty reimbursement rates. Other Operating Costs increased \$0.5 million (66.9%) due to increase in professional service expenses (e.g., consultants and temporary employees).

General and Administrative Expenses, which include allocable costs such as rent, utilities, and insurance increased \$0.1 million (13.4%) due to an increase in the allocable cost as compared to the prior year, generally as a result of the increase in salary costs. Depreciation and NY State Assessments reflect NY Green Bank's allocable share of NYSERDA's depreciation and NYSERDA's cost recovery fee (CRF) assessment from the State of New York, respectively. Depreciation increased and NY State Assessments decreased from the prior year.

Investment Income decreased \$1.0 million (13.8%). This was driven by NYGB's greater deployment into transactions during the fiscal year of on-hand capital, operating income generated, and principal repayments received.

Non-operating expenses decreased \$1.4 million, primarily due to the decrease in capital advisory costs from the prior year.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital assets are purchased and owned by NYSERDA. NY Green Bank does not maintain capital assets on its Statement of Net Position, but instead is allocated depreciation expense on capital assets from NYSERDA.

ECONOMIC AND OTHER MARKET FACTORS

Portfolio Investments in, and funding of, clean energy projects may be impacted by a number of factors including, but not limited to, general economic conditions, energy prices, materials and equipment availability and costs, energy system reliability, energy technology advancements, and regulatory and public policy matters both within and beyond New York State.

(A Division of the New York State Energy Research and Development Authority)

Management's Discussion and Analysis

For the Year Ended March 31, 2020

Unaudited

COVID-19 IMPACTS

In response to the COVID-19 health crisis, NY Green Bank moved its workforce to work remotely effective March 16, 2020 and was able to maintain effective communications and carry out its activities without any disruption through March 31, 2020. NY Green Bank's Loans and Financing Receivables provide credit facilities to 27 counterparties, many of whom were impacted by the "New York State on Pause" Executive Order which directed non-essential businesses in New York State to close in-office personnel functions effective March 22. These organizations will be eligible to resume operations after March 31, 2020 in accordance with Federal, State and local government guidelines. Given the timing of the suspension of programmatic activities, this did not materially impact programmatic activities and accomplishments for the fiscal year ended March 31, 2020. From the start of remote working through the end of the fiscal year, NY Green Bank closed on \$40.7 million in transactions, demonstrating continued support for its counterparties. The COVID-19 health crisis had limited impacts on certain financial performance for the fiscal year ended March 31, 2020, but has not had a material impact on the financial condition of NY Green Bank as of March 31, 2020.

CONTACT FOR NY GREEN BANK'S FINANCIAL MANAGEMENT

This report is designed to provide a general overview of the finances of NY Green Bank, a division of NYSERDA, for interested parties. Questions concerning any information within this report or requests for additional information should be addressed to Jeffrey J. Pitkin, Treasurer and Chief Financial Officer, NYSERDA, 17 Columbia Circle, Albany, NY 12203.

(A Division of the New York State Energy Research and Development Authority) Statement of Net Position

March 31, 2020

(with comparative totals for March 31, 2019) (Amounts in thousands)

		March 31, 2020	March 31, 2019
ASSETS:	-		2010
Current assets:			
Cash and investments	\$	164,361	174,576
Third-party billings receivable	·	35	174
Interest receivable on loans		3,172	2,264
Loans and financing receivables due within one year, net		55,823	33,310
Total current assets		223,391	210,324
Non-current assets:			
Investments		-	94,798
Loans and financing receivables- long term, net		385,736	266,120
Total non-current assets		385,736	360,918
Total assets		609,127	571,242
DEFERRED OUTFLOWS OF RESOURCES		1,527	1,955
LIABILITIES:			
Current liabilities:			
Accounts payable		29	_
Accrued liabilities		227	671
Escrow deposits		2,105	1,823
Total current liabilities		2,361	2,494
Non-current liabilities:		<u> </u>	· · · · · · · · · · · · · · · · · · ·
Net pension liability		885	234
Net OPEB liability		528	485
Total non-current liabilities		1,413	719
Total liabilities		3,774	3,213
DEFERRED INFLOWS OF RESOURCES		486	1,529
NET POSITION:			
Net position restricted for specific programs	\$	606,394	568,455

See accompanying notes to the basic financial statements.

(A Division of the New York State Energy Research and Development Authority) Statement of Revenues, Expenses and Changes in Fund Net Position For the year ended March 31, 2020 (with comparative totals for March 31, 2019) (Amounts in thousands)

		March 31, 2020	March 31, 2019
OPERATING REVENUES:			
Closing fees	\$	2,528	2,993
Undrawn fees	,	572	382
Administrative fees		103	68
Other fees		144	504
Loans and financing receivables interest		18,612	15,253
Provisions for losses on loans & financing receivables		_	(388)
Total operating revenues		21,959	18,812
OPERATING EXPENSES:			
Salaries and benefits		7,484	6,421
Investment related expenses		399	456
Other operating costs		1,277	765
General & administrative expenses		1,247	1,100
Depreciation		189	184
NY State assessments Total operating expenses		112 10,708	125 9,051
OPERATING INCOME		11,251	9,761
NON OPERATING DEVENUES.			
NON-OPERATING REVENUES: Capital contributions		20,678	119,882
Investment income		6,224	7,223
Total non-operating revenues		26,902	127,105
NON-OPERATING EXPENSES:			
Capital expansion		44	1,425
Program evaluation		170	211
Total non-operating expenses		214	1,636
INCOME BEFORE TRANFERS		37,939	135,230
Transfers- capital contributions (redemptions)			(52,926)
Change in net position		37,939	82,304
Net position, beginning of year		568,455	486,151
Net position, end of year	\$	606,394	568,455

See accompanying notes to the basic financial statements.

NY Green Bank (A Division of the New York State Energy Research and Development Authority) Statement of Cash Flows For the year ended March 31, 2020

(with comparative totals for March 31, 2019)

(Amounts in thousands)

	March 31, 2020	March 31, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Closing fees collected	\$ 2,588	2,993
Undrawn fees collected	581	450
Administrative fees collected	93	68
Other fees collected	210	475
Loans and financing receivables interest collected	17,694	14,862
Disbursement of counterparty deposits	-	(50)
Receipt of escrow deposits	282	1,798
Payments to employees & employee benefit providers	(7,405)	(6,444)
Payments to suppliers	(3,508)	(2,367)
Payment for allocated depreciation	(189)	(184)
Payments to NYS	(112)	(125)
Loans and financing receivables deployed	(258,384)	(184,150)
Loans and financing receivables principal repayments	116,279	179,674
Net cash (used in) provided by operating activities	(131,871)	7,000
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Capital contributions	20,678	119,882
Transfers- capital contributions (redemptions)	-	(52,926)
Capital expansion	(44)	(1,425)
Net cash provided by non-capital financing activities	20,634	65,531
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(412,379)	(810,281)
Proceeds from sale of investments	507,973	739,942
Investment income	5,895	4,891
Net cash provided by (used in) investing activities	101,489	(65,448)
NET CHANGE IN CASH and CASH EQUIVALENTS:	(9,748)	7,083
Cash and cash equivalents, beginning of year	24,279	17,196
Cash and cash equivalents, end of year	\$ 14,531	24,279
RECONCILIATION OF OPERATING INCOME TO NET CASH (USED IN)		
PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$11,251	9,761
Adjustments to reconcile operating income to net cash (used in) provided by operating activities:		
Decrease in third party billings receivable	139	38
Increase in interest receivable	(908)	(393)
Increase in loans and financing receivables	(142,129)	(4,088)
Increasetin accounts payable	29	(4,000)
(Decrease) increase in accrued liabilities	(444)	168
Decrease in counterparty deposits	(444)	(50)
Increase in escrow deposits	282	1,798
•	79	
Net change in pension & OPEB related accounts		(23)
Non-operating expenses unrelated to financing activities	(170)	(211)
Net cash (used in) provided by operating activities	(\$131,871)	7,000

See accompanying notes to the basic financial statements.

Notes to Basic Financial Statements March 31, 2020

(1) GENERAL

The \$1.0 billion NY Green Bank was established to attract private sector capital to accelerate clean energy deployment in New York State (NYS or the State). To date, NY Green Bank has participated in transactions by providing: construction and longer-term post-construction financing and investment, financing to enable developers to aggregate smaller distributed assets into portfolios at scale, and credit enhancements.

NY Green Bank works to increase the size, volume, and breadth of clean energy and sustainable infrastructure investment activity throughout the State, expand the base of investors focused on NYS clean energy, and increase clean energy participants' access to capital. To do so, NY Green Bank collaborates with the private sector to develop transaction structures and methodologies that overcome typical clean energy investment barriers, such as challenges in evaluating risk and addressing the needs of distributed energy and efficiency projects where underwriting may be geared more towards larger projects and/or groups of somewhat homogeneous investment opportunities.

NY Green Bank focuses on opportunities that create attractive precedents, standardized practices, and roadmaps that capital providers can willingly replicate and scale. As funders "crowd in" to a particular area within the sustainable infrastructure and clean energy landscape, NY Green Bank moves on to other areas that have attracted less investor interest.

As a key component of New York's Clean Energy Fund (CEF), NY Green Bank is structured to be self-sustaining in that it must ultimately cover its own costs of operation. The CEF is a \$5.3 billion commitment, representing part of Governor Andrew M. Cuomo's Reforming the Energy Vision (REV) strategy to advance clean energy growth and innovation and drive economic development across the State while reducing ratepayer collections.

NY Green Bank is a division of the New York State Energy Research and Development Authority (NYSERDA). NYSERDA is a public benefit corporation established in 1975 pursuant to Title 9 of Article 8 of the Public Authorities Law of the State of New York. NYSERDA is included in the State's basic financial statements as a component unit.

Pursuant to various Orders of the NYS Public Service Commission (Commission), the Commission authorized a total of \$1 billion in funded capitalization for NY Green Bank. NY Green Bank receives incremental capital contributions through NYSERDA upon executing new commitments of the authorized capital. In turn, NYSERDA funds these contributions either from a transfer of existing cash and investment balances (of certain Commission authorized programs), or from the CEF ratepayer collections held by the electric utilities, an approach known as "Bill As You Go" (BAYG). As of March 31, 2020, total ratepayer funded capitalization provided to NY Green Bank was \$618.8 million, resulting in an unfunded amount of \$381.2 million that will be subsequently provided through BAYG.

As part of U.S. generally accepted accounting principles (U.S. GAAP), the Governmental Accounting Standards Board (GASB) requires capital contributions made to NY Green Bank from NYSERDA's available cash and investment balances to be treated as transfers, while those derived directly from the BAYG approach be accounted for as non-operating revenues to NY Green Bank. As a result, additions to NY Green Bank's capital during the fiscal year equal the sum of "Capital contributions" under Non-operating revenues and "Transfers in" on NY Green Bank's Statement of Revenues, Expenses and Changes in Fund Net Position.

Notes to Basic Financial Statements March 31, 2020

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

NY Green Bank is presented as a proprietary fund. Proprietary funds are used to report business-type activities for which a fee is charged to external users for goods or services. NY Green Bank's proprietary fund financial statements are designed to provide readers with a broad overview of NY Green Bank's finances in a manner similar to a private-sector business and consist of a Statement of Net Position; a Statement of Revenues, Expenses and Changes in Fund Net Position; and a Statement of Cash Flows.

Net position restricted for specific programs in the proprietary fund financial statements is defined as the amount of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets.

The accompanying financial statements present only the activities of NY Green Bank and the results of its operations in conformity with U.S. GAAP and are not intended to present the financial position of NYSERDA. These financial statements include certain prior year comparative information but not at the level of detail required for a presentation in conformity with U.S. GAAP. Accordingly, such information should be read in conjunction with NY Green Bank's financial statements for the year ended March 31, 2020 from which the information was derived.

(b) Basis of accounting

Proprietary fund financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. Revenues resulting from exchange transactions are recognized when the exchange takes place. Revenues resulting from non-exchange transactions are recognized when all eligibility requirements (if any) have been met. Expenses are recognized when incurred.

(c) Program operating costs

Program operating costs consist of certain costs that can be directly attributed to the NY Green Bank function. Program operating costs include expenses such as professional service costs and staff travel.

(d) Indirect cost allocation method

NYSERDA incurs certain indirect costs (e.g., administrative salary expense, fringe benefit expense, and general and administrative expense) that are not directly associated with a specific function/program. Therefore, these costs are allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank.

Administrative salary expense is comprised of an allocation of NYSERDA's administrative and support unit salaries and fringe benefit expenses. The administrative salary and fringe benefit expenses allocated to NY Green Bank are included in Salaries and Benefits Expense. General and Administrative Expense includes costs such as rent, equipment and facility costs, and information technology costs allocated to NY Green Bank.

(e) Investments

Investments are recorded at fair value, which reflects quoted market prices for U.S. government obligations.

Notes to Basic Financial Statements March 31, 2020

(f) Loans and financing receivables

Loans and financing receivables are recorded at their cost basis. A provision for losses is established on any individual loan and financing receivable which:(i) is delinquent by more than 120 days on payment of principal or interest obligations; and (ii) indicates a deficiency in the present value of expected cash flows discounted at its effective interest rate, or a deficiency in the valuation of its collateral, as compared to its outstanding balance plus any accrued interest receivable. For the fiscal year ended March 31, 2019 provision for losses was \$0.4 million and is reflected as a reduction of Loans and financing receivables interest on the Statement of Revenues, Expenses and Changes in Fund Net Position. There was no provision for losses for the fiscal year ended March 31, 2020.

(g) Capital assets

NY Green Bank does not maintain capital assets on its Statement of Net Position, but instead is allocated depreciation expense on NYSERDA capital assets. Depreciation is allocated in proportion to direct salary expenses of each NYSERDA function/program, including NY Green Bank.

(h) Deferred outflows of resources and deferred inflow of resources

Deferred outflows of resources as presented represent a consumption of net assets applicable to a future reporting period. Deferred inflows of resources are defined as an acquisition of net assets applicable to a future reporting period. Deferred outflows of resources and deferred inflow of resources include differences between expected projected results and actual results related to NY Green Bank's allocated portion of NYSERDA's net pension and net OPEB liabilities, as well as an allocated portion of retirement plan contributions subsequent to the measurement date.

(i) NY State assessments

NY State assessments represent NY Green Bank's pro-rata share of fees assessed to NYSERDA by the State under Section 2975 of the Public Authorities Law (Governmental Cost Recovery System) for general governmental services, which are allocated in proportion to total expenses of each NYSERDA function/program, including NY Green Bank.

(i) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(k) Reclassifications

Certain amounts reported as of and for the fiscal year ended March 31, 2019 have been reclassified to conform with the amounts presented as of and for the fiscal year ended March 31, 2020.

(3) CASH AND INVESTMENTS

Pursuant to Public Authorities Law Section 1859(1), the Commissioner of the New York State Department of Taxation and Finance (Fiscal Agent) serves as fiscal agent for NYSERDA's cash and investments, maintaining such funds on NYSERDA's behalf and implementing investments subject to the Fiscal Agent's policies and with direction and authorization from NYSERDA. NY Green Bank investments are subject to an investment policy approved by NYSERDA's Board. The policy permits deposits with financial institutions approved by the Fiscal Agent and permits investments in: certificates of deposit of bank or trust companies located in New York State, obligations of New York State and the U.S. government and certain of their agencies, repurchase agreements subject to certain limitations, and money market funds subject to certain limitations.

Notes to Basic Financial Statements March 31, 2020

The following schedule presents NY Green Bank's cash and investments as of March 31, 2020. Fair value is measured using quoted market prices for U.S. government obligations. GASB Statement No. 72, Fair Value Measurement and Application, prescribes three approaches to measuring fair value and requires a government to use valuation techniques consistent with one or more of these approaches. The standard establishes a fair value hierarchy that categorizes the inputs to valuation techniques used to measure fair value into three levels. Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs – other than quoted prices included within Level 1 - that are observable for an asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. All NY Green Bank investments are valued based on Level 1 inputs.

			Weighted
			Average
		% of	Maturity
	Fair Value	<u>Total</u>	(months)
Cash and equivalents	\$ 14,531	8.8	N/A
U.S. Treasury Bills	53,730	32.7	5.6
U.S. Treasury Strips	96,100	58.5	<u>2.7</u>
Total	\$ 164,361	100.0	<u>3.7</u>
Current Portion	\$ 164,361		-

In addition to being subject to NYSERDA's investment policy, NY Green Bank is also subject to the same interest rate risk, concentration of credit risk, custodial credit risk for deposits, and custodial credit risks for investments.

Interest Rate Risk. NYSERDA's investment policy limits investment maturities to no longer than five years as a means of managing its exposure to fair value losses arising from increasing interest rates. Investment maturities are selected based on anticipated cash flow needs.

Concentration of Credit Risk. NYSERDA's investment policy limits investments with any single eligible banking institution to no more than 35% of its total investment portfolio, except as otherwise required by any policies and practices of the Fiscal Agent. As of March 31, 2020, NYSERDA did not have any investments with institutions that were individually in excess of 5% of total investments.

Custodial Credit Risk for Deposits. Deposits are exposed to custodial credit risk if the deposits are not covered by depository insurance or deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging institution's trust department or agent, but not in the name of NYSERDA.

In accordance with existing policies and procedures, the Fiscal Agent for NYSERDA monitors deposit balances for the purpose of determining collateralization levels. Collateral sufficient to cover all uninsured deposits is held at the Fiscal Agent's custodial bank.

Custodial Credit Risk for Investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of NYSERDA and are held either by the counterparty or the counterparty's trust department or agent, but not in the name of NYSERDA.

Fixed income investments owned directly by NYSERDA including those held on behalf of NY Green Bank, which trade in the U.S. markets, are held at NYSERDA's fiscal agent's custodian, in separate accounts, in the name of the Comptroller of the State of New York in Trust for NYSERDA.

Notes to Basic Financial Statements March 31, 2020

These securities are typically held in electronic form through the Federal Book Entry System and by the Depository Trust Company (DTC) and its subsidiaries acting as an agent of NYSERDA's fiscal agent's custodian bank.

The following is a summary of cash and investments and related committed capital as of March 31, 2020:

(Amounts in thousands)

Cash and	Committed
Investments	<u>Capital</u>
\$164,361	\$143,399

NY Green Bank's investment portfolio at any time consists of two components: committed capital and deployed capital. Committed capital relates to clean energy/sustainable infrastructure investments that NY Green Bank has legally executed, but where capital has not yet been deployed. This is supplemented by capital that has been deployed into NY Green Bank's clean energy transactions, pursuant to the terms of those arrangements. At March 31, 2020, NY Green Bank committed capital was \$143.4 million and deployed capital was \$441.6 million, as discussed further in note 4.

(4) LOANS AND FINANCING RECEIVABLES

Loans and financing receivables consist of sustainable infrastructure investments made by NY Green Bank into eligible technologies, consistent with its mission and investment criteria. These loans and financing transactions aim to mobilize private sector capital during the lifecycle of each investment, accelerate the deployment of economically and technically feasible clean energy projects in the State, provide financial returns to NY Green Bank, and contribute to New York's clean energy policy outcomes. NY Green Bank offers the following categories of capital solutions: construction finance, construction finance & term loan, term loans & investments (which may be debt or equity), warehousing/aggregation, and credit enhancements. NY Green Bank prices its products to reflect its credit underwriting, its risk position in the capital structure and pricing for comparable transactions, as well as internal portfolio return needs taking into account current market rates as well as commercial expectations of rates.

Loans and financing receivables at March 31, 2020 include the following:

	Number of <u>Transactions</u>	(Amounts in thousands) Loans and Financing Receivables Outstanding
Construction Finance	8	\$ 93,300
Construction Finance & Term Loan	6	34,191
Term Loan & Investments	18	247,391
Warehousing /Aggregation	<u>5</u>	<u>66,677</u>
Total	<u>37</u>	<u>\$ 441,559</u>

Notes to Basic Financial Statements March 31, 2020

Loans and financing receivables at March 31, 2020 mature as follows:

(Amounts in thousands)

Fiscal year		Construction			
ending	Construction	Finance &	Term Loan &	Warehousing	
March 31	<u>Finance</u>	Term Loan	<u>Investments</u>	/Aggregation	<u>Total</u>
2021	\$ 33,632	1,088	3,366	17,737	\$ 55,823
2022	32,371	1,232	66,675	8,923	109,201
2023	1,072	1,381	36,604	12,034	51,091
2024	12,142	1,503	8,255	20,478	42,378
2025	40	1,636	16,172	7,505	25,353
2026-2030	14,043	20,557	104,736	-	139,336
2031-2035	=	6,794	11,100	-	17,894
<u>2036-2040</u>	<u>=</u>	<u>=</u>	<u>483</u>	<u>=</u>	<u>483</u>
Total	<u>\$ 93,300</u>	<u>34,191</u>	<u>247,391</u>	<u>66,677</u>	<u>\$ 441,559</u>

(5) NON-CURRENT LIABILITIES

GASB Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68) requires the recognition by NYSERDA and, in turn, NY Green Bank, of its proportionate share of the net pension liability of the New York State and Local Employees' Retirement System, which is defined as the total pension liability less the plan's fiduciary net position.

NYSERDA and NY Green Bank implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Plans Other than Pensions (GASB 75), for the fiscal year ended March 31, 2019.

NY Green Bank's non-current liability represents the share of NYSERDA's net pension liability and net OPEB liability which is expected to be paid by NY Green Bank. Pension and OPEB related deferred outflows of resources and deferred inflows of resources are recognized by NY Green Bank to the extent they relate to NY Green Bank's share of the total amount recognized by NYSERDA as a whole.

Non-current liability activity for the year ended March 31, 2020 was as follows:

(Amounts in thousands)

	Beginning <u>Balance</u>	Additions	Reductions	Ending <u>Balance</u>
Net pension liability	\$234	1,873	(1,222)	885
Net OPEB liability	<u>485</u>	<u>677</u>	<u>(634)</u>	<u>528</u>
Total non-current liabilitie	s <u>\$719</u>	<u>2,550</u>	<u>(1,856)</u>	<u>1,413</u>

Notes to Basic Financial Statements March 31, 2020

(6) CONTINGENCIES

Risk Management

NYSERDA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. NYSERDA maintains commercial insurance coverage for each of those risks of loss. Management believes such coverage is sufficient to preclude any significant uninsured losses to NYSERDA. NYSERDA has not experienced any reductions in coverage and has not had any insurance settlements exceeding the coverage in the past three years. NY Green Bank is covered by NYSERDA's insurance policies.

Contingent Obligations

As of March 31, 2020, NY Green Bank has entered into three credit contracts which, consistent with their terms, have not been funded but contain contingent obligations. NY Green Bank capital is only drawn if a contingent obligation under the respective agreement is triggered. The amount of contingent obligations as of March 31, 2020 totaled approximately \$2.6 million.

Any draws made on the above contingent obligations would be due to be repaid pursuant to the terms of their respective agreements.

(7) SUBSEQUENT EVENTS

The COVID-19 outbreak is disrupting supply chains and affecting operations and the financial condition across a range of industries, including the clean energy sector. The extent of the impact of COVID-19 on NY Green Bank's operational and financial performance will depend on certain developments, including but not limited to the duration and spread of the outbreak, impact on our employees, impact on program partners and contractors, State policy directives, and actions by the Public Service Commission which may adjust current program activities, all of which are uncertain and cannot be predicted. As of June 23, 2020, the issuance date of the financial statements, the extent to which COVID-19 may impact NY Green Bank's future programmatic activities and accomplishments in uncertain, and is likely to impact future financial performance against previously established budgets, but is not likely to have a material adverse impact on NY Green Bank's financial condition.

(8) TRANSFERS – CAPITAL CONTRIBUTIONS (REDEMPTIONS)

Transfers for the year ending March 31, 2019 represent a \$52.9 million capital redemption of NY Green Bank's initial capitalization funded from Regional Greenhouse Gas Initiative revenues repurposed by NYSERDA to provide funding to support NYSERDA's statewide energy storage initiative. There were no transfers for the year ending March 31, 2020.

Members of the Authority
New York State Energy Research and Development Authority:

Ladies and Gentlemen:

We have audited the financial statements of New York State Energy Research and Development Authority and the stand-alone financial statements of the Authority's enterprise fund, NY Green Bank, (collectively, the Authority) as of and for the year ended March 31, 2020, and expect to issue our reports thereon dated June ___, 2020. Under our professional standards, we are providing you with the accompanying information related to the conduct of our audits.

Our Responsibility Under Professional Standards

We are responsible for forming and expressing opinions about whether the financial statements that have been prepared by management with the oversight of the Members of the Authority are presented fairly, in all material respects, in conformity with U.S. generally accepted accounting principles. We have a responsibility to perform our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*, issued by the Comptroller General of the United States of America. In carrying out this responsibility, we planned and performed the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. Because of the nature of audit evidence and the characteristics of fraud, we are to obtain reasonable, not absolute, assurance that material misstatements are detected. We have no responsibility to plan and perform the audits to obtain reasonable assurance that misstatements, whether caused by error or fraud, that are not material to the financial statements are detected. Our audits do not relieve management or the Members of the Authority of their responsibilities.

In addition, in planning and performing our audits of the financial statements, we considered internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control. We also have a responsibility to communicate significant matters related to the financial statement audits that are, in our professional judgment, relevant to the responsibilities of the Members of the Authority in overseeing the financial reporting process. We are not required to design procedures for the purpose of identifying other matters to communicate to you.

Audit Risk Assessment

Based on our risk assessment procedures, the following is a significant risk/financial statement level risk identified that may result in a material misstatement (due to fraud or error) in the financial statements of the Authority and has been addressed during the performance of our audits:

Risk of management override of controls – Management is in a unique position to perpetrate fraud because of management's ability to manipulate accounting records and prepare fraudulent financial statements by overriding controls that otherwise appear to be operating effectively. Although the level of risk of management override of controls will vary from entity to entity, the risk nevertheless is present in all entities.

Accounting Practices and Alternative Treatments

Significant Accounting Policies

The significant accounting policies used by the Authority are described in Note 2 to the respective financial statements..

Unusual Transactions

We noted no transactions entered into by the Authority during the year that were both significant and unusual, and that, under professional standards, we are required to communicate to you, or transactions for which there is a lack of authoritative guidance or consensus.

Qualitative Aspects of Accounting Practices

We have discussed with the Members of the Authority and management our judgments about the quality, not just the acceptability, of the Authority's accounting principles as applied in its financial reporting. The discussions generally included such matters as the consistency of the Authority's accounting policies and their application, and the understandability and completeness of the Authority's financial statements, which include related disclosures.

Management Judgments and Accounting Estimates

The preparation of the financial statements requires management of the Authority to make a number of estimates and assumptions relating to the reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources and the disclosure of contingent assets and liabilities at the date of the financial statements. Estimates also affect the reported amounts of revenues and expenses/expenditures during the reporting period.

We evaluated management's estimates, including possible management bias in developing the estimates, and determined that these estimates were reasonable in relation to the financial statements as a whole.

Audit Misstatements

There were no uncorrected or corrected financial statement misstatements identified during the audits of the Authority's March 31, 2020 financial statements.

Members of the Authority New York State Energy Research and Development Authority Page 3 of 3

Disagreements with Management

There were no disagreements with management on financial accounting and reporting matters that, if not satisfactorily resolved, would have caused a modification of our auditors' reports on the Authority's financial statements.

Management's Consultation with Other Accountants

To the best of our knowledge, management has not consulted with or obtained opinions, written or oral, from other independent accountants during the year ended March 31, 2020.

Significant Issues Discussed, or Subject to Correspondence, with Management

Major Issues Discussed with Management Prior to Retention

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with Members of the Authority and management each year prior to our retention as the Authority's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention for the current year audits.

Material Written Communications

Attached to this letter please find copies of the following material written communications between management and us:

- 1. Engagement letters
- 2. Management representation letters

Additionally, a separate management letter will be issued subsequent to the issuance of this letter under separate cover.

Significant Difficulties Encountered During the Audits

We encountered no significant difficulties in dealing with management in performing our audits.

Independence

We hereby confirm that as of June ___, 2020, we are independent accountants with respect to the Authority under relevant professional and regulatory standards.

* * * * * * *

This letter to the Members of the Authority is intended solely for the information and use of the Members and management of the Authority and management and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

KPMG LLP



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Members of the Authority
New York State Energy and Research Development Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the New York State Energy and Research Development Authority (a component unit of the State of New York) (the Authority) as of and for the year ended March 31, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated June _____, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG

Albany, New York June ____, 2020



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Members of the Authority
New York State Energy and Research Development Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of NY Green Bank, an enterprise fund of the New York State Energy Research and Development Authority (the Fund), which comprise the statement of net position as of March 31, 2020, and the related statements of revenues, expenses and changes in fund net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June ____, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG

Albany, New York June ____, 2020



June , 2020

Members of the Authority New York State Energy Research and Development Authority Albany, New York

Ladies and Gentlemen:

In planning and performing our audit of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of New York State Energy Research and Development Authority (the Authority), which collectively comprise the basic financial statements of the Authority, as of and for the year ended March 31, 2020, in accordance with auditing standards generally accepted in the United States of America, we considered the Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the basic financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, material weaknesses may exist that have not been identified.

This communication is intended solely for the information and use of Members and management of the Authority and others within the organization, and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

KPMG LLP

RESOLVED, that the Authority's Financial Statements and the Financial Statements of NY Green Bank as of March 31, 2020, as presented at this June 23, 2020 meeting are hereby approved and adopted as the financial reports required by Sections 1867(1) and 2800 of the Public Authorities Law.

PROGRAM PLANNING COMMITTEE

NYSERDA Compensation Schedule as of March 31, 2020 Pursuant to Public Authorities Law Section 2800

•		,		Total Compensation*
Name			Annual Salary	Year Ended
<u>Last</u>	<u>First</u>	<u>Title</u>	March 31, 2020	March 31, 2020
Adkins	David	Chief Information Officer	\$160,650	\$163,240
Allen	Kara	Sr Advisor	\$114,652	\$117,456
Baldyga	Todd	Director	\$170,030	\$173,235
Barton	Alicia	President and CEO	\$190,585	\$190,447
Bembia	Paul	Director	\$170,030	\$174,891
Berman	Joseph	Sr Advisor, Market Development	\$135,252	\$135,050
Borowiec	Joseph	Program Manager	\$138,763	\$141,379
Brown	Matthew	Program Manager	\$138,763	\$143,665
Burkhard	Ellen	Sr Advisor	\$129,398	\$131,842
Carey	Kevin	Director	\$138,192	\$133,838
Chappoz	Loic	Program Manager	\$135,959	\$138,721
Chaves	Laura	Asst Director	\$125,629	\$127,997
Chick	Mary	Director	\$165,218	\$164,897
Ciampa	Francis	Program Manager	\$131,207	\$131,108
Clark	Alistair	Director of NY Green Bank	\$158,100	\$0
Coll	Christopher	Director	\$142,926	\$145,099
Corcoran	Christopher	Program Manager	\$138,763	\$145,189
Costello	Peter	General Counsel	\$175,980	\$174,329
Coup	James	Asst Director	\$154,253	\$160,403
Crudele	Fred	Program Manager	\$119,851	\$120,972
Dean	Emily	Director	\$171,589	\$163,115
Dean	Janice	Deputy Counsel	\$154,253	\$159,127
DeRocker	Abbey	Program Manager	\$136,910	\$136,944
DiDomenico	Corinne	Asst Director	\$150,000	\$63,582
DiRamio	Michael	Asst Director	\$155,000	\$0
Doling	Jason	Asst Director	\$150,072	\$152,715
Drogin	Lindsay	Director of NY Green Bank	\$162,192	\$5,084
Egbert	Scott	Program Manager	\$138,332	\$138,125
Engel-Fowles	Victoria	Program Manager	\$138,763	\$143,079
Erle	Kim	Managing Director of NY Green Bank	\$184,000	\$41,029
Fagan	Michael	Director of Finance, Green Bank	\$162,192	\$167,923
Ferranti	Adele	Program Manager	\$138,763	\$143,648
Frank	Bradley	Program Manager	\$125,607	\$128,419
Frank	Gregory	Asst Director	\$138,763	\$143,079
Fusco	Karen	Program Manager	\$115,454	\$115,160
Geel	Laura	Program Manager	\$133,299	\$126,081
Glanton	Cheryl	Director	\$166,825	\$166,404
Gordon	Donovan	Director	\$152,393	\$153,329
Griffin	Alfred	President of the New York Green Bank	\$208,577	\$216,458
Hale	John	Sr Advisor for Energy Efficiency Markets	\$181,057	\$188,960
Hale	Kevin	Director	\$169,278	\$169,250
Hall	Christopher	Sr Advisor	\$136,910	\$136,644
Hammer	Hillel	Sr Advisor	\$142,800	\$141,802
Harmon	Victoria	Sr Advisor	\$168,986	\$171,884
Harris	Doreen	Vice President	\$173,400	\$177,123
Harris	Colin	Director of NY Green Bank	\$162,685	\$165,415
Hodges	Sven	Director Legal and Regulatory Aff, Green Bank	\$162,192	\$164,923
Joel	Max	Program Manager	\$138,763	\$147,719
Joseph	Janet	Sr VP Strategy & Market Dev	\$186,241	\$186,101
Joshi	Rohit	Director	\$170,030	\$173,108
Kaatz	Glen	Director	\$154,253	\$159,127
Kasson-Muzio	Amy	Program Manager	\$121,544	\$121,308
Keane	Peter	Deputy Counsel	\$154,253	\$157,161
Kessler	Andrew	Managing Director of NY Green Bank	\$183,677	\$186,374
Lampman	Gregory	Program Manager	\$138,763	\$143,379
Leach	Bradford	Program Manager	\$127,500	\$127,421

Lee	Brian	Managing Director, Risk & Compliance	\$184,540	\$192,417
Lepeniotis	Stefanos	Program Manager	\$138,763	\$141,327
Levy	Dana	Program Manager	\$138,763	\$143,084
Lochner	John	Vice President	\$173,400	\$126,254
MacDonald	Katherine	Asst Director	\$132,000	\$11,425
MacPherson	Wendy	Program Manager	\$138,763	\$143,080
Mahar	Peter	Controller & Asst Treasurer	\$154,253	\$162,052
Majumdar	Zigurts	Sr Advisor	\$125,000	\$18,269
Marcotte	Jaime	Program Manager	\$138,762	\$142,630
Mas	Carl	Director	\$162,004	\$161,591
McCartin	Amy	Director of NY Green Bank	\$170,030	\$116,648
McKeon Jr.	Robert	Web Manager	\$113,225	\$116,747
Meissner	Jennifer	Director	\$170,030	\$175,191
Mellon	Andrea	Program Manager	\$138,763	\$143,079
Moore	Jason	Managing Director, Investment & Portfolio Mgt	\$177,000	\$175,328
Moriarta	Courtney	Director	\$142,800	\$142,692
Moyer	Susan	Director	\$154,253	\$159,052
Muller	Katherine	Vice President	\$173,400	\$177,743
O'Connor	Christopher	Program Manager	\$130,194	\$129,959
Olmsted	Peter	Chief of Staff	\$133,459	\$110,221
O'Shei	Patrick	Director	\$171,589	\$176,467
Peck	Mary	Director of Internal Audit	\$150,055	\$149,831
Peterson	Alyse	Sr Advisor	\$129,398	\$131,552
Pitkin	Jeffrey	Treas & Internal Contr Officer	\$180,987	\$180,856
Porubcan	Ashley	Program Manager	\$122,463	\$83,650
Rabito	Donna	Director	\$154,253	\$159,051
Rambacher	Sarah	Program Manager	\$124,540	\$127,248
Reed	Michael	Program Manager	\$127,436	\$130,137
Richards	Priscilla	Program Manager	\$138,763	\$143,079
Ruder	Adam	Asst Director	\$137,720	\$134,803
Sandbank	David	Vice President	\$173,400	\$177,982
Scherer	Erich	Sr Advisor	\$138,640	\$144,696
Schryer	Kimberlie	Program Manager	\$138,762	\$141,377
Shimazu	Michael	Sr Advisor for Business Growth and Innovation	\$154,253	\$154,136
Smith	Scott	Program Manager	\$138,763	\$143,079
Thornton	Claudette	Asst Director	\$119,345	\$119,114
Tito	Bradford	Program Manager	\$138,763	\$142,640
Treanor	Brian	Asst Controller	\$138,763	\$143,079
Trybulski	Stanley	Director	\$147,177	\$152,917
Tyler	Kelly	Director	\$170,030	\$153,119
Ulmer	Vanessa	Sr Advisor	\$138,763	\$142,210
Vestal	Matthew	Sr Advisor	\$109,956	\$109,074
Williams	John	Vice President	\$175,980	\$179,926

^{*} For some employees, total Compensation includes performance-based lump sum payments and payments under State fringe benefit plans not included in annual salary. Pursuant to NYSERDA's personnel policies, all employees whose salaries are at the maximum of their Management/Confidential salary grade range are eligible to receive an annual performance-based lump sum payment, awarded as a percentage of salary from a fixed pool of funds budgeted and approved for such funds. For some employees, compensation was lower than annual salary reflecting salary adjustments which became effective during the year or reflect compensation payments for less than a full year.

Vitae for NYSERDA Employees Included on the Compensation Schedule

Alicia Barton

Alicia Barton was appointed as NYSERDA's President and CEO in June 26, 2017. In this position, she oversees all programs and activities of NYSERDA. Prior to joining NYSERDA, Ms. Barton held public and private sector leadership roles advancing clean energy projects and companies for over a decade including serving as co-chair of the Energy and Cleantech Practice at Foley Hoag, LLP, chief of operations of the Global Utility business unit at SunEdison and chief executive officer of the Massachusetts Clean Energy Center (MassCEC), a publicly supported agency that funds and accelerates the development of the clean energy sector. Prior to serving as CEO of MassCEC, Ms. Barton was the Deputy Commissioner for Policy and Planning for the Massachusetts Department of Environmental Protection (MassDEP); Assistant Secretary for Environmental Review and Director of the Massachusetts Environmental Policy Act (MEPA) office; and Deputy General Counsel at the Executive Office of Energy and Environmental Affairs (EEA). Ms. Barton currently serves on boards of several organizations, including Greentown Labs, the Environmental League of Massachusetts, Efficiency Forward, and the Advisory Board for the New England Women in Energy and Environment (NEWIEE). She holds a bachelor's degree in Natural Resources from The Ohio State University and a juris doctor degree from Boston College Law School.

Janet Joseph

Janet Joseph is Senior Vice President for Strategy and Market Development. Ms. Joseph leads NYSERDA's Market Development activities, designing and implementing interventions that accelerate the scale and penetration of on-site, behind-the-meter energy efficiency and clean energy solutions in the commercial, industrial, government, multifamily, and single-family residential sectors. Janet has held a variety of technical and policy positions at NYSERDA over the past 27 years. She has spearheaded initiatives to develop renewable power in New York, build a cleantech start up industry, and identify greenhouse gas reduction strategies that provide benefits for New Yorkers. Prior to joining NYSERDA, Janet was a research scientist at Battelle Pacific Northwest Laboratories. Janet has also worked as an environmental consultant for Booz-Allen and Hamilton in Washington, D.C. Janet Joseph is on the Boards of the Northeast Energy Efficient Partnerships, Northeast Clean Energy Council Institute, and RPI Center for Future Energy Systems. Janet received the 2015 Public Service Excellence Award from the State Academy for Public Administration and was voted one of the top ten Clean Tech leaders in New York in 2013. Janet has a Master's degree in Environmental Chemistry from the University of Maryland.

Jeffrey Pitkin

Jeffrey Pitkin was appointed treasurer of NYSERDA and has held this position since 2001. In this position, Mr. Pitkin is responsible for ensuring the timeliness and accuracy of internal and external financial reporting; supporting organizational transparency, accountability, and stewardship; and ensuring effective policies and practices for personnel, information technology, information security, contract management, operational transformation and LEAN, and facility management to support NYSERDA's objectives. He is also responsible for prudently investing NYSERDA's funds and for issuing bonds on behalf of New York State's investor-owned utilities to finance costs eligible for tax-exempt bond financing. Mr. Pitkin is also the Board-appointed internal control

officer, assisting NYSERDA's management to maintain effective policies and procedures to ensure orderly and efficient operations to meet organizational objectives; prevent fraud, waste and abuse; ensure adherence to laws, regulations and contractual agreements; and maintain reliable financial and management reporting. Mr. Pitkin served as NYSERDA's controller and assistant treasurer from 1991 to 2001. Prior to joining NYSERDA, he was controller for Trans World Music Corporation and was a senior accountant for Ernst & Young. Mr. Pitkin was previously a certified public accountant and received a bachelor's degree in accounting from Siena College in New York.

Peter Costello

Peter Costello serves as General Counsel and Secretary of the New York State Energy Research and Development Authority (NYSERDA). Mr. Costello was appointed Acting General Counsel at the end of June 2019. In October 2019, Mr. Costello was named NYSERDA's General Counsel and appointed Secretary to the Authority in January 2020. Mr. Costello serves as the chief legal officer for the Authority, and is responsible for the overall direction and supervision of NYSERDA's legal department and all legal matters concerning the Authority, including advice and counsel on laws, rules, and regulations governing clean energy development and operations of the Authority. As a member of NYSERDA's executive team, he also participates in formulating and implementing strategy and policy for the Authority. Mr. Costello joined NYSERDA in February 2009, working in the Authority's Counsel's Office for more than five years. He focused primarily on supporting NYSERDA's research and development programs, and real estate matters, including the development of the Saratoga Technology + Energy Park ("STEP"). Following its formation, he was assigned to provide legal support to NY Green Bank and participate as a member of its senior management team. In January 2015, Mr. Costello was appointed as Managing Director for Legal and Regulatory Affairs for NY Green Bank, where he served until his appointment as General Counsel of the Authority. At NY Green Bank, Mr. Costello's responsibilities included providing legal advice and counsel with respect to strategic initiatives, operations, transactions, regulatory issues, and general corporate affairs, as well as managing NY Green Bank's internal legal team and its relationships with outside counsel firms. Before joining NYSERDA, Mr. Costello worked in a transactional capacity at a number of private law firms, including LeBoeuf, Lamb, Greene & MacRae LLP, and its spin-off Lowe, Fell & Skogg, LLC, where he became a partner. In private practice, Mr. Costello focused on various corporate and real estate matters, including merger, acquisition and disposition; financing; land use and development; leasing; entity formation, management and operation; and technology transfer and software licensing. He also served as responsible outside counsel for one of the U.S.'s Big Three auto manufacturer's regional real estate and dealership development operations, including mergers and acquisitions; network planning; site control; and incentive programs. Mr. Costello has a Bachelor of Arts from McGill University and a Juris Doctor from the University of Colorado School of Law.

David Adkins

David Adkins is the Chief Information Officer (CIO) at NYSERDA. He is responsible for managing the Authority's Information Technology, Data Governance/Architecture and Web Operations units and is responsible for implementing and maintaining technology systems. Prior to joining NYSERDA in 2018, Mr. Adkins oversaw End User Services for NYS Information Technology Services, supporting over 120,000 end-users across the executive branch agencies. Prior to State service, he was the Chief Technology Officer (CTO) for the New York State Bar Association. He was also the Director of Information Technology for the New York State United

Teachers (NYSUT). He currently teaches undergraduate and graduate courses in Information Technology and Cybersecurity. Mr. Adkins received a Bachelor of Science in Telecommunications from Syracuse University and a Master of Business Administration and Doctorate in Information Science from the University at Albany.

Kara Allen

Kara Allen is Senior Advisor for Policy and Regulatory Affairs at NYSERDA. In this role, she leads the development of the New York State Energy Plan and Biennial Report. She advises on New York's participation in the Regional Greenhouse Gas Initiative and Transportation and Climate Initiative and manages adaptation research projects to analyze the impacts of climate change to New York's bulk electric system and New York City's low-income multifamily housing. She serves as a member of the New York City Climate Adaptation Task Force Energy Working Group, the State Hazard Mitigation Planning Team, and the Governor's Environmental Justice and Just Transition Working Group. Kara came to NYSERDA from Governor Andrew M. Cuomo's office where she served as Assistant Secretary of Energy. As the Assistant Secretary, she oversaw the operations of NYSERDA, the Department of Public Service, and the power authorities of New York and Long Island. Prior to moving to New York, Kara was the Executive Director of the Sustainable Energy and Environment Coalition (SEEC), a coalition of House members dedicated to advancing policies pertaining to clean energy innovation and job creation, environmental protection, and global climate change. During her time in Washington, D.C., she also served as Assistant Director for Vanderbilt University's Office of Federal Relations, where she focused on general science and higher education policy. Before that, she worked for Rep. Jim Cooper (TN-05), handling energy and environmental issues. She currently serves on the board of Solar One and the Brooklyn Community Board 6's Parks / Recreation / Environmental Protection Committee. She is also a Truman National Security Project Political Partner. A native to Silver Spring, Maryland, she holds an M.S. in Environmental Science and Policy from Johns Hopkins University and a B.S. from Vanderbilt University in Political Science and U.S. History.

Todd Baldyga

Todd Baldyga is Director for Industrial and Agriculture in Market Development. He is responsible for managing a team of staff and consultants to address energy efficiency and process improvements in the industrial, agriculture and data center markets. During his career at NYSERDA, Todd has been involved in the creation and implementation of many technical and financial energy efficiency programs totaling over \$500 million to support the commercial, institutional, municipal and industrial sectors. Todd led a team to implement over \$100 million of clean energy projects under the American Recovery and Reinvest Act. Prior to joining NYSERDA, Todd was employed by Massachusetts Electric Company for 10 years and held various positions and responsibilities as a distribution power engineer. Todd has a B.S. in Electrical Engineering from Western New England College.

Paul Bembia

Paul J. Bembia is the Director of the West Valley Site Management Program at the Western New York Nuclear Service Center in Cattaraugus County. As Director, Paul is responsible for planning, implementing, and overseeing NYSERDA's activities at the Center, which include the safe and compliant management of the State Licensed Disposal Area and Retained Premises, and

representing NYSERDA and New York State's interests in the West Valley Demonstration Project. Paul joined NYSERDA in 1990, and has held a variety of technical and management positions at NYSERDA over the past 27 years, including Project Manager, Senior Project manager, Program Manager and Program Director. Prior to joining NYSERDA, Paul was a staff geologist at Ecology and Environment, Inc., and a staff geochemist for the U.S. Nuclear Regulatory Commission in Washington, D.C. Paul has a Master's degree in Geological Sciences from SUNY Binghamton, and a Bachelor's degree in Geology from SUNY Fredonia.

Joseph Berman

Joseph Berman is the Senior Advisor of Market Development for NYSERDA. Appointed to his current role in 2018, Mr. Berman is responsible for advising across all elements of the Market Development portfolio, with a core focus in the Commercial and Industrial program space. An accomplished coalition builder with extensive experience in developing and guiding high-value relationships among industry, government and the NGO community, Mr. Berman has been tasked with spearheading NYSERDA's efforts to identify and secure strategic market partnerships across both the private and public sectors to facilitate rapid, efficient, and cost effective deployment of program resources. Mr. Berman is a multiple award-winning, innovative, national sustainability expert with over a decade of corporate experience leading initiatives that enhance brand identity, save operational cost, improve organizational efficiency, eliminate waste, mitigate risk, and reduce environmental impacts. Prior to his tenure at NYSERDA, Mr. Berman was the Sustainability and Corporate Responsibility Senior Consultant and Technical Expert for Arcadis, and in that capacity led sustainability efforts for the company in North America and oversaw a community of practice of 250 professional area experts across a broad spectrum of environmental disciplines. In the 7 years before his role at Arcadis, Mr. Berman built and directed the sustainability and corporate social responsibility platform for Price Chopper Supermarkets. During that time Mr. Berman, a LEED AP BD&C since 2009, successfully project administered over 1 million sq.ft. of 3rd party certified commercial green building construction and envisioned and oversaw the buildout of one of the largest privately held, interstate electric vehicle charging station ecosystems in the North East of the United States. In 2004 Mr. Berman graduated with a Bachelor of Arts Independent Major in the Art, History, and Culture of Ancient Eurasia from the University of Massachusetts at Boston, and in 2006 he graduated with a Master of Arts in the Archaeology of the Eastern Mediterranean and Middle East from University College London, Institute of Archaeology.

Joseph Borowiec

Joseph Borowiec is the Program Manager and Team Lead for Advanced Buildings at NYSERDA, and has been with NYSERDA for 16 years. Joe is responsible for leading a team focused on making investments in innovations that improve the efficiency and resiliency of existing and new buildings in NYS, and enable smart buildings to actively manage energy use and interact with the power grid. Joe is a member of the Association of Energy Engineers, Illuminating Engineering Society of North America, and serves on the Gas Technology Institute Public Interest Advisory Committee. Prior to joining NYSERDA, Joe was employed for 21 years as a research engineer at General Electric's Global Research Center. Joe holds a BS in Electrical Engineering, a MS in Computer Science, and an MBA in International Management from Union College. He has 21 United States Patents.

Matthew C. Brown

Matt is a Program Manager in the New Construction Team at NYSERDA. In this role, he supervises a team that delivers market transforming and incentive programs across all sectors. At NYSERDA, Matt previously managed a business process improvement team, commercial incentives and services group and led programs that provided \$100 million of funding for clean energy projects funded via ARRA, including energy efficiency, renewable energy and clean fleet projects. Matt has also created and led multiple market transformation programs and efforts during his time at NYSERDA. This has included a K-12 schools sector specific effort that achieved an average energy efficiency improvement of 22% over a six year period, Commissioning and Retro-Commissioning program, benchmarking, plug load reduction effort, and several other technology specific initiatives. Matt received a BA from St. Lawrence University and has a Master's in Public Policy from Rockefeller College.

Ellen Burkhard

Dr. Ellen Burkhard is a Senior Advisor for the New York State Energy Research and Development Authority's Environmental Research Program. Ellen manages projects that evaluate energy efficiency, emissions, and the resulting air quality and health effects due to energy production, storage, transport, and use. Ellen works with universities and research institutions focused on long-range transport of pollutants from upwind sources; localized airquality effects of high-emitting sources; photochemical and atmospheric processing of pollutants; pollutant trends analysis during periods of emissions changes due to implementation of energy policies, environmental regulation, or changing markets; and cardiovascular and pulmonary effects from air pollution exposure. Ellen earned a Ph.D. in Environmental Health and Toxicology from the SUNY Albany School of Public Health.

Kevin Carey

Kevin Carey is Director of Governmental Affairs at NYSERDA. In this role Kevin is responsible for developing, implementing, and managing NYSERDA's government affairs strategies, activities, and policies involving matters of state, federal and local government, specifically including issues related to legislation and regulation.

Kevin has been with NYSERDA since June 2009. In this capacity, he has played a leading role in the coordination and development of NYSERDA's legislative initiatives and engagement, working with program teams, the Executive Chamber, other agencies, and stakeholders. Kevin has an in-depth background and expertise in governmental matters, and a diverse 30+ year career in both the public and private sector. For over ten years he worked in the Fixed Income Securities Market where he focused on marketing, trading, and evaluating municipal bonds. Kevin served as Assistant Commissioner for Public/Private Partnership at the NYS Office of Parks, Recreation and Historic Preservation while also serving as the Executive Director of the Natural Heritage Trust, a public benefit corporation. In this role he spearheaded efforts, working with public and private partners, to establish Nature Centers, new State Park facilities, recreational programs and coordinated fund raising initiatives. Kevin was recognized with a New York State Parks Distinguished Service Award during his tenure at NYS Parks. Kevin earned a Bachelor of Arts Degree in Economics from Le Moyne College, Syracuse N.Y.

Loic Chappoz

Loic Chappoz is the Program Manger for the Multifamily team at NYSERDA, a team charged with implementing strategies and interventions that overcome market barriers, animate the market, encourage private capital and investment, and accelerate the scale and penetration of clean energy and energy efficiency in the multifamily buildings through New York. Loic joined the NYSERDA Multifamily team in 2014. Prior to joining NYSERDA, he worked as an independent consultant on energy efficiency policies in France, as a fuel efficiency specialist in the airline industry, and as a commercial pilot for ten years. Loic Chappoz holds a Master of International Affairs in Energy and Environmental Policy from the Sciences Paris School of International Affairs.

Laura Chaves

Laura Chaves is Assistant Director of Human Resources and is responsible for managing and/or implementing various HR functions which include; employment, compensation, performance management, diversity management, HRIS/HRMS, and human resource policies and procedures. Prior to joining NYSERDA in April 2008, Laura served as Human Resource Manager for MapInfo and worked in various HR roles at Microsoft and Genetics Institute. Laura holds a B.S. in Human Resource Management from the University of Massachusetts at Boston.

Mary Chick

Mary Chick is the Director of Market Insights, where she and her team ensure NYSERDA's programs and strategies are rooted in actionable insights about the economics and decision making of customers, partners and markets where NYSERDA operates. Market research and analytics is foundational to NYSERDA's work to inform and develop strategies that overcome market barriers, and animate the market to increase the scale and adoption of clean energy. Prior to joining NYSERDA in 2009 as a Senior Marketing Project Manager, Mary spent more than 20 years in various senior level positions at DDB Worldwide Communications, Inc. where her focus was building strong brands, managing cross-functional teams, and using market research to guide and implement integrated marketing programs. Mary earned a Bachelor's degree in Business Administration, with concentrations in Marketing and Statistics, from Bowling Green State University.

Frank Ciampa

Frank is responsible for managing oversight for a strategic planning team that seeks to qualify and initiate policy interventions to promote clean energy market development in New York State. This includes the analysis of energy issues like climate change, energy infrastructure, costs and economic development in the context of statewide policy. As leader of the Policy Development team, Frank provides operational oversight for projects to understand dynamics of New York's clean energy economy, quantify the state's GHG emissions inventory, participate in carbon and air pollution markets (e.g., RGGI and CSAPR), as well as regulatory proceedings intended to rethink electric and nat. gas utility business models for the "utility of the future". Together, these topics (and many more) are all contributing to progress on the State's ambitious goals for 2030 to reduce GHG emissions by 40% from 1990 levels, increase renewables to have them contribute 50% of electric generation, and decrease energy consumption in buildings by 600 trillion BTUs. Frank has over 10 years of experience in energy policy, clean technologies, and corporate sustainability. Before joining NYSERDA, Frank worked in the private sector as Manager, Sustainability Policy Development with KEO International Consultants in Abu Dhabi. Prior to his

expat posting, he worked in Boston for Clean Asset Partners Corporation and MSCI, Inc. Throughout his career, Frank's key responsibilities have focused on regulatory impact assessments, stakeholder engagement, quality assessment programs, market analysis, regulatory review, data collection, gap analysis, forecasting, and implementing custom go-to-market strategies for sustainability services. Frank earned his Bachelor's degree in Earth and Environmental Sciences from University of Rochester, and his Master's degree in Sustainability and Environmental Management from Harvard University.

Alistair Clark

Alistair Clark is a Vice President at NY Green Bank, where he supports the origination, evaluation, and execution of scalable clean energy and efficiency project investments across New York State. Prior to joining NY Green Bank, Mr. Clark worked as an associate within Jones Lang LaSalle's Investment Banking/Debt Capital Markets team where he provided underwriting, market research, and materials production support for commercial real estate debt transactions including debt financings, loan sales, and loan restructurings. He participated in the advisory and closure of billions of dollars worth of performing and nonperforming commercial loan dispositions across all property types while working in every phase of the deal process. He also worked for a Korea-based private equity and advisory firm focused on the clean energy space. During his MBA, he worked in London with Taylor-DeJongh, a private merchant bank specializing in energy and infrastructure project finance advisory. Before business school, he worked at Goldman Sachs Asset Management and also spent time in Hong Kong as a mergers and acquisitions intern for Quam Capital, a specialty finance firm focused on China. Mr. Clark was named one of the world's "Top 99 Under 33 Foreign Policy Leaders" by The Diplomatic Courier and Young Professionals in Foreign Policy. He was also an adjunct professor at Marymount Manhattan College. Mr. Clark holds a bachelor's degree in economics and political science from Vanderbilt University, a master's degree in international political economy and development from Fordham University, and a Master of Business Administration degree from IE Business School in Spain.

Christopher Coll

Chris is a Program Manager and the Team Lead for the Low-to Moderate-Income group at NYSERDA, which is responsible for developing strategies, proposing policy, and coordinating across all sector areas within NYSERDA and various New York State organizations to streamline and improve the effectiveness of the delivery of clean energy services to low-to moderate-income households. Chris holds a bachelor of arts degree in political science from SUNY New Paltz in addition to a master of arts degree in public affairs and policy from the Rockefeller College of Public Affairs and Policy at the State University of New York at Albany.

Chris Corcoran

Chris Corcoran is the Program Manager and Team Lead for the Products program, a team charged with implementing strategies and interventions that accelerate the adoption of emerging or underutilized energy-relevant products. The Products team develops strategies to optimize energy benefits from new and replacement purchase decisions based on an understanding of market readiness as well as NYSERDA's potential to accelerate adoption from targeted and temporary support while leveraging opportunities across the full portfolio of NYSERDA programs to achieve goals. Chris joined NYSERDA in 2014, working with the Commercial team focusing on Demand Management and Existing Facilities programs. Prior to joining NYSERDA, he worked for PG&E

as an Expert Product Manager for the Commercial Segment and Program Manager for Lighting. Chris earned a Bachelor's degree in Political Science and Rhetoric from University of California, Berkeley, and an MBA from University of California, Davis.

Dave Coup

Dave Coup is an Assistant Director for Modeling and Analytics in the Energy and Environmental Analysis (EEA) group. Dave is responsible for energy, environmental and economic modeling and forecasting activities that support statewide energy planning and policy analysis. During the past thirteen years, Dave played a major role in the development and implementation of numerous aspects of the Regional Greenhouse Gas Initiative ("RGGI") including auction design research, electricity system modeling, macroeconomic modeling, and program planning related to the use of New York's allowance auction proceeds. He also coordinated two important studies <u>for</u> New York's Off-shore Wind Master Plan. Dave has also represented end-use customers on various committees of the New York Independent System Operator and participated in the development of components of the 2015 New York State Energy Plan, including a section on fostering the growth of the Clean Energy Economy in New York. Prior to joining EEA he worked in NYSERDA's Research and Development group and spent eleven years working for General Electric. He holds a B.S. in industrial and systems engineering from The Ohio State University and a Master's degree in environmental management and policy from Rensselaer Polytechnic Institute.

David Crudele

Dave Crudele is Program Manager for Smart Grid Systems & Distributed Energy Integration. In this role, Dave leads a team focused on making investments in technology to modernize the electric grid with the goal of making the New York State electric grid cleaner, more reliable, and more affordable. Dave is the co-chair of the New York State Interconnection Technical Working Group which brings together power engineering experts from New York utilities and distributed energy project developers to create consensus solutions to the technical challenges of integrating distributed energy resources with the electric grid. Dave also lead the NY Prize Community Microgrid Program which is identifying and addressing the challenges of building energy efficient and resilient microgrids in New York. Before joining NYSERDA, Dave performed electric grid research and development and consulting with Nova Energy Specialists and the Electric Power Research Institute (EPRI).

Emily Dean

Emily Dean is Director of Market Development. In this role, she leads the development and implementation of energy efficiency programs and initiatives across the residential, low moderate income, local government & communities, industrial, agricultural, and workforce development sectors. Before joining NYSERDA in July 2016, Ms. Dean was the Deputy Assistant Commissioner for Energy Management at the New York City Department of Citywide Administrative Services. In this role, she served as the City's lead in developing strategies and programs to reduce City government operations' carbon footprint and oversaw the energy efficiency capital program for the City's 4,000+ buildings. Prior to her appointment as Deputy Assistant Commissioner, Ms. Dean led the City's solar and clean distributed generation programs. Ms. Dean earned her Bachelor of Arts in Urban Design from New York University and her Master of Public Administration with a focus on Environmental Policy from Columbia University. She

serves on the Board of the Building Energy Exchange and is a Certified Energy Manager by the Association of Energy Engineers.

Janice Dean

Janice Dean is Deputy Counsel at the New York State Energy Research and Development Authority (NYSERDA), where she advises clean energy programs and handles litigation and investigations. She is also counsel to the West Valley Nuclear Service Center, the site of the nation's only privately-operated spent fuel reprocessing facility, as it undergoes decommissioning. In that role, she guides legal compliance at the site with federal and state environmental laws, the U.S. Nuclear Regulatory Commission Part 50 operating license, and state licensing and permitting requirements. Janice is a member of the Board of Advisors of the New York City Environmental Law Leadership Institute, and has presented and written on issues including climate change and the State Environmental Quality Review Act, environmental issues in bankruptcy, and the State as a citizen actor. Janice was recognized by two New York attorneys general for her contributions to environmental law in New York State, by the American Bar Association as a Distinguished Environmental Advocate, and received the 2019 Robinson Award from the Elisabeth Haub School of Law. She is a graduate of the University of California, Berkeley, and the Elisabeth Haub School of Law at Pace University.

Abbey DeRocker

Abbey DeRocker is Program Manager for the Large-Scale Renewables team and is responsible for executing multifaceted programs which serve to aid in the development and effective operation of large-scale renewable resources to satisfy New York's renewable energy and environmental goals. Ms. DeRocker's primary focus is to run the Renewable Energy Standard (RES) procurements, administer the large-scale renewable agreement portfolio resulting from RES and prior procurements, develop and implement processes leading to increased penetration of largescale renewable resources in New York, and improve the total value proposition of these resources. Prior to joining NYSERDA in 2016, Ms. DeRocker served as Manager of Risk Analytics and Manager of Enterprise Risk Management with Southern California Edison where she led the implementation of three major initiatives including the Enterprise Risk Management program, Greenhouse Gas Trading, and Acid Rain Program Trading. In these roles, she led power purchase and renewable attribute agreement negotiation, involving various technologies including conventional and renewable power, demand response, energy efficiency, distributed generation, and energy storage. Prior to moving to Los Angeles, Ms. DeRocker served as the Manager of the Valuation Review Group for the Commodities division of Morgan Stanley in Purchase, New York. In her last role, she presented the Global Valuation results to the Commodities business unit and Institutional Securities Group Management and led the North American Electricity, North American Natural Gas, Emissions and Global Oil Liquids valuation teams. Ms. DeRocker holds a Bachelor of Arts degree in economics with a concentration in environmental science from Bates College.

Corinne DiDomenico

Corinne DiDomenico joined NYSERDA as Assistant Director of Large-Scale Renewables focusing on cross cutting policy development activities, Clean Energy Standard implementation, programmatic reporting, and oversees the New York Generation Attribute Tracking System. She supports the policy and market development activities, and the design and implementing interventions that accelerate the scale and penetration of large-scale renewables in New York.

Prior to joining NYSERDA, she managed the long-term contracting procurements for clean energy for National Grid, leading the strategic execution of a \$16 billion portfolio that included over 2,000 MW of clean energy; including offshore wind, land-based wind, hydro, solar, and anaerobic digestion. From 2005 to 2009, she held various positions in Power Engineering, Generating Plant Operations (Steam and Gas Turbine), and Maintenance Services. Corinne received a Bachelor of Science in Civil Engineering from Drexel University and a Master of Business Administration from CUNY Baruch.

Michael DiRamio

As Assistant Director of Energy Affordability and Equity, Michael DiRamio co-directs strategy, policy and engagement related to low-income and disadvantaged communities across the Authority in support of energy justice and affordable, clean energy solutions for all New Yorkers. Prior to joining NYSERDA, Michael was a manager in the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy focused on interagency and crossoffice collaboration with state and local governments on clean energy solutions for low income communities. Prior to joining DOE, Michael worked in the private sector where he managed low-income and market rate utility energy efficiency programs in the Midwest and advised the U.S. Environmental Protection Agency and Department of Labor, and the State of Michigan, on major energy efficiency and renewable energy policy initiatives and investments. He also advised national philanthropies on social impact investments, co-founded and led community nonprofit organizations, and worked for over 10 years to advance environmental sustainability and economic justice for residents in the Detroit area. Michael began his career working on energy and environmental issues at a major architecture and planning firm in Boston. He earned an M.S. in environmental policy from the University of Michigan and a B.A. in government from Wesleyan University.

Jason Doling

Jason Doling is Program Manager for Energy Storage focused on removing stall points that prevent storage deployment, particularly in grid storage applications. Objectives include flattening peak demand, enabling flexible renewable generation resources, increasing electric system utilization and resiliency, and reducing greenhouse gas emissions. At NYSERDA, Jason helped establish the New York Battery and Energy Storage Technology Consortium (NY-BEST) which now numbers more than 150 members, and plays a key role in advancing energy storage technologies. Prior to joining NYSERDA in 2009, Jason was with NYSTAR, the New York State Foundation for Science, Technology and Innovation which focuses on innovation-based economic development where he served as Director of Business Development. Jason began his career at PricewaterhouseCoopers and holds a BS from the University at Albany, SUNY.

Lindsay Drogin

Lindsay Drogin is the Director of Investment Administration and Portfolio Support at NY Green Bank where she concentrates on the execution of new business and the monitoring of the existing portfolio. Prior to joining NY Green Bank, Ms. Drogin served as an investment banker with FINRA Series 79 & 63 licenses at a major international bank where she focused on the origination and execution of high yield and structured finance transactions across industries including the infrastructure and energy sectors while maintaining a portfolio of leveraged loans. During the four years before joining NY Green Bank, Ms. Drogin also devoted her energies to extensively mentor early stage companies in various cleantech verticals such as

waste, water and clean energy and encouraged the development of programs that serve such companies. Ms. Drogin earned a Master of Business Administration degree in Finance from New York University's Stern School of Business, a bachelor's degree in Economics from Queens College of the City University of New York and a Professional Certificate in Energy Finance from New York University where she discovered a passion for clean energy and sustainable infrastructure.

Scott Egbert

Scott Egbert joined NYSERDA in June 2017 as Program Manager, Renewable Optimization and Energy Storage Innovation. Mr. Egbert is responsible for managing NYSERDA's investment portfolio in Renewable, DER, and Energy Storage Technology and Business Innovation. Mr. Egbert has over 20 years of experience in executive management, product delivery, product engineering, and business development. Previously, Mr. Egbert served as Manager, Business Development at GE Fuel Cells, Manager, New Product Development at GE Energy Storage, Managing Director, Plug Power Energy India, and Director of Engineering and Development at Plug Power Inc. Mr. Egbert holds a Bachelor of Science degree in Electrical Engineering from New Jersey Institute of Technology.

Victoria Engel-Fowles

Victoria Engel-Fowles is the Program Manager for the Market Characterization and Evaluation team. In her role, Victoria oversees all aspects of NYSERDA's program evaluation work and, with her team, engages with internal and external stakeholders to develop and implement multi-year market, impact and strategy evaluation plans to provide actionable insights to NYSERDA teams, credible outcome measurements, and cost-effective, high-value deliverables. In particular, her team is responsible for assessing and quantifying both direct and indirect energy impacts of initiatives. Victoria joined NYSERDA in 2001; prior to becoming Program Manager, she focused on market evaluation where she worked to build evaluation strategy for a variety of programs and portfolios. Victoria has a BA in Environmental Studies and Anthropology from St. Lawrence University and a MBA from the College of Saint Rose.

Kim Erle

Kim Leinwand Erle is Managing Director at NY Green Bank, a division of NYSERDA. In this role, Ms. Erle oversees Strategy, Impact & Investor Relations. Prior to joining NY Green Bank in December 2019, Ms. Erle worked as an independent strategy consultant providing thought leadership to senior executives in business strategy and organizational change. Previously, Ms. Erle was a Portfolio Manager of Deutsche Bank's RREEF Retrofit Partners fund, seeking to deploy investor capital in deep energy retrofit projects for commercial, MUSH and multi-family property owners. As Chief Operating Officer of Trajectory Asset Management, Ms. Erle was responsible for business development, investor relations and firm governance. Ms. Erle was a Partner at Mitchell Madison Group, a global consultancy, where she was a leader in the Financial Institutions practice. Ms. Erle earned a Bachelor of Science in Operations Research & Industrial Engineering from Cornell University, a Master of Business Administration from Columbia Business School and a Master of Arts in Economics from Johns Hopkins University's Paul H. Nitze School of Advanced International Studies. She serves on the External Advisory Board for the Cornell Atkinson Center for Sustainability.

Michael Fagan

Michael Fagan is the Director of Finance on the NY Green Bank's Operations and Finance team. Michael oversees all aspects of financial and operational activities across the organization with particular responsibility for fund accounting and administration, audit, and financial reporting. Prior to joining NY Green Bank, Michael was a Controller and Principal Financial Officer at Man Group, with oversight and direct responsibility for financial reporting, regulatory, and fully integrated middle office support. His focus was on credit, direct lending, and emerging markets funds. Michael holds a bachelor's degree in accountancy from Providence College and is Certified Public Accountant licensed in the State of New York.

Adele Ferranti

Adele Ferranti is currently the Team Lead for NYSERDA's workforce development and training initiatives targeting existing and emerging workers in all sectors. Workforce development and training activities address energy efficiency, building science, renewable energy and emerging and advanced technologies as well as initiatives to develop career pathways for low and moderate-income residents. Prior to her current position, she was a Senior Project Manager in NYSERDA's R&D group for over 15 years where she started NYSERDA's photovoltaic (PV) and wind training programs and NYSERDA's PV incentive program. Adele has a B.S. in Biology from SUNY Geneseo, M.S. in Environmental Science from SUNY School of Environmental Science and Forestry, and a M.P.A. from the Maxwell School of Citizenship and Public Affairs, Syracuse University.

Bradley Frank

Brad Frank is a Program Manager within the West Valley Site Management Program. Brad is responsible for oversight of the West Valley Demonstration Project (WVDP) and acts as NYSERDA's lead for End-State planning. Prior to joining NYSERDA, Brad was a supervisor with the prime contractor at the West Valley Demonstration Project, and an operations superintendent for Kinder Morgan Inc. He also has served as an active duty Army officer, and is currently serving as a Major in the Army National Guard. Brad received his MBA from St. Bonaventure University, a Bachelor's of Science from the United States Military Academy at West Point, and a Certificate in Strategy and Policy Development from the U.S. Army War College.

Gregory Frank

Gregory Frank is the Assistant Director of Contract Management. He provides back-up responsibilities for the Director of Contract Management and supervises Contract Management staff. Greg is the lead Contract team member for NYSERDA's, Multifamily Performance Program, West Valley Site Management Program, Saratoga Technology + Energy Park, and the NY Green Bank. He is also responsible for providing functional support of the procurement modules within NYSERDA's financial and contract database system. Greg has been at NYSERDA for over 18 years. Prior to joining NYSERDA, Greg was a project manager at Professional Service Industries, Inc., an engineering, consulting and testing firm. Greg has an A.A.S. in Business Marketing and Management from Sage Junior College of Albany and a B.S. in Natural Resources Management and Engineering from the University of Connecticut.

Karen Fusco

Karen Fusco is the Team Lead and Program Manager for the Consumer Services and Events Management (CSEM) team at NYSERDA. As part of the Corporate Communications and Marketing group, Karen's team is responsible for planning and executing conferences, meetings, events, exhibits, sponsorships, and public speaking opportunities as key strategic components of NYSERDA's outreach efforts. The CSEM team also manages NYSERDA's consumer hotline contract. Karen has been with NYSERDA for more than 10 years and is completing her Bachelor degree in environmental studies at SUNY Empire. Prior to joining NYSERDA in 2009, Karen was an Account Manager for a produce broker for 14 years.

Laura Geel

Laura Geel is a Program Manager for the Single Family Residential group. In this role, she provides leadership to NYSERDA's Residential team that delivers market transformation and incentive programs to the one-to-four family residential sector, which includes the Home Performance with ENERGY STAR Program and low income EmPower NY Program. Market transformation activities seek to grow the infrastructure of residential energy efficiency service providers and increase consumer awareness and demand for energy efficiency services. The programs work with contractors, manufacturers, retailers, home inspectors, realtors, community-based organizations, low-income advocates, and other stakeholders in the residential sector. Laura has experience in the residential new construction market in a previous role at NYSERDA. Laura holds a Bachelor of Science in Business & Organizational Management, with a focus on Social Responsibility from Russell Sage College and a Master of Business Administration with a concentration of Business Strategy from Sage Graduate School.

Cheryl Glanton

Cheryl Glanton is the Director of Contract Management. She provides leadership to NYSERDA's contracts team in managing the Authority's contracting and procurement. This includes ensuring the development and compliance with contracting policies and procedures consistent with regulations and NYSERDA policies. Cheryl has been at NYSERDA for over 5 years. Prior to assuming this role, she was a Senior Project Manager for the Process, Power, and FlexTech program which addresses energy efficiency and productivity for industrial, water/wastewater, agricultural, data center, and combined heat and power facilities. Prior to joining NYSERDA, Cheryl was a manager at General Electric. Cheryl has a BSME from Worcester Polytechnic Institute and a MBA from Case Western Reserve University.

Donovan Gordon

Donovan Gordon is Director of Clean Heating & Cooling for NYSERDA. He leads New York State's efforts to develop markets that support clean, high-efficiency, renewable thermal systems, including solar cooling, heating and hot water; air and ground source heat pumps, biomass heating systems, and thermal storage. He is charged with conceptualizing, driving and implementing a portfolio of products to encourage and enable customers and partners to invest in low-carbon/renewable cooling and heating systems and also with advancing New York's progress toward self-sustained markets. Donovan is a Leadership in Energy and Environmental Design (LEED) accredited Green Associate, and an International Ground Source Heat Pump Association (IGSHPA) accredited Geothermal Installer. He received a bachelor's degree in Business

Management from St. Francis College and a Master in Business Administration from NYU, Stern School of Business.

Alfred Griffin

Alfred Griffin is President of NY Green Bank and brings 25 years of experience in banking and finance to the organization. He is an industry leader in developing innovative solutions in support of the financing of renewable energy generation and energy efficiency projects. In his role with NY Green Bank, Alfred is responsible for the overall strategy and staffing of the organization, and for overseeing partnerships with private sector market participants and capital providers to address market barriers that will accelerate deployment of clean energy / sustainable infrastructure. Prior to joining NY Green Bank, Alfred specialized in structured finance with roles in corporate and investment banking, capital markets and risk management at Citigroup Global Markets Inc. Specific roles included Alternative Energy Banking where Alfred was responsible for the design, marketing and execution of structured solutions within the evolving market segment. Before joining Citi in 1997, Alfred held positions at Edward D. Jones & Co. and Smith Barney Inc. Alfred is a graduate of the University of North Carolina at Chapel Hill where he earned his BA and MBA degrees. He is a Chartered Financial Analyst.

Greg Hale

Greg Hale joined NYSERDA in February, 2018 as Senior Advisor for Energy Efficiency Markets and Finance. Greg is overseeing the Authority's work to create a policy roadmap to achieve zero net energy buildings and communities throughout the state, which includes strategic co-leadership of the innovative RetrofitNY initiative. Greg also provides oversight of NYS policy efforts related to energy efficiency financing, including an ongoing role as strategic advisor to NY Green Bank. Prior to joining NYSERDA, Greg served in Governor Cuomo's administration as Senior Advisor to the Chairman of Energy & Finance, where he focused on the development and execution of the Governor's signature energy policy–Reforming the Energy Vision (REV) and was responsible for overseeing the establishment of the \$1 billion NY Green Bank. Greg was also the lead author of NY's 2015 State Energy Plan, and led an inter-agency working group developing clean energy solutions for the low to moderate income sector. Prior to joining the Governor's Office, Mr. Hale was the Director of Efficiency Finance at Natural Resources Defense Council's Center for Market Innovation. Prior to NRDC, Greg spent 17 years in the real estate industry, first as a real estate lawyer at Skadden, Arps, et al., and then as co-owner and general counsel of Cirque Property L.C., a real estate investment company based in Salt Lake City, Utah. Greg is a founding board member of the New York City Energy Efficiency Corporation, where he currently chairs the HR & Governance committee, and he served on the steering committee of the PACENow Coalition. Greg is a graduate of Dartmouth College and The University of Michigan Law School.

Kevin Hale

Kevin currently serves as the Director of Utility Affairs and Strategic Partnerships where he's responsible for strategy execution and program development under the Clean Energy Fund and the State's Reforming the Energy Vision policy approach to energy. In his previous role at NYSERDA, Kevin was the Director of Corporate Strategy and Planning where his responsibilities included leading the Authority's strategic planning efforts, organizational change management, and developing corporate processes and systems for ongoing optimization of NYSERDA's portfolio of programs. Kevin has been with NYSERDA since 2005 and has contributed to the

design and execution of New York's Renewable Portfolio Standard ("RPS"), the Regional Greenhouse Gas Initiative ("RGGI"), and the New York Green Bank. Prior to NYSERDA, Kevin held senior positions at Science Applications International Corporation ("SAIC"), Johnson Controls, and Enron Energy Services. He holds an MBA from SUNY Albany and a B.S. in Business Management from SUNY Plattsburgh.

Christopher Hall

Chris manages NYSERDA's coverage and participation in the New York State Independent System Operator's (NYISO's) shared governance process. Chris generates a monthly report to management that summarizes important issues and trends in the wholesale electricity market, and leads a monthly NYISO team meeting to discuss noteworthy developments at the NYISO from the prior month. As directed, Chris also produces and/or manages work related to macroeconomic and electricity system modeling, and contributes to analyses on various other technical issues. Chris has worked for NYSERDA from 2000 through April 2011, and again from January 2013 to the present. In the interim, Chris worked for the Long Island Power Authority as "Manager of Power Markets Policy" from May 2011 through December 2012. In this role, Chris represented and advocated for the LIPA's interests in regional transmission organizations (RTOs) with an emphasis on the NYISO wholesale electricity market. Chris has a B.A. in Mathematics from the State University of New York at Potsdam and an M.B.A. with a concentration in management from Clarkson University.

Hillel Hammer

Hillel Hammer is a Senior Advisor for Energy and Environmental Analysis and supports analysis and development of New York State's energy and greenhouse gas policies, plans, and regulatory agenda, and related NYSERDA programs and environmental research. His responsibilities include the Greenhouse Gas Inventory and analysis of the air quality health benefits of decarbonization policies, input to the New York State Energy Plan, technical support for coordination with the Transportation Climate Initiative and other transportation initiatives, and technical support of decarbonization policy development and evaluation. Prior to joining NYSERDA, Hillel was an environmental consultant specializing in climate change and air quality, focused on supporting various government agencies in the New York region in developing policy and regulatory efforts, as well as project development support and various private sector analysis work related to energy, climate change, and air quality. Hillel also worked previously as a researcher at the Berkeley National Laboratory on air quality and climate studies.

Victoria Harmon

Victoria Harmon is the Senior Advisor to Richard Kauffman, the Chairman of Energy and Finance for New York. Ms. Harmon is responsible for developing, managing and implementing communications strategy for the state's energy policy initiatives, including Governor Andrew Cuomo's groundbreaking strategy, Reforming the Energy Vision, or REV and nation-leading mandate for 50 percent of New York's electricity to come from renewable energy by 2030. Working closely with the State's senior energy leadership team, other agencies in state government and Governor Andrew Cuomo's executive communications officers, Ms. Harmon also manages and coordinates communications strategy with agency press officers in the Department of Public Service, New York Power Authority, New York State Energy and Research Development Authority, Long Island Power Authority, and the New York Green Bank.

Prior to this role, Ms. Harmon was a Managing Director for Credit Suisse, based in New York, responsible for Private Banking and Asset Management in the Americas while also serving as Co-Head of Investment Banking Corporate Communications globally. Prior to joining Credit Suisse in 1999, Ms. Harmon worked for Salomon Smith Barney in the Corporate Communications department in both their New York and Hong Kong offices. Prior to working in financial services, she worked for the US Trade Representative, Mickey Kantor, in the Executive Office of the President of the United States and for NBC News in Washington Ms. Harmon holds a JD from Georgetown University Law Center and a B.A. in Political Science from the University of California, Berkeley.

Doreen Harris

Doreen Harris is the Directors of Large-Scale Renewables at NYSERDA where she oversees the strategic development of utility-scale renewable resources to achieve the State's nation-leading Clean Energy Standard mandate. In this role, Ms. Harris manages a portfolio of New York investments in large-scale renewables totaling over \$2.5 billion and oversees annual solicitations to continue to build this portfolio. Ms. Harris also directs a statewide strategic effort to spur the responsible and cost-effective development of New York's Offshore Wind resource. In addition, she leads associated policy and market development activities, designing and implementing interventions that accelerate the scale and penetration of large scale renewables in New York, including ongoing oversight of the New York Generation Attribute Tracking System. Prior to joining NYSERDA, Ms. Harris worked in the private sector in several energy and engineering consulting roles. Ms. Harris received a Bachelor of Science in Chemical Engineering from the University of Rochester and a Master of Business Administration from the University at Albany.

Colin Harris

Mr. Harris supports the full range of day-to-day operational activities across the organization including financial planning and analysis, budgeting, reporting, strategy development and implementation, as well as risk and compliance. Mr. Harris has been a consultant to various litigants concerning fraud, operational risk and due diligence practices in the hedge fund industry. He has also served as Vice President of Business Development for the Sumitomo Mitsui Banking Corporation and the Carbon Disclosure Project (CDP). Previously, Mr. Harris worked in Environmental Markets with J.P. Morgan's Global Commodities team executing sales and marketing strategies in carbon and REC markets within North America. He also consulted with the Oliver Wyman Group in their corporate and institutional banking practice specializing in hedge fund litigation and advisory, energy risk and operational risk management projects. Mr. Harris graduated from Cornell University with a Master of Business Administration in Capital Markets and Asset Management and a Bachelor of Science in Applied Economics and Management

Sven Hodges

Sven Hodges provides legal advice and counsel to NY Green Bank with respect to strategy, transactions, regulatory issues, and general corporate affairs. Prior to joining NY Green Bank, Mr. Hodges served as Assistant Chief Counsel and Attorney-Advisor to the Loan Programs Office of the U.S. Department of Energy. In that capacity, he provided transactional and programmatic advice on project and corporate financings for clean energy, advanced transportation, and other sustainable infrastructure projects under the Title XVII loan guarantee

program and the Advanced Technology Vehicle Manufacturing loan program. From January 2015 through June 2016, he served on the White House Council on Environmental Quality as Deputy Associate Director for Clean Energy Finance. In that capacity, he worked to advance a variety of policy initiatives relating to clean energy finance (including federal tax credits, green bonds, and green banks), clean energy technologies (including offshore wind and energy storage), and corporate sustainability. Prior to joining the federal government, Mr. Hodges worked as in-house counsel at GE Energy Financial Services and as an associate in the Global Projects Group of Paul Hastings LLP in New York. Mr. Hodges holds a bachelor's degree from Harvard College, a master's degree from the London School of Economics, and a juris doctor degree from the Columbia Law School.

Max Joel

Max Joel is a Program Manager with the NY-Sun Initiative at the New York State Energy Research & Development Authority (NYSERDA). The NY-Sun Initiative aims to increase the number of solar electric systems across New York State by stimulating the marketplace, so that costs associated with installing solar electric systems for residents and businesses are reduced. Previously, Max was the Director of Community Solar Initiatives at Solar One, a nonprofit organization in New York City, and the Capital Projects Coordinator at the Queens Botanical Garden. Max holds a BA in Urban Studies from Columbia University and a master's degree in Environmental Management from the Yale School of Forestry & Environmental Studies.

John Joshi

John Joshi joined NYSERDA as the Director of Financing Solutions and brings 25 years of experience in investment management and structured finance to NYSERDA. In his role at NYSDERA John is developing strategies as part of the Clean Energy Fund for mobilizing private capital and market-based financing solutions to support scaled investments in clean energy across sectors and technology areas. This role is important to support the Governor's energy agenda and the strategy for scaling clean energy by engaging private capital financing solutions. John will focus on technologies where financing solutions have been underutilized or underdeveloped. In his prior experience John has developed innovative financing structures and managed multibillion-dollar investment portfolios in various asset classes. John has extensive experience in solar & renewable energy capital markets solutions, structured products, hedge funds, & risk management, most recently as Head of Capital Markets for PLANT. While working for Smart Energy Solutions LLC, John advised the White House policy staff, the Senate Finance staffers and the Secretary of Energy on effective solutions for increased capital for the solar sector, including active participation in the Solar Access Public Capital (SAPC) initiative.

Glen Kaatz

Glen Kaatz is the Director of Information Technology. Currently he is responsible for all facets of Information Technology operations including the data center, desktop hardware and software support and enterprise software development. He has been with NYSERDA since 2006. Prior to joining NYSERDA he was an enterprise architect for the New York Independent System Operator. Glen received a B.S. degree in Computer Science from Siena College.

Amy Kasson-Muzio

Amy Kasson-Muzio is the Quality Assurance and Standards Program Manager at NYSERDA. Amy is responsible for driving Quality Assurance strategies that promote consumer and investor confidence necessary to scale investment in the State's clean energy economy. She also oversees quality oversight for the NY-SUN, Multifamily Performance Plan, Home Performance with ENERGY STAR® (HPwES), EmPower NY, the Low-rise Residential New Construction Program, Clean Heating and Cooling Programs including Ground Source and Air Source Heat Pumps, Solar Thermal Programs as well as Pellet Stove and BioMass Boilers. Amy joined NYSERDA in 2017, bringing over 20 years of Quality Assurance experience with public organizations, General Electric and Regeneron, where she focused on developing, maintaining and lead continuous improvements to the Quality Management System. Amy holds a Bachelor of Science degree in Environmental Studies from the State University of New York at Albany.

Peter Keane

Peter Keane is NYSERDA's Deputy Counsel, and focuses on renewable energy matters, research and development, and regulatory affairs. Peter's responsibilities include providing legal advice and counsel to NYSERDA with respect to the System Benefits Charge, Renewable Portfolio Standard Main and Customer-Sited Tiers, Energy Efficiency Portfolio Standard, Regional Greenhouse Gas Initiative, NY-Sun, New York Generation Attribute Tracking System, Clean Air Interstate Rule, and Performance Management programs. Prior to joining NYSERDA in 2001, he practiced energy law with the firms of LeBoeuf, Lamb, Greene & MacRae LLP and Couch White, LLP. Mr. Keane is a 1997 magna cum laude graduate of Albany Law School.

Andrew Kessler

Andrew Kessler is a Managing Director at the NY Green Bank, a Division of NYSERDA. Mr. Kessler oversees investments and portfolio management for NY Green Bank. Over a 25-year career, Mr. Kessler has developed extensive experience in corporate and project finance and advisory as well as operational management, corporate development, and project development. Prior to joining NY Green Bank, Mr. Kessler founded and led the Biogas, Waste & Recycling Advisory group at the Danish Trade Council based in Washington, D.C. He also served as Co-Head of the Danish Trade Council's North America Energy & Environment Group. In 2010, Mr. Kessler founded Turning Earth, an integrated organics recycling company focused on converting organic waste streams into biogas and other beneficial resources. Prior to launching Turning Earth, Mr. Kessler spent 15 years as an investment banker holding senior positions as a corporate finance and mergers & acquisitions professional at various firms including HSBC, Waller Capital, Morgan Stanley, and Duff & Phelps. He has executed equity, debt, and M&A transactions across a diverse set of sectors and markets and has served in numerous corporate governance leadership roles. Mr. Kessler has written and lectured on waste, recycling, biogas, and related renewable energy topics and regularly speaks at industry forums and conferences. He served on the Board of Directors of the U.S. Composting Council from 2010 to 2012 and was elected to its Executive Committee as Vice President and Treasurer, respectively. Mr. Kessler earned a bachelor's degree in Economics from the University of Virginia and a Master of Business Administration at New York University's Stern School of Business.

Gregory Lampman

Gregory Lampman is the Program Manager for the Environmental Research Program at the New York State Energy Research and Development Authority (NYSERDA). Greg's work focuses on development and maintenance of a portfolio of scientific research that provides objective information to help address immediate and long-term, energy-related environmental challenges across New York State. Working closely with staff and other scientists, Greg also endeavors to convey this information to appropriate policy makers and seeks to understand their information needs. The program supports: air quality and related health research; acidic and mercury deposition monitoring and assessments; research into the State's vulnerability to climate change to help develop mitigation and adaptation strategies; assessments and research into of the environmental effects of renewable energy development; biomass combustion efficiency and emissions assessments. Greg is also part of the Offshore Wind Team, leading the environmental aspects of the work seeking to advance responsible and cost-effective development of offshore wind energy. Greg joined NYSERDA in 2000 and has a background in biogeochemistry, energy efficiency in buildings and water/wastewater treatment systems, and energy efficient design and construction. Greg has an Associate's degree in Environmental Science and earned his Bachelor and Master degrees in Biology with at concentration in biogeochemistry from the State University of New York College at Brockport.

Brad Leach

Brad Leach is Program Manager, Data and Markets in Energy and Environmental Analysis. In this role, he supervises a team that operates programs related to energy assurance/emergency preparedness, oversight of state petroleum infrastructure, nuclear programs including the closure of Indian Point and the related decommissioning process. Prior to joining NYSERDA in November, he consulted for four years with Connecticut-based Energy Advisory Services. In this role he worked with multiple clients on U.S. and international energy projects. Prior to that he was Executive Director, Energy Research and Product Development at CME Group where he was responsible for the development of natural gas, electricity, environmental emissions, and nuclear contracts. Brad holds a Bachelor's degree in Political Science from Columbia University.

Brian Lee

Brian Lee is a senior finance executive with extensive experience in transaction structuring, business development and regulatory compliance. As Managing Director of Risk & Compliance, Mr. Lee is responsible for the day-to-day analysis and management of NY Green Bank's key business risks (enterprise and investment) including related reporting and compliance across the organization and the investment portfolio. Among other responsibilities, together with the investment team, he evaluates and monitors the inherent risks in the investment portfolio, ensuring alignment with NY Green Bank's business plan, investment strategy and risk appetite. Prior to joining NY Green Bank, Mr. Lee held various senior roles at Lloyds Banking Group, North America. As Senior Vice President of Strategy & Performance, he was tasked to improve performance across key customer relationship and product areas. He led a team that proposed and received approval to build a debt capital markets business in North America, and he was instrumental to the planning, establishment and successful development of Lloyds' new broker-dealer, Lloyds Securities Inc. He later served as its Chief Compliance Officer, leading a team responsible for all aspects of compliance. Prior to joining Lloyds, Mr. Lee worked at Manresa Partners, a boutique investment advisory firm seeking principal investment opportunities. He also

worked at Citigroup, designing and implementing structured transactions for its largest corporate clients. He was instrumental in proposing and developing a portfolio totaling \$350 million of equity investments in renewable energy power projects. Mr. Lee holds a Master of Business Administration degree from The Tuck School of Business at Dartmouth and a Bachelor of Science degree in Chemical Engineering from Princeton University.

Stefanos Lepeniotis

Stefanos Lepeniotis is the Program Manager of Statistics and Analytics within the Performance Management Group. Stefanos is responsible for statistical and analytical support of all different teams at NYSERDA. Stefanos is working with many project/program managers on the Test-Measure-Adjust strategies of their initiatives. He is also providing support to many teams using external data purchased by NYSERDA to understand market share and different segmentations of the markets (Commercial, Residential, etc.). Stefanos joined NYSERDA in 2016 working with the Performance Management team. Prior to joining NYSERDA he worked for Hoechst- Celanese Corp. as a research Statistician and then for JPMorgan Chase Bank, GE Money, Citigroup at their Decision Science Departments. He also worked for M&T Bank managing an off-shore group of analysts in all banking products. Stefanos has published more than 20 papers in the field of statistics as author and co-author, and has presented at many National and International Conferences. Stefanos earned a Bachelor's degree in Economics and Statistics from Athens School of Economics, a Master's degree in Statistics from RUTGERS University in New Jersey, and a Master's degree in Computer Science from the New Jersey Institute of Technology.

Dana Levy

Dr. Dana Levy is the Program Manager for On-site Power Production at NYSERDA where he directs a ten-member team. Dana contributes via his diverse perspectives gained from roles in academic laboratory research, engineering consulting, and factory operation and management. The On-site Power Production Program has an annual budget of approximately \$30 million (which is roughly 6% of NYSERDA's overall budget), and focuses on end-use customer acquisition of electric generating systems consisting of Distributed Generation-Combined Heat and Power (DG-CHP), anaerobic digester gas (ADG)-to-electricity, fuel cells, and on-site wind. Prior to joining NYSERDA in 1999, he served as Environmental Coordinator at the Army's Watervliet Arsenal and as an environmental engineering consultant to industry and government. Dana earned his Doctorate and M.S. degrees in Environmental Engineering from Rensselaer Polytechnic Institute, a B.S. degree in Chemical Engineering from the University of Massachusetts; and is a licensed Professional Engineer and a recipient of the U.S. Clean Heat and Power Association Combined Heat and Power Champion Award and the Northeast Clean Heat and Power Initiative CHP Champion Award.

John Lochner

John Lochner is the Vice President for Innovation. In this role, John provides oversight of NYSERDA's Innovation department including departmental strategy, operations, program development, execution, and performance management. John's previous experience includes investing, management consulting, investment banking, time as an executive at a distributed renewable energy start-up, and advisory work for environmental organizations including the Natural Resources Defense Council and The Nature Conservancy. John holds an M.B.A from The

Wharton School at the University of Pennsylvania, an M.A. from Harvard University, and a B.A. from Duke University.

Katherine McDonald

Katie joined NYSERDA in February 2020 where she serves as the Assistant Director of Technology to Market supporting and launching programs that can help the state of New York address ambitious climate and energy goals through innovation and entrepreneurship. Katie comes to NYSERDA from Greentown Labs, the largest cleantech incubator in the United States, where she was Senior Director of Strategic Partnerships responsible for corporate partnerships and industry accelerator programs. At Greentown, Katie designed and scaled the 'Greentown Launch' model for corporate / startup partnership development and ran first- of- a- kind programs in energy storage, hydrogen, solar materials, circular economy, and distributed energy resources. Before Greentown Labs, Katie served as Executive Director of Cleantech Open Northeast, the region's premier cleantech business accelerator. Under Katie's leadership, the accelerator saw recordbreaking application numbers, a 100% recommendation rate from startups, and the first national prize in the Northeast chapter's history. In 2016, Katie also represented Cleantech Open at the White House for World Water Day. Katie has worked for organizations including the World Bank, 350.org, and Amherst College to build innovation programs, organize communities, and drive climate impact. Katie sits on the Board of 501CTHREE, a first of a kind non-profit dedicated to catalyzing social and entrepreneurial action on climate.

Wendy MacPherson

Wendy MacPherson is a Program Manager for the Clean Heating and Cooling Team which promotes clean technology solutions for residential and commercial buildings through air source heat pumps, ground source heat pumps, solar heating and cooling and high-efficiency, low-emissions biomass heating systems. Prior to joining NYSERDA in 2009, Ms. MacPherson worked at Saint-Gobain for 23 years, in the High-Performance Materials businesses. She has a breadth of experience in manufacturing, including project and product management of large industrial product lines. Ms. MacPherson has a B.S. Industrial Engineering from Rensselaer Polytechnic Institute in Rensselaer, NY and an MBA from Union College in Schenectady, NY.

Peter Mahar

Peter Mahar is Controller and Assistant Treasurer and oversees the daily operations of the Finance Unit. This includes assisting the Treasurer in the development of NYSERDA's annual budget, preparation of quarterly and annual financial statements, monitoring the internal control structure over financial reporting, and ensuring the accuracy of NYSERDA's financial transactions including receipts, disbursements, income, and expenses. Peter is a member of NYSERDA's Management team and sits on many working groups. Peter has been with NYSERDA since 2000 and has been in his current position for the last seventeen years. Prior to joining NYSERDA, Peter was a Senior Auditor at the New York State Office of the State Comptroller Bureau of Municipal Affairs. Peter has also worked as a staff accountant for a Certified Public Accounting firm based out of Albany New York. Peter is a Certified Public Accountant and received a Bachelor of Science in Accounting from Utica College of Syracuse University.

Zigurts Majumdar

Ziggy Majumdar joined NYSERDA as Senior Advisor in 2020 in the Innovation Business Unit and is a member of the Advanced Buildings Team. Ziggy's responsibilities include managing projects and developing investment plans to support novel approaches that can reduce GHG emissions, improve quality of life, catalyze economic growth, and inform climate policy. Ziggy is developing new programs to improve utilization of natural working lands, biomaterials, and waste streams, and in healthy, intelligent buildings. Prior to NYSERDA, Ziggy was Director of Development at The Lighting Research Center at RPI, founded and ran his own company for over 3 years and worked for over 6 years at Booz Allen Hamilton, in Washington, DC, where he helping initiate and manage over 10 R&D programs, ranging from \$20M - \$120M per program, for US government clients such as ARPA-E, DARPA and DHS. Ziggy was a postdoctoral fellow at the National Institutes of Health in Bethesda, MD, has 3 patents and over 10 peer-reviewed scientific publications. Ziggy has a Ph.D. in physics from the University of Illinois at Urbana-Champaign and B.A. in physics from the University of Pennsylvania.

Jaime Marcotte

Jaime Marcotte is a Program Manager on the Commercial Team in Market Development. Jaime is a member of the management team for NYSERDA's FlexTech and Tech Services, REV Campus Challenge, P-12, Real Time Energy Management, Remote Energy Management, and Commercial Tenant initiatives. Jaime has a Bachelor's of Science in Civil Engineering, Masters of Business Administration and Masters of Science in Environmental Manufacturing Management from Clarkson University.

Carl Mas

Carl Mas is Director of Energy and Environmental Analysis and has responsibility for directing analysis in support of policy and program planning for NYSERDA as well as the oversight of NYSERDA's environmental research portfolio. The energy planning support includes responsibility over the Authority's efforts with respect to the Regional Greenhouse Gas Initiative and the New York State Energy Plan. Carl also oversees the state's fuels market intelligence and data collection activities, energy emergency planning, nuclear coordination program, and energy price forecasting and systems modeling. The environmental research activities include the provision of energy-related environmental accountability through analysis of long-term monitoring records and modeling as well as the evaluation of the effectiveness of energy-related environmental protection strategies to support regulatory processes. Before rejoining NYSERDA, Carl was a Manager working at Columbia University's Earth Institute, principally in charge of the Sustainable Develop Solutions Network Deep Decarbonization Pathways Project, which consisted of 15 country research teams composed of over 30 leading research institutions from countries representing 70% global greenhouse gas emissions. Carl also previously held the position of Senior Project Manager in NYSERDA's Energy Analysis group, where he managed projects and served as a policy and program advisor in the areas of renewable energy, climate change mitigation, environmental impacts of energy systems, and alternative transportation fuels. Carl also worked as a researcher at two U.S. Department of Energy National Laboratories: Sandia National Laboratory and the National Renewable Energy Laboratory; as an energy systems analyst and team leader for a start-up fuel cell company; and as a consultant for a not-for-profit international development organization focused on renewable energy policy development and market growth.

Carl received a dual Masters in Science from the University of California, Berkeley, in Mechanical Engineering and Energy & Resources.

Amy McCartin

No longer employed at the Authority.

Robert McKeon Jr.

Robert McKeon joined NYSERDA in 2009 as Web Marketing Project Manager, and in 2015 became Project Manager in the Web Operations group, responsible for the design, maintenance, and reliability of NYSERDA websites, including (but not limited to) nyserda.ny.gov, nysun.ny.gov, energyplan.ny.gov, greenbank.ny.gov, as well as other contractor administered websites. Robert works with Corporate Marketing, NYSERDA IT, and contracted technical and design resources to deliver branded content and messaging, functionality, and guidance on web related projects for NYSERDA. Prior to joining NYSERDA, Robert was Web Architect at New York Financial Management System (NYFMS) on a project team implementing an enterprise financial and supply chain management system (PeopleSoft) for all New York State agencies. Prior to NYFMS, Robert was Web Content Director at Excelsior College, working with Marketing and IT in designing a dynamic website that aided the College in exceeding enrollment goals while winning industry "Best of the Web" awards. Prior to Excelsior College, Robert was Senior Multimedia Designer at On2 Technologies (a Google company) where he created proof-of-concept multimedia demonstrations for Fortune 500 companies featuring On2's premier video codec, VP6. Prior to joining On2 Technologies, Robert was Multimedia Graphics Manager at Hearst Corporation's Times Union newspaper in Albany, NY, where he managed production of timesunion.com, leveraging and re-purposing newspaper content into the online medium while winning multiple industry journalism awards. Robert simultaneously earned both an A.A.S. degree from SUNY FIT in Advertising Design and a B.S. degree in Studio Art from SUNY Oneonta.

Jennifer Meissner

Jennifer Meissner serves as Director of Performance Management. In this role, Jennifer is responsible for measuring and evaluating NYSERDA program performance for development and provision of data and resources to support market analytics and intervention design. Jennifer is a member of the Board of Directors of the International Energy Program Evaluation Conference (IEPEC) and has held advisory and committee roles for other state, regional and national energy program measurement and evaluation organizations. Jennifer has 19 years of experience in clean energy technology, program and market evaluation and has also been involved in NYSERDA's corporate strategic planning and state energy planning activities. Her experience prior to joining NYSERDA focused on corporate environmental and sustainability strategy, including consulting. She holds a B.S. in Environmental Studies from the University of Vermont and a M.S. in Environmental Management and Policy from Rensselaer Polytechnic Institute. Jennifer is also a Certified Measurement & Verification Professional by the Association of Energy Engineers.

Andrea Mellon

Andrea Mellon is a Program Manager for the West Valley Site Management Program. Andrea is responsible for maintaining the State-Licensed Disposal Area and Retained Premises of the Western New York Nuclear Service Center in a safe manner and in compliance with all applicable

regulations, and providing management oversight to staff. Andrea also provides regulatory support in the management of hazardous waste at the West Valley Demonstration Project. Prior to joining NYSERDA, she was a scientist with West Valley Nuclear Services Co., at the West Valley Demonstration Project. Andrea holds a B.S. in Biology/Chemistry from Gannon University.

Jason Moore

Jason Moore is a Managing Director of NY Green Bank. His primary responsibilities include originating, structuring, executing, and managing investments in sustainable infrastructure projects. Prior to joining NY Green Bank, Jason held investment banking and transaction advisory positions at BBVA Compass, Nordeutsche Landesbank, and P50 Capital. He is a graduate of Mississippi State University and holds a master's degree in finance from Boston College.

Courtney Moriarta

Courtney Moriarta is the Director for NYSERDA's Single Family Residential Team. Ms. Moriarta oversees NYSERDA's Clean Energy Fund work supporting the 1-4 unit existing homes market focusing on innovative initiatives designed to promote and rapidly scale uptake of energy efficiency and clean energy options for all New Yorkers. Her team is also responsible for providing free home energy audits statewide under the state's Green Jobs Green New York Act. Ms. Moriarta previously provided consulting services to the U.S. Department of Energy supporting their residential energy efficiency programs and the Massachusetts Energy Efficiency Advisory Council supporting the Mass Save residential program portfolio. With more than 25 years experience in the residential energy efficiency and sustainability field, she is frequently called upon as a subject matter expert supporting standards development, program design, and public policy matters. She currently serves on the Consortium for Energy Efficiency's Program Advisory Council, as NYSERDA's liaison to the Board of Directors for the Building Performance Institute, and is an active member of the Northeast Energy Efficiency Partnerships' Cold Climate Air Source Heat Pump industry working group. She holds dual bachelor's degrees from the Massachusetts Institute of Technology and is a member of the American Society of Heating Refrigeration and Air Conditioning Engineers and the Association of Energy Services Professionals.

Susan Moyer

Susan B. Moyer is Director of Corporate Marketing, responsible for planning, development and implementation of the organization's marketing strategies, marketing communications, and oversees an integrated effort to effectively position NYSERDA in the market. Prior to joining NYSERDA in 2008, Susan was Senior Vice President and Director of Marketing for the Northeast Region of KeyBank N.A., where she was responsible for KeyBank's Field Marketing initiatives across the East Region. In addition, Susan was with General Electric Company ("GE") for 19 years, where, as Manager, Communications Programs, she was responsible for the design and launch of GE's Web site. Other roles in her tenure at GE included: marketing for consumer and industrial business units, strategic supplier management, management of GE's Accessibility Programs, and Communications Director for the GE Business Information Center. Susan graduated from the University of Florida with a B.S. in Advertising and Marketing.

Katherine Muller

Katherine Muller is Director of Communications and Corporate Marketing, managing the Authority's communications, marketing, consumer services and events departments. She is responsible for media relations, crisis communications, brand management, corporate marketing, social media and events management. Prior to joining NYSERDA in 2011, Ms. Muller worked for a decade at World Wrestling Entertainment ("WWE"), a global entertainment company, advancing to Senior Director of Corporate Communications. While at WWE, her responsibilities included managing corporate communications, crisis communications, and community relations programs throughout the U.S. Ms. Muller worked in corporate communications at the General Electric Company ("GE") in Fairfield, Conn. before joining WWE. She graduated from Marist College with a B.A. in Communications, and a MPA from Rockefeller College of Public Affairs and Policy at SUNY Albany.

Christopher O'Connor

Christopher O'Connor is a Program Manager overseeing the Performance Measurement & Reporting group at NYSERDA. This group provides the framework, corporate-wide, for collecting and presenting decision-quality information in support of NYSERDA's test-measure-adjust strategy. Under this framework falls regulatory reporting of all program performance as well as development & administration of web-based data visualizations for both internal and external stakeholder use. Prior to joining NYSERDA, Chris held management and operations leadership roles in Engineering and Architecture consulting firms, crossing paths with NYSERDA in areas of Solar PV, the Industrial & Process Efficiency Program, and Technical Assistance programs. Chris began his career with nearly a decade of work in the Aerospace industry, becoming a practitioner of Lean Manufacturing and Six Sigma tools. He has BS in Aerospace Engineering from the University at Buffalo, and an MBA from the University at Albany.

Peter Olmstead

Peter Olmsted joined NYSERDA as Chief of Staff in May 2019. In this position, he supports the President and CEO along with NYSERDA's Executive Team in overseeing all program and activities of NYSERDA. Prior to joining NYSERDA, Mr. Olmsted served as Assistant Secretary of Energy for Governor Andrew Cuomo, and prior to this role served as Manager of Strategic Engagement for the New York State Department of Public Service. Before joining the ranks of New York State government, Mr. Olmsted held various roles in the public and non-profit sectors to address some of the most pressing energy and environmental issues of our time. For five years, Mr. Olmsted served as East Coast Regional Director for the Vote Solar Initiative. Prior to Vote Solar, he held various positions in the mid-Atlantic, including serving as Energy Committee staff in the Delaware State Senate, Research Associate at the Center for Energy and Environmental Policy at the University of Delaware, and Policy Intern for the Energy Coordinating Agency in Philadelphia, Pennsylvania. Mr. Olmsted started his professional career at Lancaster Farmland Trust in Lancaster County, Pennsylvania as Land Preservation Coordinator. Mr. Olmsted currently serves on the Board of Director for Saratoga PLAN, located in Saratoga Springs, New York. He graduated from Skidmore College with a B.A. in Environmental Studies, and from the University of Delaware with a Masters of Energy and Environmental Policy.

Patrick O'Shei

Patrick O'Shei is the Director of Market Development at NYSERDA. He is responsible for the design and delivery of Energy Efficiency programs serving existing commercial buildings and new construction in all sectors. He also oversees the development of building energy codes, product and technical standards, and quality assurance. He is responsible for the development of new market initiatives based upon Big Data, E-Commerce and digital technologies. In his previous role as Director of Performance Management and Evaluation he was responsible for measuring and evaluating NYSERDA program performance and their impact on markets and the provision and development of data/information resources to support analytics and performance management. Prior to this position, he was the Program Manager for Quality Standards & Compliance. Prior to joining NYSERDA, Patrick held positions as a Senior Consultant for Metamorphosis Management Group, VP Operations & Finance for ESCO Energy Services, VP & COO for the Kripalu Center for Yoga and Health. He has 15 years of experience in corporate quality management and operational excellence and 15 years of teaching experience in the fields of management and mathematics at SUNY Empire State College. Patrick holds a B.S. in Paper Science & Engineering from the SUNY College of Environmental Science & Forestry and an M.S. in Applied & Mathematical Statistics from the Rochester Institute of Technology.

Mary Peck

Mary Peck was appointed as the Director of Internal Audit for NYSERDA on June 27, 2018. In this position, Mary is responsible for managing all aspects of the execution of the annual audit plan, reviewing operations to assure compliance with management policies, governance processes, and the effectiveness of internal controls. Throughout her career, she has earned a reputation at both the state and national level as an expert and leader in developing and promoting strong systems of governance, risk, and controls. In 2004, the NYS Division of the Budget, in conjunction with the Office of the State Comptroller, created an interagency task force to address both internal audit compliance issues, as well as to provide compliance guidance on the broader internal control requirements of the NYS Internal Control Act. In support of that effort, Mary was chosen as the Task Force Co-Chair and was asked to present on the final report and the NYS model at an audit symposium in South Korea. Mary serves on the Board of Governors for the Institute of Internal Auditors and the New York State Internal Control Association. Prior to her appointment at NYSERDA, Mary served as the Director of Internal Control for NYS OPWDD, was a Senior Auditor for the New York ISO, a not for profit organization responsible for monitoring the statewide electrical power grid and held various positions within the Office of the State Comptroller. Mary graduated summa cum laude with a BBA in Accounting from Siena College. She is a Certified Internal Auditor and holds various other risk and audit designations

Alyse Peterson

Alyse Peterson is Senior Advisor for Nuclear Coordination and Radioactive Waste Policy at NYSERDA. In this role, she serves as the State's Liaison Officer (SLO) Designee to the U.S. Nuclear Regulatory Commission (NRC) and as the State's nuclear coordinator. As SLO Designee, she is the primary communication channel between the State and the NRC. As State nuclear coordinator, she works closely with the New York State Departments of Public Service, Health, Environmental Conservation, and Homeland Security & Emergency Services on all state activities related to atomic energy. She serves as a member of the Indian Point Closure Task Force. She is the State's representative to the national Low Level Radioactive Waste Forum on which she has

long served in a leadership role, currently as Past-Chair. Alyse came to NYSERDA from the New York State Department of Environmental Conservation (DEC) where she served as a Senior Environmental Engineer and was responsible for environmental contaminant investigation & remediation under CERCLA, and RCRA waste management & beneficial use practices, among other issues. Alyse holds an Bachelor of Science degree in Environmental Engineering from Rensselaer Polytechnic Institute and is a licensed Professional Engineer.

Ashley Porubcan

Ashley Porubcan was named as Program Manager for the Operational Transformation & Lean team in 2017. In this role, she leads a team that engages in a range of initiatives to expand impact, build new capabilities, improve customer and partner interfaces, improve responsiveness, reduce cycle times, streamline and enable internal workflow, support reporting and managerial decision-making, manage risk, and reduce cost. Additionally, the Operational Transformation and Lean Unit serves as an internal consultancy that supports projects in partnership with programmatic and functional units to improve the way NYSERDA does business for their customers and contractors. Ashley has over 10 years of service at NYSERDA and has served in the roles of Business Analyst, Project Manager, and Project Coordinator for various teams. Ashley holds a Bachelor of Science in Business & Technology Management from Clarkson University and a Master of Business Administration from the University at Albany.

Donna Rabito

Donna Rabito is Director of Human Resources and is responsible for providing overall strategic human resource leadership to the organization by overseeing the development and implementation of human resources policies, programs and services. Prior to joining NYSERDA in January 2013, Donna served as Associate Director of Human Resources for Albany Medical Center; Human Resources Manager for Albany Molecular Research, Inc.; and Manager of Human Resources for Laberge Engineering and Consulting Group. Donna holds a B.S. in Marketing from SUNY New Paltz, an M.B.A. in Human Resources/Information Systems from the University at Albany, and is a certified Senior Professional in Human Resources.

Sarah Rambacher

Sarah Rambacher is a Program Manager for the Shared Services team at NYSERDA, a team charged with centralizing common administrative process across the Authority, to reduce overall administrative costs, streamline and standardize processes, and deliver continuous improvement opportunities. Sarah joined NYSERDA in 2012 and has held a variety of positions at NYSERDA over the last six years, including Project Manager in the Industrial & Process Efficiency Team and Business Analyst in the Operational Transformation and Lean Team. Sarah is also a Certified Empire Belt in the New York State Lean Initiative. Sarah holds a Bachelor of Business Administration with a Major in International Business from Loyola College and a Minor Equivalent in Mandarin Chinese from Johns Hopkins University.

Michael Reed

Michael Reed is a Program Manager on the Commercial Market Development team. As the team lead for commercial programs in New York City, Michael helps lead programs focused on accelerating the adoption of smart building technology and services, as well as addressing barriers preventing the adoption of energy efficiency in commercial tenant spaces. Prior to joining

NYSERDA in May of 2017, Michael led clean energy programs for Groundswell, a DC based clean energy nonprofit. Michael also served for three years in the Peace Corps in Peru. Michael holds a B.A. from the University of California, San Diego, and an M.P.A from the NYU Wagner School of Public Service.

Priscilla Richards

Priscilla Richards, LC is a Program Manager and leads NYSERDA's Codes Team. She is responsible for managing a team of staff and consultants, focusing on three key energy code strategies to reduce carbon impacts of buildings: advancing energy codes, improving code compliance, and increasing and streamlining enforcement. During her career at NYSERDA, she has led or implemented energy efficiency and market transformation initiatives totaling over \$350 million, primarily targeting the commercial sector. She holds a Lighting Certified credential from the National Council on Qualifications for the Lighting Professions. Prior to joining NYSERDA, Priscilla was a project manager with the New York State Energy Office, and worked as an engineer for Kallen and Lemelson, Consulting Engineers, LLP. Priscilla has a Bachelor of Science in Electrical Engineering from Rensselaer Polytechnic Institute and a Master's degree in Public Affairs from SUNY Albany.

Adam Ruder

Adam Ruder is the Program Manager for NYSERDA's Clean Transportation group. The Clean Transportation group focuses on developing and demonstrating new technologies, policies, and business models that support three key focus areas: electric vehicles, public transportation, and mobility management. Adam has led the implementation of Gov. Cuomo's ChargeNY initiative to advance electric vehicle adoption in New York State and he closely collaborates with other states and the federal government to jointly advance EV policies and programs. Before joining NYSERDA in 2008, Adam received a Master in Public Policy degree from the John F. Kennedy School of Government at Harvard University.

David Sandbank

In November 2014 David Sandbank joined NYSERDA to run New York State's \$1 billion NY-Sun initiative and has overseen the largest year-over-year growth of solar in New York State. In addition, Sandbank led the design and launch of a comprehensive Community Solar program to reduce the over-all cost of solar in the State and enable access to solar for all New Yorkers along with Solarize, Affordable Solar and K-Solar. Prior to joining NYSERDA, Sandbank worked as a solar developer, helping a start-up grow into a \$30 million company. Sandbank helped build a staff of more than 100 and oversaw company operations, marketing, engineering and installation teams. In November 2013, Sandbank was elected vice president of the New York Solar Energy Industries Association to actively work with government agencies, policy makers and utility companies to help advance the solar industry in New York.

Erich Scherer

As Senior Advisor for Energy and Environmental Analysis, Erich Scherer's role focuses on providing policy advice and developing underpinning analysis on key New York State clean energy strategies. In doing so, Erich works closely with teams across NYSERDA as well as policy leads at the Department of Public Service. Erich leads on EEA's capability to analyze clean energy technology cost, value and resource availability. Recent projects include New York's Clean

Energy Standard, Renewable Heating and Cooling Policy Framework and Offshore Wind Master Plan. Erich's career in the energy sector spans almost fifteen years. Prior to arriving at NYSERDA in 2015, he worked in the private sector as a financial services advisor for solar PV, biomass heat and energy efficiency in London and Philadelphia. He started his career in the energy sector at the UK Government Department of Energy and Climate Change, where he was one of the authors of the UK Renewables Strategy as well as key renewables policies including the Renewables Obligation, Feed-in Tariffs and the Renewable Heat Incentive. At the European Commission in Brussels, he was one of the designers of the 2009 Renewables Directive, which sets mandatory 2020 targets driving renewable energy policy efforts across the European Union. Before joining the energy sector, Erich practiced law for five years, specializing in corporate and finance law. He holds Masters degrees in Law from the University of Oxford and the Free University of Amsterdam.

Kimberlie Schryer

Kimberlie Schryer is the Program Manager for Residential Data Analysis and Systems Planning. Kim is responsible for data analytics to better determine contractor training needs, improve project and business-level performance and scale residential energy efficiency. She represents New York on several nationally recognized data standards working groups and facilitates standards practice in IT systems planning for new NYSERDA initiatives. Previous NYSERDA responsibilities have spanned several public benefit commercial and residential incentive and training programs and quality assurance. Kim joined NYSERDA in 2002, bringing 15 years of experience with Fortune 500 organizations, including Oracle Corporation and General Electric, focused on change management. She is a Chemical Engineer from the University of Louisville and also has an MBA from Union College in Schenectady, NY.

Michael Shimazu

Michael Shimazu serves as NYSERDA's Senior Advisor for Business Growth and Innovation. In this capacity, Mike is responsible for managing several programs that support research and innovation across the spectrum of clean energy technologies, including launching the 76West Clean Energy Competition, and advises NYSERDA teams regarding technology commercialization. During his 8 years at NYSERDA, he launched and managed the nationally-recognized Clean Energy Business Incubator program, began a venture mentoring service, and initiated outreach to venture, corporate, and impact investors to support early-stage clean energy companies in New York State. Previously, Mike was a co-founder and Vice-President of Molecular OptoElectronics Corporation (venture-backed startup company), a business development executive at Rensselaer Polytechnic Institute and the University at Albany, and the principal of Industrial Physics Group, a successful technology business development consultancy. Mike received a B.S from the Massachusetts Institute of Technology and M.S. from Rensselaer. He holds three U.S. patents.

Scott Smith

Scott Smith is a member of the Clean Heating and Cooling Team which develops and executes strategies to scale the renewable heating and cooling market in New York State including: ground source and air source heat pumps, solar thermal and biomass. Prior to joining NYSERDA, Scott worked as an environmental consultant for Dames & Moore on the clean-up of PCBs at the former General Electric Company transformer manufacturing facility in Hudson Falls. He has a

Bachelor's degree in Chemical Engineering from Worcester Polytechnic Institute and a Master's Degree in Chemical Engineering from the University of Oklahoma.

Bradford Tito

Bradford Tito serves as Program Manager for Communities and Local Government at NYSERDA. Brad works with communities across the state to save energy and improve the environment. His role is to package and promote innovative and responsive clean energy offerings that resonate with local governments and the nearly 20 million people they serve. Prior to joining NYSERDA in 2015, Brad served as Director of Sustainability for the City of Yonkers, NY where he led a number of high-profile initiatives including an award-winning LED streetlight project, the establishment of mandatory green building standards, and the replacement of 500 windows in historic Yonkers City Hall. Brad also served as the Director of Environmental Coordination for Nassau County, NY where he worked for five years implementing a broad range of environmental and health initiatives. Brad holds a master's degree in Urban Policy Analysis and Management from the New School University and a bachelor's degree in Sustainable Development from Prescott College in Arizona.

Brian Treanor

Brian Treanor is Assistant Controller and oversees accounting operations including accounts payable, billing/accounts receivable, and payroll. Brian is also primarily responsible for the preparation of quarterly and annual financial statements, and is the principal lead for the Authority's independent financial statement audit. Brian also maintains the Authority's system for budgetary control over public funds and is responsible for various internal and external program financial reports. Brian has been with NYSERDA for 14 years. Brian is a Certified Public Accountant with a B.S. in Accounting from the State University at Albany. Brian's 12 years of prior professional experience included work for international CPA firm KPMG as an auditor, and employment as a Director of Accounting and Decision Support for a community hospital system.

Stanley D. Trybulski

Stan Trybulski is the Director of Market Insights, where he and his team ensure NYSERDA's programs and strategies are rooted in actionable insights about the economics and decision making of customers, partners and markets where NYSERDA operates. Market research and analytics is foundational to NYSERDA's work to inform and develop strategies that overcome market barriers, and animate the market to increase the scale and adoption of clean energy. Prior to joining NYSERDA in May of 2016, Stan spent over 15 years as a clean energy private equity investor, investment banker and management consultant at such firms as Good Energies, Morgan Stanley and Marakon Associates. Throughout his career, Stan has conducted extensive company due diligence, market analysis and insight generation across clean energy markets. Stan holds a bachelor's degree in Politics from Princeton University and an MBA from Columbia University.

Kelly Tyler

Kelly Tyler is the Director of the Communities and Local Government Department at NYSERDA where she leads a team that engages, collaborates and partners with municipalities and community stakeholders to proactively address local energy and economic development needs with market-oriented clean energy strategies. Under her leadership, the department administers the Clean

Energy Communities, Community Energy Engagement and Cleaner, Greener Communities Program. Additionally, she serves as Manager of the Buffalo Regional Office. Prior to NYSERDA, Kelly worked for the Buffalo Niagara Partnership as Manager of Business and Workforce Development where she administered business growth and advocacy efforts through a 160-member manufacturers group; and at the Amherst Chamber of Commerce as Vice President of Operations. Kelly holds a Masters of Business Administration from Medaille College and a Bachelor of Arts in Public Communication and English from Buffalo State College.

Vanessa Ulmer

Vanessa supports NYSERDA's Energy and Environmental Analysis group as a member of the Policy Development Team. Vanessa's current portfolio focuses on statewide energy efficiency policy and the Reforming the Energy Vision (REV) regulatory process. She is a member of the core NYSERDA and Department of Public Service team which developed a 2025 statewide energy efficiency target and plan for NYS, and which is now advancing implementation efforts. Vanessa joined NYSERDA in 2012, initially supporting the Authority's commercial programs. Prior to NYSERDA, Vanessa's career focused on public policy analysis and advocacy across the fields of public health, urban policy, sustainable development, and international trade. She worked previously for a Tulane University health research center, for the Carnegie Endowment for International Peace, and for a transatlantic think tank. Vanessa holds a Master in Public Affairs from Princeton University and a BS in Policy Analysis and Management from Cornell University.

Matthew Vestal

Mr. Vestal is Senior Advisor for NYSERDA's Large-Scale Renewables Team, leading various State efforts related to achieving New York's goals of 9 GW of offshore wind by 2035 and 70% renewables by 2030. His position focuses on providing commercial and technical guidance for policies and frameworks that underpin New York's clean energy strategies. Prior to NYSERDA, Mr. Vestal was an associate at Capital Dynamics, a market-leading investor in land-based renewables and conventional fuel technologies where he supported deal origination, transaction underwriting, and asset management. Prior to Capital Dynamics, Mr. Vestal was an analyst at GE Energy Financial Services where he worked in project development and fixed-income underwriting. Mr. Vestal holds a bachelor's degree in engineering physics from the University of Kansas.

John Williams

John Williams is Vice President of Policy and Regulatory Affairs and has responsibility for overall policy and planning guidance for NYSERDA. In this role, John leads the Authority's efforts with respect to the New York State Energy Plan. He engages the Authority's Energy and Environmental Analysis and Government Affairs functions, as well as the Performance Management and program evaluation functions of the Authority. In his previous role with NYSERDA, John served as Director of Energy Analysis and as Deputy Counsel. Prior to joining NYSERDA, John served as Energy Counsel for the New York State Assembly; was a Staff Attorney for The Energy Project of the Pace University School of Law; and also worked as a Financial Analyst for the Public Service Company of New Mexico, a combined electric and natural gas utility company serving the largest markets in the state of New Mexico. John serves as the designated alternate for NYSERDA on the NYS Board on Electric Generation Siting and the

Environment, and also serves on the Board of Directors for the National Association of State Energy Officials. John has a B.A. in History from Columbia University, a J.D. from St. John's University School of Law, and an LL.M. in Environmental Law from Pace University School of Law. John is a Member of the Bar of the states of New York and New Jersey.

Andrew Zielinksi

Andrew Zielinski is an Advisor for the Large-Scale Renewables (LSR) team. In this role, Andrew focuses on New York Independent System Operator (NYISO) activities including participation in the shared governance process, transmission related issues with the NYSERDA renewable portfolio, and technical studies in collaboration with the Energy and Environmental Analysis group. Andrew supports the LSR team on topics related to transmission, NYISO activity and various other technical issues. Prior to joining NYSERDA, Andrew worked at the NYISO in the Transmission Studies group as a Planning Engineer . Andrew has a Bachelor of Science in Electrical Engineering with a focus in Power Systems from Clarkson University and a Masters of Business Administration from the College of Saint Rose.

Resolution N	ο.
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RESOLVED, that the Authority's compensation schedule presented at this June 23, 2020 meeting is hereby recommended for approval by the Board as the compensation schedule to be submitted pursuant to Section 2800 of the Public Authorities Law; and

BE IT FURTHER RESOLVED that the attached vitae are recommended for approval by the Board for submission under Section 2800 of the Public Authorities Law.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

FY 2019-20 ANNUAL INVESTMENT REPORT

A. EXPLANATION OF INVESTMENT GUIDELINES

Public Authorities Law Section 2925 provides that the investment guidelines of a public authority shall set forth, among other things:

- a detailed list of permitted investments;
- what types of investments shall be secured with collateral and to what extent;
- what types of investments shall be made pursuant to written contracts;
- how collateral shall be valued and monitored;
- standards for diversifying types of investments and for qualifying and diversifying firms with which business is transacted;
- requirements for Board verification of matters relating to investments;
- provisions for annual independent audit of all investments; and
- provisions for preparing and filing quarterly and annual investment reports.

The Guidelines explicitly require the Board to determine whether results are consistent with objectives, to review the independent audit of investments, to review the program for consistency with statutory requirements, and to verify collateral semi-annually (at least once on an unscheduled basis). The Guidelines permit delegation of these functions through the Audit and Finance Committee to the Authority's independent auditors.

The Guidelines provide that, where practicable, the Members shall review and approve at the June meeting an annual investment report and the investment guidelines.

B. AMENDMENTS

The Investment Guidelines were last approved by the Members at the June 2019 meeting. No amendments to the investment guidelines were made during the year.

C.	INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTION
	Following is the Investments Guidelines, Operative Policy and Instruction as of June 2019.

INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS (June 2019)

I. Introduction

These guidelines set forth the policy of the New York State Energy Research and Development Authority (hereafter "the Authority") and instructions to its officers and staff with regard to its investments and the monitoring and reporting of these investments. The guidelines are intended to meet or exceed the provisions of Public Authorities Law (hereafter, "PAL") Section 2925, the Office of the State Comptroller's Investment Guidelines for Public Authorities contained in 2 NYCRR Part 201, Section 201.3, and the provisions of the Authority's enabling legislation concerning Authority investments. In accordance with PAL Section 2925, the guidelines will be reviewed, revised, if necessary, and approved as frequently as necessary and appropriate, but not less frequently than annually, in the manner described hereafter.

The provisions of these guidelines apply to all monies for which the Authority is responsible for directing investment. This includes monies to which the Authority has legal title and which are held by the Commissioner of Taxation and Finance as fiscal agent of the Authority (PAL Section 1859(1)). It also includes monies to which the Authority does not have legal title, but for which it is responsible for directing investment such as monies held by the trustee for the State Service Contract Revenue (West Valley) Bonds.

The Authority conducts a Private Activity Bond Financing Program. Pursuant to this program, tax-exempt non-recourse securities are issued by the Authority, and the proceeds are made available to State utilities and other non-State entities to finance eligible projects. These securities do not constitute a debt of or charge against the credit of the Authority or the State. Rather, the utility or other entity for which the securities are issued is liable for payment of the principal, redemption premium, if any, and interest on the securities. The proceeds of each issuance are deposited with a trustee chosen by the participating utility or other entity and are not available for investment by the Authority. Generally, the Indenture of Trust for the transaction will contain a list of securities in which the Trustee may invest these monies. The list of permitted investments is approved by the Commissioner of Taxation and Finance as part of the Commissioner's review pursuant to the enabling legislation of the Authority. Investments are made at the direction of the participating utility or other entity and not at the direction of the Authority. Accordingly, the provisions of these Investment Guidelines do not apply to the investing of these monies. Nonetheless, when participating in the formulation of these financing transactions, staff are directed to pursue the objectives set forth in the Investment Guidelines and to require that prudent provisions as to permitted investments, collateral requirements and investment monitoring be included in the underlying documents, as appropriate.

II. Definitions

"Broker-Dealer" means any government bond trader approved by the Commissioner of Taxation and Finance reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York.

"Custodian" means the Commissioner of Taxation and Finance, or a bank, trust company or national banking association designated or approved to hold securities on behalf of or for the benefit of the Authority, as trustee or otherwise.

"Eligible Banking Institution" means any bank, trust company, or national banking association approved by the Commissioner of Taxation and Finance doing business through offices located within New York State. For the State of New York's Excelsior Linked Deposit Program only, Eligible Banking Institution shall also include savings and loan institutions.

"Federal Governmental Obligations" means obligations of the United States and obligations the principal and interest of which are unconditionally guaranteed by the United States.

"Repurchase Agreement" means a written contract whereby the Authority purchases securities, and the seller of the securities agrees to repurchase the securities at a future date for a specified price. Repurchase

Agreements may be used to purchase only Federal Government Obligations. The Authority may enter into a Repurchase Agreement only with an Eligible Banking Institution or a Broker-Dealer.

"Money Market Fund" means shares of a diversified open-end management investment company, as defined in the Investment Company Act of 1940, registered under the Federal Securities Act of 1933, and operated in accordance with Rule 2a-7 of the Investment Company Act of 1940 as a "Government Money Market Fund" (investing at least 99.5 percent of its total assets in cash, Government Securities, and and/or Repurchase Agreements that are fully collateralized), provided that it is rated in the highest rating category by at least two nationally recognized rating organizations, and provided that it does not impose any liquidity fees or suspend redemptions as provided thereunder.

III. Investment Objectives

The investment objectives of the Authority, listed in order of importance, are as follows: to conform with all applicable Federal, State and other legal requirements; to safeguard adequately investment principal; to earn reasonable rates of return; and to provide for portfolio liquidity. These investment objectives will likely be achieved through substantial reliance on Federal Governmental Obligations and minimal investment in long-term securities.

IV. Delegation of Authority

The responsibility for implementing the investment program is delegated to the Authority's Treasurer. All investment transactions shall be approved and authorized by the Treasurer or, in his/her absence the Controller and Assistant Treasurer, or any Officer of the Authority. Such authorized investment transactions shall be initiated and executed by the Commissioner of Taxation and Finance (or his/her authorized designees), the Authority's fiscal agent established pursuant to Section 1859 of the Public Authorities Law. The Treasurer shall establish written procedures for the operation of the investment program consistent with these Investment Guidelines. Such procedures shall include an internal control structure to provide a reasonable level of accountability over the authorization, recording and reporting of investment transactions, and to provide for a segregation of duties between authorization and accounting functions.

Investments shall be made in accordance with the Authority's Investment Guidelines, Operative Policy and Instructions using the judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the objectives set forth herein. All Authority staff participating in the investment process shall act responsibly as custodians of the public trust and shall avoid any transaction that might impair public confidence in the Authority's ability to effectively fulfill its responsibilities. All participants involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

V. Types of Investments Authorized

The Authority may deposit monies in demand deposit (checking) and time deposit (savings) accounts with Eligible Banking Institutions located in New York State. Monies deposited in such accounts shall be fully secured as soon as practicable by Federal Deposit Insurance Corporation (FDIC) insurance or obligations of New York State or Federal Government Obligations, subject to approval of the Commissioner of Taxation and Finance, the Authority's fiscal agent, in consultation with the Authority.

Investments shall be limited to the following types of securities:

- (1) Federal Governmental Obligations, provided that the term of each shall not exceed five (5) years;
- (2) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State, provided that the term of each shall not exceed five (5) years;
- (3) certificates of deposit of Eligible Banking Institutions located in New York, provided that: the term

of each shall not exceed five (5) years; pursuant to the limitations of a resolution adopted by the Members in June 1994, the Authority may invest in certificates of deposits through the State of New York's Excelsior Linked Deposit Program, whereby the Authority's deposit will earn a fixed rate of interest equal to 2% to 3% less than the institution's published certificate of deposit rate consistent with this program's criteria; and subject to all other provisions outlined in these Guidelines.

- (4) Repurchase Agreements, provided that the term of each shall not exceed sixty (60) days and that no more than 40 percent of the Authority's total investments shall be invested in Repurchase Agreements at the time of purchase; and
- (5) Money Market Funds, provided that no more than 20 percent of the total amount of the Authority's investments shall be invested in Money Market Funds for more than 15 consecutive days.

Nothing herein contained shall preclude the Authority from imposing further restrictions on the investing of funds in any Indenture of Trust relating to the issuance of bonds.

VI. Authorized Financial Institutions and Dealers

Eligible Banking Institutions and Broker-Dealers authorized for the Authority's investment purposes shall be approved based upon policies and procedures established by the Commissioner of Taxation and Finance. The Authority will periodically consult with the Department of Taxation and Finance concerning their policies, practices and the resulting list.

VII. Diversity of Investments

To the extent practical, the Authority shall diversify its investments by financial institution, by investment instrument, and by maturity. The cash flow requirements of the Authority will be a significant determining factor in selecting the term of investment securities. Competitive quotations, pursuant to policies established by the Commissioner of Taxation and Finance and executed by his/her designated staff, shall be used to select the institution from which investments are purchased.

Except as otherwise required by any policies and practices of the Commissioner of Taxation and Finance, the Authority shall not invest more than 35 percent of its total investment portfolio with a single Eligible Banking Institution.

VIII. Collateral and Delivery of Securities

Collateral for investments shall be limited to: (i) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State; and (ii) Federal Governmental Obligations. The Authority shall not accept a pledge of a proportionate interest in a pool of collateral. Collateral shall be segregated in the name of the Authority, and shall be in the custody of the Authority or a third party Custodian pursuant to a written custodial agreement; provided, that if the Custodian is the Commissioner of Taxation and Finance, a written custodial agreement shall not be required. The written custodial agreement shall specify circumstances, if any, under which collateral may be substituted, and shall provide that the Custodian holds the collateral solely for the benefit of the Authority and makes no claim thereto. The market value of collateral and accrued interest, if any, shall equal or exceed the value of the secured investment and accrued interest, if any, at all times. Collateral shall be marked to market at the time of the initial investment and, thereafter, no less frequently than monthly using the bid or closing price as quoted in The Wall Street Journal.

In addition to collateral permitted for investments, collateral for deposits made with banks participating in the State's Excelsior Linked Deposit Program shall, subject to the discretion of the Commissioner of Taxation and Finance with confirmation to the Authority, include obligations permitted under Section 105 of the State Finance Law.

Certificates of deposit, demand deposits and time deposits shall be fully collateralized for amounts in excess of Federal Deposit Insurance Corporation (FDIC) coverage.

Securities purchased through a Repurchase Agreement shall be marked to market at least monthly.

Collateral shall not be required with respect to the purchase of obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, or money market funds.

Under any Repurchase Agreement, payment shall be made by or on behalf of the Authority to the seller upon the seller's delivery of obligations of the United States to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the obligations of the United States are credited to the Custodian's Federal Reserve Bank account. Payment shall be made by or on behalf of the Authority for obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, certificates of deposit, and other purchased securities upon the delivery thereof to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the purchased securities are credited to the Custodian's Federal Reserve System account.

IX. Written Contracts

The Authority has determined that, with the exception of Repurchase Agreements, written contracts are not a regular business practice for the types of securities (obligations of New York State, Federal Governmental Obligations, etc.) in which Authority monies may be invested. The interests of the Authority will be adequately protected by conditioning payment by or on behalf of the Authority on the physical delivery of purchased securities to the Authority or its Custodian, or, in the case of book-entry transactions, on the crediting of purchased securities to the Custodian's Federal Reserve System account. In addition, all purchases will be confirmed in writing to the Authority.

Only an Eligible Banking Institution or a Broker-Dealer shall be qualified to enter into a Repurchase Agreement with the Authority's fiscal agent. The Authority's fiscal agent shall enter into a Master Repurchase Agreement, patterned after the Bond Market Association (formerly Public Security Association) model master repurchase agreement, with each Eligible Banking Institution or Broker-Dealer with which the fiscal agent enters into a specific Repurchase Agreement. The Master Repurchase Agreement shall include:

- (a) a description of the relationship of the parties as purchaser and seller;
- (b) a description of the events of default which would permit the purchaser to liquidate the pledged collateral;
- (c) procedures which ensure that the Authority obtains a perfected security interest in the underlying securities; and
- (d) the method of computing margin maintenance requirements, including a limitation, based on policies established by the Commissioner of Taxation and Finance, that securities purchased and held as collateral for repurchase agreements shall be Federal Government Obligations maturing in twelve years or less, and provided that: (i) if such collateral has a maturity of seven years or less, the market value must equal or exceed 101% of the par value of the repurchase agreement; and (ii.) if such collateral has a maturity greater than seven years, the market value must equal or exceed 102% of the par value of the repurchase agreement.

X. Qualification of Custodians

The following shall be qualified to act as Custodian: the Commissioner of Taxation and Finance, any bank or trust company chartered by the State of New York which is not a member of the Federal Reserve System, or any bank, trust company, or national banking association which is a member of the Federal Reserve System, including an Eligible Banking Institution, which transacts business through offices located within the State of New York. During the time that any bank or trust company serves as Custodian, it must be rated at least "A", or its equivalent, by a nationally recognized independent rating agency. With respect to the holding of securities purchased by the Authority through a Repurchase Agreement, the Custodian may not be the Eligible Banking Institution with which the Authority or its fiscal agent has

entered into such Repurchase Agreement, nor an agent of such Eligible Banking Institution for purposes of the Repurchase Agreement.

XI. Audit and Finance Committee

The functions of the Audit and Finance Committee with respect to investments are to:

- (a) monitor the system of internal controls;
- (b) verify relevant matters relating to securities purchased or held as collateral semi-annually and on an unscheduled basis;
- (c) determine whether the investment results are consistent with the investment objectives set forth in these Investment Guidelines;
- (d) review any independent audits of the investment program;
- (e) review these Investment Guidelines periodically and recommend to the Members of the Authority such amendments thereto as may be necessary or appropriate; and
- (f) evaluate systematically and periodically the investment program consistency with the provisions of PAL Section 2925, these Investment Guidelines, and the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3).

In support of its functions, the Audit and Finance Committee shall:

- (a) require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under Government Auditing Standards issued by the Comptroller General of the United States:
- (b) review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate;
- (c) review the written annual audit report of the independent auditors;
- (d) discuss with the independent auditors, with staff and officers not present, the results of the annual independent audit and the written annual audit report; and
- (e) review not less frequently than annually these Investment Guidelines, and recommend to the Members of the Authority such changes in these Investment Guidelines as it deems necessary or appropriate.

XII. Operations and Procedures

The Treasurer, or in his/her absence the Controller and Assistant Treasurer or any Authority Officer, shall authorize the purchase and sale of all securities, authorize the disbursement of funds for delivery of securities, determine the selection of brokers, dealers and Custodians, and execute contracts for Repurchase Agreements and custodial services on behalf of the Authority. The process of initiating, reviewing and approving requests to purchase and sell securities shall be documented and retained for audit purposes. Oral directions concerning the purchase or sale of securities shall be confirmed in writing. The Authority shall pay for purchased securities upon the delivery or book-entry thereof, and the Authority will obtain written confirmation of each delivery or book-entry. Custodians must have prior authorization from the Authority to deliver securities and collateral and shall not deliver securities except upon receipt of funds. Custodians shall confirm in writing all such transactions. Custodians shall report whenever activity has occurred in a custodial account of the Authority.

The Treasurer shall develop detailed investment procedures implementing the Investment Guidelines as part of the Accounting Policy and Procedures Manual which shall include, but not be limited to, the following:

- (a) the establishment and maintenance of a system of internal controls for investments;
- (b) methods for adding, changing or deleting information contained in the investment record, including a description of the documents to be created and verification tests to be conducted;
- (c) a data base or record incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices and related information necessary to manage the portfolio; and
- (d) requirements for periodic reporting and a satisfactory level of accountability.

Except in the purchase of government securities at their initial auction, the Authority will encourage investment selections utilizing competitive quotations based upon the procedures established by the Commissioner of Taxation and Finance and carried out by his/her designated personnel.

The Treasurer shall maintain a record of investments. The record shall identify each security, the fund for which held, the place where kept, date of disposition and amount realized, and the market value and Custodian of the collateral.

At least monthly, the Authority shall verify the principal amount and market values of all investments and collateral. The Authority shall obtain appropriate listings from Custodians and compare such listings against the records of the Authority.

XIII. Audit

At the time the independent auditors to the Authority conduct the annual audit of the accounts and financial affairs of the Authority, the independent auditors shall audit the investments of the Authority for the subject fiscal year. The annual investment audit shall determine whether:

- (a) the Authority's investment practices and operations have been consistent with the provisions of PAL Section 2925, these Investment Guidelines, the Office of the Comptroller's Investment Guidelines for Public Authorities, and the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (b) adequate accounts and records are maintained which accurately reflect all transactions and report on the disposition of the Authority's investment assets; and
- (c) a system of adequate internal controls for investments is maintained.

The independent auditors shall prepare a written annual audit report which presents the results of their annual investment audit, and shall include:

- (a) a description of the scope and objectives of the audit;
- (b) a statement that the audit was made in accordance with generally accepted government auditing standards;
- (c) a description of any material weaknesses found in the internal investment controls;
- (d) a description of all non-compliance with provisions of PAL Section 2925, these Investment Guidelines, the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3), or the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;

- (e) a statement of positive assurance of compliance on the items tested; and
- (f) a statement of any other material deficiency or finding identified during the audit not covered in (e) above.

XIV. Reporting

Within sixty (60) days of the end of each of the first three quarters of the Authority's fiscal year, the Treasurer shall prepare and submit to the Members of the Authority and to the Audit and Finance Committee of the Authority a quarterly investment report which indicates new investments, the inventory of existing investments, the selection of Custodians and Broker-Dealers, and such other matters as the Treasurer deems appropriate.

Within 120 days of the end of the fiscal year, the Treasurer shall prepare and submit to the Audit and Finance Committee an annual investment report, which shall include the Investment Guidelines, including any amendment to the Investment Guidelines since the last annual investment report; an explanation of the Investment Guidelines and amendments; the results of the annual independent audit; the investment income record; a list of total fees, commissions or other charges paid to each Broker-Dealer and Custodian; and such other matters as the Treasurer deems appropriate.

The Members of the Authority shall review and approve the annual investment report, if practicable, at the June meeting of the Authority, for submission thereof to the Division of the Budget, the Department of Audit and Control, the Senate Finance Committee, and the Assembly Ways and Means Committee.

The Authority's annual financial statements shall report the Authority's investments and provide such disclosure information as is required by applicable governmental accounting standards.

Not less frequently than annually, and if practicable, at the June meeting of the Authority, the Members of the Authority shall review, amend, if necessary or appropriate, and approve these Investment Guidelines.

The provisions of these Investment Guidelines and any amendments hereto shall take effect prospectively and shall not invalidate the prior selection of any Custodian, Broker-Dealer, any prior investment, nor any list of permitted investments set forth in any indenture of trust or similar document previously executed by the Authority.

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D. INVESTMENT SUMMARY AS OF MARCH 31, 2020

Following is summary and detail of the Authority's investments as of March 31, 2020

NYSERDA				
Investment Report Summary				
As of March 31, 2020				
Summary of Investments by Functions/Programs				
	3/31/2020	3/31/2019	Increase/	
Funding Source	Market Value	Market Value	<u>Decrease</u>	
Multi Funding Source Cash Management	\$ 67,654,739	\$ 29,615,142	\$ 38,039,597	
NY-Sun	47,020,659	27,808,312	19,212,347	
Green Jobs Green New York (GJGNY)	57,539,271	53,535,651	4,003,620	
Market Development/Innovation & Research (CEF)	67,551,470	84,162,861	(16,611,390)	
Other (Individually less than 5% of total)	60,691,368	82,990,191	(22,298,822)	
Regional Greenhouse Gas Initiative (RGGI)	99,377,312	128,785,529	(29,408,217)	
Clean Energy Standard (CES)	72,628,273	124,204,976	(51,576,704)	
NY Green Bank	165,618,658	252,533,979	(86,915,322)	
Fiduciary Funds:				
Perpetual Care	31,372,266	30,081,260	1,291,006	
Low Level Radioactive Waste Account	2,529,804	2,517,178	12,627	
Total Investments	\$ 671,983,820	\$ 816,235,078	\$ (144,251,257)	

Analysis: Multi Funding Source Cash Management increased to provide more attractive yields and maintain liquidity as an alternative to investing in US Treasury Obligations, due to market disruptions in March resulting from the COVID-19 health crisis. NY-Sun balance increased primarily due to Bill-As-You-Go collections for projected working capital needs exceeding actual expenses. The decrease in CEF, Other, RGGI, and CES represents redemptions of certain US Treasury Obligations which were held in fully collateralized demand deposit account balances to avoid both Money Market fund limits and investing in negative yield US Treasury Obligations through March 31, 2020. Green Bank decrease was primarily due to additional capital deployed, principally on relatively recently closed deals.

Summary of Investments by Investment Type				
	3/31/2020		3/31/2019	
US Treasury Obligations	\$ 549,246,614	\$	747,431,300	
Certificates of Deposit	-		477,206	
Money Market Deposits	122,737,206		68,326,572	
Total	\$ 671,983,820	<u></u>	816,235,078	
Weighted average term of investments	7.4 months		8.6 months	
Weighted average time to maturity	2.1 months		6.0 months	

Analysis: The weighted average term of investments decreased principally due to shorter maturities on recent investments taking into consideration cash flow needs, available money market limits, and current yields.

1,086,534 1,594,450	\$ 935,204		
ncluding adjustments to fair market value) 5 1,117,777 6 1,197,206 6 1,086,534 6 1,594,450	(Including adjustments to fair market value) \$ 355,099 \$ 453,134 \$ 935,204		
fair market value) 5 1,117,777 6 1,197,206 6 1,086,534 6 1,594,450	to fair market value) \$ 355,099 \$ 453,134 \$ 935,204		
5 1,117,777 5 1,197,206 6 1,086,534 6 1,594,450	\$ 355,099 \$ 453,134 \$ 935,204		
1,197,206 1,086,534 1,594,450	\$ 453,134 \$ 935,204		
1,086,534 1,594,450	\$ 935,204		
1,594,450			
	\$ 1 102 732		
	Ψ 1,102,702		
1,765,839	\$ 2,388,521		
2,930,831	\$ 1,485,572		
2,422,168	\$ 1,848,437		
6,224,124	\$ 7,223,226		
1,289,026	\$ 789,179		
51,853	\$ 55,629		
19,679,809	\$ 16,636,733		
2 6%	2 3%		
6	2,930,831 2,422,168 6,224,124 1,289,026 51,853	2,930,831 \$ 1,485,572 2,422,168 \$ 1,848,437 6,224,124 \$ 7,223,226 1,289,026 \$ 789,179 51,853 \$ 55,629 19,679,809 \$ 16,636,733 2.6% 2.3%	2,930,831 \$ 1,485,572 2,422,168 \$ 1,848,437 6,224,124 \$ 7,223,226 1,289,026 \$ 789,179 51,853 \$ 55,629 19,679,809 \$ 16,636,733

Analysis: The annualized yield was higher than the prior year, primarily due to higher US Treasury yields. The decrease in the weighted average yield to maturity on current investments is due to decreases in current yields.

NYSERDA Investments 03/31/20

							Mankat
	-Investment Type-	-Purchase Date-	-Maturity Date-	-Cost-	-Principal-	- Yield-	-Market Value-
Multi Funding Source Cash Manage	- -				•		
	Money Market	N/A		67,654,739	67,654,739	0.20%	67,654,739
Multi Funding Source Cash Manage	ment Total			\$67,654,739	\$67,654,739		\$67,654,739
NY-SUN							
	US Treasury Bill	12/12/19	04/09/20	13,418,909	13,486,000	1.54%	13,485,730
		02/13/20	06/04/20	15,060,913	15,132,000	1.53%	15,130,033
		01/16/20	05/07/20	18,319,390	18,406,000	1.53%	18,404,896
NY-SUN Total				\$46,799,212	\$47,024,000		\$47,020,659
Green Jobs Green New York							
Green Jobs Green New Tork	Money Market	N/A		39,293,898	39,293,898	0.00%	39,293,898
	US Treasury Bill	02/13/20	04/16/20	15,925,036	15,968,000	1.54%	15,967,521
	US Treasury Strip	01/31/18	02/15/21	2,131,937	2,281,000	2.24%	2,277,852
Green Jobs Green New York Total	OO Treasury Outp	01/31/10	02/13/21	\$57,350,871	\$57,542,898	2.2470	\$57,539,271
				ψοι,σου,σιι	+		\(\text{\text{0.1}}\)
Market Development/Innovation & R	Research						
<u>.</u>	US Treasury Bill	01/09/20	04/16/20	29,820,796	29,942,000	1.51%	29,941,102
	•	02/13/20	05/14/20	23,678,465	23,771,000	1.55%	23,768,861
		02/20/20	06/11/20	13,778,964	13,844,000	1.53%	13,841,508
Market Development/Innovation & R	Research Total			\$67,278,225	\$67,557,000		\$67,551,470
Indian Point Energy Center							
	US Treasury Bill	02/06/20	04/16/20	1,322,081	1,326,000	1.52%	1,325,960
Indian Point Energy Center Total				\$1,322,081	\$1,326,000		\$1,325,960
Energy Efficiency Portfolio Standard							
	US Treasury Bill	02/20/20	04/16/20	14,790,138	14,826,000	1.56%	14,825,555
	US Treasury Note	09/13/18	09/30/20	1,803,377	1,854,000	2.76%	1,866,162

Energy Efficiency Portfolio Standard	d Total				\$16,593,515	\$16,680,000		\$16,691,71 7
National Fuel Gas								
	US Treasury Bill		02/06/20	04/16/20	1,259,267	1,263,000	1.52%	1,262,962
National Fuel Gas Total					\$1,259,267	\$1,263,000		\$1,262,962
Energy Storage								
Life gy Glorage	US Treasury Bill		12/05/19	04/16/20	11,758,354	11,823,000	1.51%	11,822,64
Energy Storage Total			12,007.10	5 11 1 51 2 5	\$11,758,354	\$11,823,000	110 170	\$11,822,64
Research & Development			00/10/10	00/10/00		40.4== 000	4 =00/	10.1=1.01
	US Treasury Bill		09/12/19	09/10/20	9,999,239	10,177,000	1.78%	10,171,810
December 1 O December 1 Total	US Treasury Note		09/06/18	09/30/20	5,745,145	5,896,000	2.66%	5,934,678
Research & Development Total					\$15,744,384	\$16,073,000		\$16,106,48
Renewable Portfolio Standard								
Nonewasie i errene standard	US Treasury Bill		03/12/20	04/16/20	13,478,694	13,482,000	0.26%	13,481,59
Renewable Portfolio Standard Total	,			2 , 2, 2	\$13,478,694	\$13,482,000		\$13,481,59
					. , ,	· , ,		. , ,
Regional Greenhouse Gas Initiative								
	US Treasury Bill		12/19/19	04/23/20	28,430,938	28,583,000	1.55%	28,582,428
			01/03/20	05/21/20	45,598,937	45,857,000	1.48%	45,852,873
			01/30/20	06/18/20	24,801,476	24,947,000	1.53%	24,942,011
Regional Greenhouse Gas Initiative	Total				\$98,831,351	\$99,387,000		\$99,377,312
Olean Francis Otendend								
Clean Energy Standard	IIC Tressury Bill		02/06/20	04/16/20	20.075.046	20.465.000	1.52%	20 164 00
	US Treasury Bill		03/05/20	05/21/20	30,075,846 42,410,375	30,165,000 42,468,000	0.64%	30,164,095 42,464,178
Clean Energy Standard Total			03/03/20	03/21/20	\$72,486,220	\$72,633,000	0.04 /6	\$72,628,27
olean Energy Clandard Total					Ψ1 Z, T UU,ZZU	ψ1 2,033,000		Ψ12,020,21
NY Green Bank								
NY Green Bank	Money Market	N/A			15,788,569	15,788,569		15,788,569
NY Green Bank	Money Market US Treasury Bill	N/A	09/05/19	08/13/20	15,788,569 10,996,947	15,788,569 11,178,000	1.75%	
NY Green Bank	-	N/A	09/05/19 08/29/19	08/13/20 08/13/20			1.75% 1.75%	11,173,618
NY Green Bank	-	N/A			10,996,947	11,178,000		15,788,569 11,173,618 10,975,696 6,075,939

Grand Total				\$666,093,986	\$670,643,206		\$671,983,820
Low Level Radioactive Waste Total				\$2,509,891	\$2,530,000		\$2,529,804
		01/16/20	07/09/20	758,355	764,000	1.55%	763,840
	US Treasury Bill	10/10/19	04/09/20	1,751,536	1,766,000	1.66%	1,765,96
Low Level Radioactive Waste							
Perpetual Care Funds Total				\$30,429,879	\$30,719,000		\$31,372,26
	US Treasury Note	08/15/18	02/15/21	29,746,123	30,030,000	2.64%	30,683,50
	US Treasury Bill	02/20/20	08/20/20	683,756	689,000	1.53%	688,76
Perpetual Care Funds							
NY Green Bank Total				\$162,597,303	\$164,948,569		\$165,618,65
		01/10/19	08/15/20	19,675,683	20,015,000	2.59%	20,163,96
		12/03/18	04/15/20	18,510,538	18,835,000	2.79%	18,975,68
			07/15/20	21,850,245	22,220,000	2.60%	22,377,29
		12/27/18	06/15/20	21,988,096	22,338,000	2.59%	22,501,38
	US Treasury Note	12/06/18	05/15/20	11,789,213	11,993,000	2.71%	12,081,63
		01/03/19	11/05/20	11,996,799	12,147,000	0.68%	12,139,08

E. AUDITOR'S REPORT ON COMPLIANCE WITH INVESTMENT GUIDELINES

As part of the annual audit of the financial statements of the Authority, the independent auditors audited the Authority's investments and its compliance with its Investment Guidelines for the fiscal year ended March 31, 2020. Following is the report issued by the independent auditors.

DRAFT REPORT



KPMG LLP 515 Broadway Albany, NY 12207-2974

Independent Accountant's Report on Compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York

Members of the Authority
New York State Energy and Research Development Authority:

We have examined the New York State Energy Research and Development Authority's (the Authority) compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York* during the year ended March 31, 2020. Management is responsible for the Authority's compliance with those requirements. Our responsibility is to express an opinion on the Authority's compliance with those requirements based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accounts and the standards applicable to attestation engagements contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Authority complied, in all material respects, with the specified requirements referenced above. An examination involves performing procedures to obtain evidence about whether the Authority complied with the specified requirements referenced above. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material noncompliance, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Our examination does not provide a legal determination on the Authority's compliance with specified requirements.

In our opinion, the Authority complied, in all material respects, with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York* for the year ended March 31, 2020.

In accordance with Government Auditing Standards, we are required to report all deficiencies that are considered to be significant deficiencies or material weaknesses in internal control; fraud and noncompliance with provisions of laws and regulations that have a material effect on the Authority's compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York and any other instances that warrant the attention of those charged with governance; noncompliance with provisions of contracts or grant agreements, and abuse that has a material effect on the subject matter. We are also required to obtain and report the views of responsible officials concerning the findings, conclusions, and recommendations, as well as any planned corrective actions. We performed our examination to express an opinion on whether the Authority complied with the aforementioned requirements and not for the purpose of expressing an opinion on the internal control over compliance with those requirements or other matters; accordingly, we express no such opinions. The results of our tests disclosed no matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of the Members and management of the Authority, the New York State Office of the State Comptroller, the New York State Division of the Budget, and the New York State Authorities Budget Office and is not intended to be and should not be used by anyone other than those specified parties.

F. LIST OF FEES AND CHARGES RELATED TO INVESTMENTS

Operating Fund NYS Department of Taxation and Finance - fiscal agent fees and expenses

\$345,000

Total Fees and Charges

\$345,000

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

(June 2020)

INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS (June 2020)

I. Introduction

These guidelines set forth the policy of the New York State Energy Research and Development Authority (hereafter "the Authority") and instructions to its officers and staff with regard to its investments and the monitoring and reporting of these investments. The guidelines are intended to meet or exceed the provisions of Public Authorities Law (hereafter, "PAL") Section 2925, the Office of the State Comptroller's Investment Guidelines for Public Authorities contained in 2 NYCRR Part 201, Section 201.3, and the provisions of the Authority's enabling legislation concerning Authority investments. In accordance with PAL Section 2925, the guidelines will be reviewed, revised, if necessary, and approved as frequently as necessary and appropriate, but not less frequently than annually, in the manner described hereafter.

The provisions of these guidelines apply to all monies for which the Authority is responsible for directing investment. This includes monies to which the Authority has legal title and which are held by the Commissioner of Taxation and Finance as fiscal agent of the Authority (PAL Section 1859(1)). It also includes monies to which the Authority does not have legal title, but for which it is responsible for directing investment such as monies held by the trustee for the State Service Contract Revenue (West Valley) Bonds.

The Authority conducts a Private Activity Bond Financing Program. Pursuant to this program, tax-exempt non-recourse securities are issued by the Authority, and the proceeds are made available to State utilities and other non-State entities to finance eligible projects. These securities do not constitute a debt of or charge against the credit of the Authority or the State. Rather, the utility or other entity for which the securities are issued is liable for payment of the principal, redemption premium, if any, and interest on the securities. The proceeds of each issuance are deposited with a trustee chosen by the participating utility or other entity and are not available for investment by the Authority. Generally, the Indenture of Trust for the transaction will contain a list of securities in which the Trustee may invest these monies. The list of permitted investments is approved by the Commissioner of Taxation and Finance as part of the Commissioner's review pursuant to the enabling legislation of the Authority. Investments are made at the direction of the participating utility or other entity and not at the direction of the Authority. Accordingly, the provisions of these Investment Guidelines do not apply to the investing of these monies. Nonetheless, when participating in the formulation of these financing transactions, staff are directed to pursue the objectives set forth in the Investment Guidelines and to require that prudent provisions as to permitted investments, collateral requirements and investment monitoring be included in the underlying documents, as appropriate.

II. Definitions

"Broker-Dealer" means any government bond trader approved by the Commissioner of Taxation and Finance reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York.

"Custodian" means the Commissioner of Taxation and Finance, or a bank, trust company or national banking association designated or approved to hold securities on behalf of or for the benefit of the Authority, as trustee or otherwise.

"Eligible Banking Institution" means any bank, trust company, or national banking association approved by the Commissioner of Taxation and Finance doing business through offices located within New York State. For the State of New York's Excelsior Linked Deposit Program only, Eligible Banking Institution shall also include savings and loan institutions.

"Federal Governmental Obligations" means obligations of the United States and obligations the principal and interest of which are unconditionally guaranteed by the United States.

"Repurchase Agreement" means a written contract whereby the Authority purchases securities, and the seller of the securities agrees to repurchase the securities at a future date for a specified price. Repurchase Agreements may be used to purchase only Federal Government Obligations. The Authority may enter into a Repurchase Agreement only with an Eligible Banking Institution or a Broker-Dealer.

"Money Market Fund" means shares of a diversified open-end management investment company, as defined in the Investment Company Act of 1940, registered under the Federal Securities Act of 1933, and operated in accordance with Rule 2a-7 of the Investment Company Act of 1940 as a "Government Money Market Fund" (investing at least 99.5 percent of its total assets in cash, Government Securities, and and/or Repurchase Agreements that are fully collateralized), provided that it is rated in the highest rating category by at least two nationally recognized rating organizations, and provided that it does not impose any liquidity fees or suspend redemptions as provided thereunder.

III. Investment Objectives

The investment objectives of the Authority, listed in order of importance, are as follows: to conform with all applicable Federal, State and other legal requirements; to safeguard adequately investment principal; to earn reasonable rates of return; and to provide for portfolio liquidity. These investment objectives will likely be achieved through substantial reliance on Federal Governmental Obligations and minimal investment in long-term securities.

IV. Delegation of Authority

The responsibility for implementing the investment program is delegated to the Authority's Treasurer. All investment transactions shall be approved and authorized by the Treasurer or, in his/her absence the Controller and Assistant Treasurer, or any Officer of the Authority. Such authorized investment transactions shall be initiated and executed by the Commissioner of Taxation and Finance (or his/her authorized designees), the Authority's fiscal agent established pursuant to Section 1859 of the Public Authorities Law. The Treasurer shall establish written procedures for the operation of the investment program consistent with these Investment Guidelines. Such procedures shall include an internal control structure to provide a reasonable level of accountability over the authorization, recording and reporting of investment transactions, and to provide for a segregation of duties between authorization and accounting functions.

Investments shall be made in accordance with the Authority's Investment Guidelines, Operative Policy and Instructions using the judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the objectives set forth herein. All Authority staff participating in the investment process shall act responsibly as custodians of the public trust and shall avoid any transaction that might impair public confidence in the Authority's ability to effectively fulfill its responsibilities. All participants involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

V. Types of Investments Authorized

The Authority may deposit monies in demand deposit (checking) and time deposit (savings) accounts with Eligible Banking Institutions located in New York State. Monies deposited in such accounts shall be fully secured as soon as practicable by Federal Deposit Insurance Corporation (FDIC) insurance or

obligations of New York State or Federal Government Obligations, subject to approval of the Commissioner of Taxation and Finance, the Authority's fiscal agent, in consultation with the Authority.

Investments shall be limited to the following types of securities:

- (1) Federal Governmental Obligations, provided that the term of each shall not exceed five (5) years;
- (2) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State, provided that the term of each shall not exceed five (5) years;
- (3) certificates of deposit of Eligible Banking Institutions located in New York, provided that: the term of each shall not exceed five (5) years; pursuant to the limitations of a resolution adopted by the Members in June 1994, the Authority may invest in certificates of deposits through the State of New York's Excelsior Linked Deposit Program, whereby the Authority's deposit will earn a fixed rate of interest equal to 2% to 3% less than the institution's published certificate of deposit rate consistent with this program's criteria; and subject to all other provisions outlined in these Guidelines.
- (4) Repurchase Agreements, provided that the term of each shall not exceed sixty (60) days and that no more than 40 percent of the Authority's total investments shall be invested in Repurchase Agreements at the time of purchase; and
- (5) Money Market Funds, provided that no more than 20 percent of the total amount of the Authority's investments shall be invested in Money Market Funds for more than 15 consecutive days.

Nothing herein contained shall preclude the Authority from imposing further restrictions on the investing of funds in any Indenture of Trust relating to the issuance of bonds.

VI. Authorized Financial Institutions and Dealers

Eligible Banking Institutions and Broker-Dealers authorized for the Authority's investment purposes shall be approved based upon policies and procedures established by the Commissioner of Taxation and Finance. The Authority will periodically consult with the Department of Taxation and Finance concerning their policies, practices and the resulting list.

VII. Diversity of Investments

To the extent practical, the Authority shall diversify its investments by financial institution, by investment instrument, and by maturity. The cash flow requirements of the Authority will be a significant determining factor in selecting the term of investment securities. Competitive quotations, pursuant to policies established by the Commissioner of Taxation and Finance and executed by his/her designated staff, shall be used to select the institution from which investments are purchased.

Except as otherwise required by any policies and practices of the Commissioner of Taxation and Finance, the Authority shall not invest more than 35 percent of its total investment portfolio with a single Eligible Banking Institution.

VIII. Collateral and Delivery of Securities

Collateral for investments shall be limited to: (i) obligations of New York State and obligations the principal and interest of which are guaranteed by New York State; and (ii) Federal Governmental Obligations. The Authority shall not accept a pledge of a proportionate interest in a pool of collateral. Collateral shall be segregated in the name of the Authority, and shall be in the custody of the Authority or a

third party Custodian pursuant to a written custodial agreement; provided, that if the Custodian is the Commissioner of Taxation and Finance, a written custodial agreement shall not be required. The written custodial agreement shall specify circumstances, if any, under which collateral may be substituted, and shall provide that the Custodian holds the collateral solely for the benefit of the Authority and makes no claim thereto. The market value of collateral and accrued interest, if any, shall equal or exceed the value of the secured investment and accrued interest, if any, at all times. Collateral shall be marked to market at the time of the initial investment and, thereafter, no less frequently than monthly using the bid or closing price as quoted in The Wall Street Journal.

In addition to collateral permitted for investments, collateral for deposits made with banks participating in the State's Excelsior Linked Deposit Program shall, subject to the discretion of the Commissioner of Taxation and Finance with confirmation to the Authority, include obligations permitted under Section 105 of the State Finance Law.

Certificates of deposit, demand deposits and time deposits shall be fully collateralized for amounts in excess of Federal Deposit Insurance Corporation (FDIC) coverage.

Securities purchased through a Repurchase Agreement shall be marked to market at least monthly.

Collateral shall not be required with respect to the purchase of obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, or money market funds.

Under any Repurchase Agreement, payment shall be made by or on behalf of the Authority to the seller upon the seller's delivery of obligations of the United States to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the obligations of the United States are credited to the Custodian's Federal Reserve Bank account. Payment shall be made by or on behalf of the Authority for obligations of New York State, obligations the principal and interest of which are guaranteed by New York State, Federal Governmental Obligations, certificates of deposit, and other purchased securities upon the delivery thereof to the Custodian designated by the Authority, or, in the case of a book entry transaction, when the purchased securities are credited to the Custodian's Federal Reserve System account.

IX. Written Contracts

The Authority has determined that, with the exception of Repurchase Agreements, written contracts are not a regular business practice for the types of securities (obligations of New York State, Federal Governmental Obligations, etc.) in which Authority monies may be invested. The interests of the Authority will be adequately protected by conditioning payment by or on behalf of the Authority on the physical delivery of purchased securities to the Authority or its Custodian, or, in the case of book-entry transactions, on the crediting of purchased securities to the Custodian's Federal Reserve System account. In addition, all purchases will be confirmed in writing to the Authority.

Only an Eligible Banking Institution or a Broker-Dealer shall be qualified to enter into a Repurchase Agreement with the Authority's fiscal agent. The Authority's fiscal agent shall enter into a Master Repurchase Agreement, patterned after the Bond Market Association (formerly Public Security Association) model master repurchase agreement, with each Eligible Banking Institution or Broker-Dealer with which the fiscal agent enters into a specific Repurchase Agreement. The Master Repurchase Agreement shall include:

- (a) a description of the relationship of the parties as purchaser and seller;
- (b) a description of the events of default which would permit the purchaser to liquidate the pledged collateral;

- (c) procedures which ensure that the Authority obtains a perfected security interest in the underlying securities; and
- (d) the method of computing margin maintenance requirements, including a limitation, based on policies established by the Commissioner of Taxation and Finance, that securities purchased and held as collateral for repurchase agreements shall be Federal Government Obligations maturing in twelve years or less, and provided that: (i) if such collateral has a maturity of seven years or less, the market value must equal or exceed 101% of the par value of the repurchase agreement; and (ii.) if such collateral has a maturity greater than seven years, the market value must equal or exceed 102% of the par value of the repurchase agreement.

X. Qualification of Custodians

The following shall be qualified to act as Custodian: the Commissioner of Taxation and Finance, any bank or trust company chartered by the State of New York which is not a member of the Federal Reserve System, or any bank, trust company, or national banking association which is a member of the Federal Reserve System, including an Eligible Banking Institution, which transacts business through offices located within the State of New York. During the time that any bank or trust company serves as Custodian, it must be rated at least "A", or its equivalent, by a nationally recognized independent rating agency. With respect to the holding of securities purchased by the Authority through a Repurchase Agreement, the Custodian may not be the Eligible Banking Institution with which the Authority or its fiscal agent has entered into such Repurchase Agreement, nor an agent of such Eligible Banking Institution for purposes of the Repurchase Agreement.

XI. Audit and Finance Committee

The functions of the Audit and Finance Committee with respect to investments are to:

- (a) monitor the system of internal controls;
- (b) verify relevant matters relating to securities purchased or held as collateral semi-annually and on an unscheduled basis:
- (c) determine whether the investment results are consistent with the investment objectives set forth in these Investment Guidelines;
- (d) review any independent audits of the investment program;
- (e) review these Investment Guidelines periodically and recommend to the Members of the Authority such amendments thereto as may be necessary or appropriate; and
- (f) evaluate systematically and periodically the investment program consistency with the provisions of PAL Section 2925, these Investment Guidelines, and the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3).

In support of its functions, the Audit and Finance Committee shall:

(a) require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under Government Auditing Standards issued by the Comptroller General of the United States;

- (b) review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate;
- (c) review the written annual audit report of the independent auditors;
- (d) discuss with the independent auditors, with staff and officers not present, the results of the annual independent audit and the written annual audit report; and
- (e) review not less frequently than annually these Investment Guidelines, and recommend to the Members of the Authority such changes in these Investment Guidelines as it deems necessary or appropriate.

XII. Operations and Procedures

The Treasurer, or in his/her absence the Controller and Assistant Treasurer or any Authority Officer, shall authorize the purchase and sale of all securities, authorize the disbursement of funds for delivery of securities, determine the selection of brokers, dealers and Custodians, and execute contracts for Repurchase Agreements and custodial services on behalf of the Authority. The process of initiating, reviewing and approving requests to purchase and sell securities shall be documented and retained for audit purposes. Oral directions concerning the purchase or sale of securities shall be confirmed in writing. The Authority shall pay for purchased securities upon the delivery or book-entry thereof, and the Authority will obtain written confirmation of each delivery or book-entry. Custodians must have prior authorization from the Authority to deliver securities and collateral and shall not deliver securities except upon receipt of funds. Custodians shall confirm in writing all such transactions. Custodians shall report whenever activity has occurred in a custodial account of the Authority.

The Treasurer shall develop detailed investment procedures implementing the Investment Guidelines as part of the Accounting Policy and Procedures Manual which shall include, but not be limited to, the following:

- (a) the establishment and maintenance of a system of internal controls for investments;
- (b) methods for adding, changing or deleting information contained in the investment record, including a description of the documents to be created and verification tests to be conducted;
- (c) a data base or record incorporating descriptions and amounts of investments, transaction dates, interest rates, maturities, bond ratings, market prices and related information necessary to manage the portfolio; and
- (d) requirements for periodic reporting and a satisfactory level of accountability.

Except in the purchase of government securities at their initial auction, the Authority will encourage investment selections utilizing competitive quotations based upon the procedures established by the Commissioner of Taxation and Finance and carried out by his/her designated personnel.

The Treasurer shall maintain a record of investments. The record shall identify each security, the fund for which held, the place where kept, date of disposition and amount realized, and the market value and Custodian of the collateral.

At least monthly, the Authority shall verify the principal amount and market values of all investments

and collateral. The Authority shall obtain appropriate listings from Custodians and compare such listings against the records of the Authority.

XIII. Audit

At the time the independent auditors to the Authority conduct the annual audit of the accounts and financial affairs of the Authority, the independent auditors shall audit the investments of the Authority for the subject fiscal year. The annual investment audit shall determine whether:

- (a) the Authority's investment practices and operations have been consistent with the provisions of PAL Section 2925, these Investment Guidelines, the Office of the Comptroller's Investment Guidelines for Public Authorities, and the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (b) adequate accounts and records are maintained which accurately reflect all transactions and report on the disposition of the Authority's investment assets; and
- (c) a system of adequate internal controls for investments is maintained.

The independent auditors shall prepare a written annual audit report which presents the results of their annual investment audit, and shall include:

- (a) a description of the scope and objectives of the audit;
- (b) a statement that the audit was made in accordance with generally accepted government auditing standards:
- (c) a description of any material weaknesses found in the internal investment controls;
- (d) a description of all non-compliance with provisions of PAL Section 2925, these Investment Guidelines, the Office of the State Comptroller's Investment Guidelines for Public Authorities (2 NYCRR Part 201, Section 201.3), or the Authority's investment operating procedures contained in its Accounting Policies and Procedures Manual;
- (e) a statement of positive assurance of compliance on the items tested; and
- (f) a statement of any other material deficiency or finding identified during the audit not covered in (e) above.

XIV. Reporting

Within sixty (60) days of the end of each of the first three quarters of the Authority's fiscal year, the Treasurer shall prepare and submit to the Members of the Authority and to the Audit and Finance Committee of the Authority a quarterly investment report which indicates new investments, the inventory of existing investments, the selection of Custodians and Broker-Dealers, and such other matters as the Treasurer deems appropriate.

Within 120 days of the end of the fiscal year, the Treasurer shall prepare and submit to the Audit and Finance Committee an annual investment report, which shall include the Investment Guidelines, including any amendment to the Investment Guidelines since the last annual investment report; an explanation of the Investment Guidelines and amendments; the results of the annual independent audit; the investment income record; a list of total fees, commissions or other charges paid to each Broker-Dealer and Custodian; and such

other matters as the Treasurer deems appropriate.

The Members of the Authority shall review and approve the annual investment report, if practicable, at the June meeting of the Authority, for submission thereof to the Division of the Budget, the Department of Audit and Control, the Senate Finance Committee, and the Assembly Ways and Means Committee.

The Authority's annual financial statements shall report the Authority's investments and provide such disclosure information as is required by applicable governmental accounting standards.

Not less frequently than annually, and if practicable, at the June meeting of the Authority, the Members of the Authority shall review, amend, if necessary or appropriate, and approve these Investment Guidelines.

The provisions of these Investment Guidelines and any amendments hereto shall take effect prospectively and shall not invalidate the prior selection of any Custodian, Broker-Dealer, any prior investment, nor any list of permitted investments set forth in any indenture of trust or similar document previously executed by the Authority.

Resol	ution	No.	

RESOLVED, that the "Investment Guidelines, Operative Policy and Instructions (June 2020)," as presented at this June 23, 2020 meeting are hereby approved; and

BE IT FURTHER RESOLVED, that the Authority's "2019-2020 Annual Investment Report," for the year ended March 31, 2020, as presented at this June 23, 2020 meeting, is hereby approved and adopted as the annual investment report of the Authority required by Section 2800 and Section 2925(6) of the Public Authorities Law.

	Market <u>Value</u>		Market <u>Value</u>
	3/31/2020	<u>Change</u>	3/31/2019
Contributions to date	\$45,757,473	\$2,607,637	\$43,149,836
Benefit payments (retiree health insurance)	(\$9,607,549)	(\$1,578,525)	(\$8,029,024)
Administrative expenses	(\$285,725)	(\$26,959)	(\$258,766)
Net contributions	\$35,864,199	\$1,002,154	\$34,862,046
Investment Income (realized gains)	\$20,666,574	\$1,219,394	\$19,447,180
Investments at costs	\$56,530,773	\$2,221,547	\$54,309,226
Unrealized gains/(losses)	-\$6,009,243	(\$4,817,205)	-\$1,192,037
Market value of Investments	\$50,521,530	(\$2,595,658)	\$53,117,188

	Market	Market	
	<u>Value</u>	<u>Value</u>	
Asset Category	3/31/2020	% of total 3/31/2019	% of total
Cash/money market	\$456,495	0.9% \$550,966	1.0%
Real Estate	\$446,045	0.9% \$547,577	1.0%
Foreign/Emerging	\$14,637,489	29.0% \$15,820,808	29.8%
Equities	\$10,873,980	21.5% \$11,560,090	21.8%
Fixed income (bonds)	\$24,107,521	47.7% \$24,637,747	46.4%
Total	\$50,521,530	<u>100.0%</u> <u>\$53,117,188</u>	<u>100.0%</u>
Investment Yield	3/31/2020	3/31/2019	
Annualized	-6.9%	1.5%	
Cumulative to Date	40.9%	52.4%	
Average annual yield *	4.1%	5.8%	

Investment Detail

	Investment	t		Market	
Asset Class	Policy Targ	et Current Holding	<u>Cost</u>	<u>Value %</u>	of Total
Cash	0%-6%	Cash Balance	\$23,752	\$23,752	0.0%
Cash	0%-6%	Dreyfus Instit Reserves Treasury Prime Fund	\$432,743	\$432,743	0.9%
Short Term Bonds	1%-6%	Tributary Short-Intermediate bond Fund	\$1,665,885	\$1,681,564	3.3%
Intermediate Term Bond	9%-19%	Calvert Bond Fund	\$7,444,575	\$7,545,472	14.9%
Inflation-Protected Securities	5%-15%	MassMutual Premier Inflation Protected & Income Func	\$5,419,005	\$5,514,871	10.9%
Long-Term Bond	1%-11%	PIMCO Long Term Credit Bond Fund	\$2,878,627	\$3,004,406	5.9%
High Yield Bond	7%-17%	Credit Suisse Strategic Income Fund	\$6,923,410	\$5,866,897	11.6%
Large Blend	5%-26%	First Trust Capital Strength ETF	\$8,163,059	\$7,690,682	15.2%
Mid-Cap Blend	1%-11%	FMI Common Stock Fund	\$648,894	\$480,177	1.0%
Small Blend	3%-16%	Principal Smallcap S&P 600 Index Fund	\$4,271,283	\$2,703,121	5.4%
Foreign Large Cap	10%-20%	T Rowe Price Overseas Stock Fund	\$9,371,326	\$7,398,941	14.6%
Diversified Emerging Mkts	10%-20%	Calvert Emerging Markets Equity Fund	\$8,153,116	\$7,238,548	14.3%
Global Real Estate	1%-6%	Schwab Fundamental Global Real Estate Index Fund	\$597,376	\$446,045	0.9%
Global Bond	1%-6%	Matthews Asia Strategic Income Fund	\$537,722	\$494,311	1.0%
			\$56,530,773	\$50,521,530	100.0%

^{*} The targeted long-term expected rate of return of the NYSERDA OPEB TRUST is estimated to be 6.50% per year.

INVESTMENT POLICY STATEMENT

NYSERDA OPEB TRUST (RETIREE HEALTH INSURANCE BENEFITS)

June 2020

I. DEFINITIONS

Authorized Agent: One or more individuals designated by resolution of the NYSERDA Board to serve as authorized agent(s) to the Plan Administrator as provided in the Trust Agreement.

Benefits: NYSERDA's obligation to provide post-employment health insurance benefits and to pay a portion of the cost of such benefits for retirees and their eligible dependents under the New York State Health Insurance Program (NYSHIP).

Fund: A fund such as a mutual fund or exchange traded fund in which Trust assets are invested.

Investment Consultant: Milliman, Inc., or such other individual or organization as may be approved by the NYSERDA Board.

Investment Horizon: The time period over which the investment objectives, as set forth in this statement, are expected to be met.

Investment Return: The investment income and realized and unrealized gains and losses, all net of investment expense and fees.

NYSERDA: New York State Energy Research and Development Authority and its successors.

NYSERDA Board: The governing board of New York State Energy, Research and Development Authority (NYSERDA).

Plan: The arrangement for Benefits adopted and maintained by NYSERDA, as amended from time to time.

Plan Administrator: Any Officer of NYSERDA.

Plan Sponsor: NYSERDA

Trust: The trust account established to safeguard the assets of the Plan, as amended from time to time.

Trust Agreement: The agreement between NYSERDA and the Trustee establishing the Trust and providing for its administration.

Trustee: The financial institution appointed by the NYSERDA Board to serve as Trustee, and any successors or assigns.

II. PURPOSE & BACKGROUND

The Plan is a Post-Employment Benefits Plan sponsored by NYSERDA, a not-for-profit organization with a place of business in New York State. The Plan's investment program is defined in the following sections of this Investment Policy Statement (IPS).

The purpose of this IPS is to assist the Plan Administrators and Investment Consultant in effectively supervising, monitoring, and evaluating the investment of the Plan's assets. Additionally, the IPS will function to:

- 1. State in a written document the Plan Administrator's attitudes, expectations, objectives, and guidelines for the investment of Plan assets which the Plan Administrator judges to be appropriate and prudent, in consideration of the needs of the Plan.
- 2. Define and assign the responsibilities of oversight of the Plan's assets.

- 3. Set forth an investment structure for managing Plan assets. This structure will help to define asset class, Fund styles, asset allocation and acceptable ranges that, combined, will help to generate the risk/return profile needed to meet the objectives of this policy.
- 4. Encourage effective communication between the Plan Administrator and the Investment Consultant, as well as any other interested parties.
- 5. Establish formalized performance criteria that any Fund selected is expected to meet and against which they are to be measured on a regular basis.
- 6. Serve as a review document to guide the Plan Administrators and the Investment Consultant's ongoing oversight of the investment options of the Plan's assets.
- 7. Manage plan assets according to prudent standards as established in common trust law and ERISA fiduciary requirements.
- 8. Establish the relevant investment time horizon of the Plan, risk tolerances of the Plan Administrators and performance expectations of the Plan assets.

III. STATEMENT OF OBJECTIVES

The assets of the Plan are invested under the supervision of the Plan Administrator.

After reviewing expected short-term and long-term cash flow requirements of the plan, as well as considering the investment time horizon and risk tolerance level believed to be appropriate for the invested assets, the following set of objectives has been established:

- 1. Preservation of capital.
- 2. Pay all benefit and expense obligations when due.
- 3. Achieve a funding cushion to reduce the impact of possible future downturns in the plan's funded status.
- 4. Achieve or exceed actuarial earnings assumptions.
- Maximize the return on assets earned through the acceptance of prudent and reasonable levels of risk.
- 6. Control risk through reasonable and rational diversification of the assets into various asset classes.
- 7. Establish policies based on total return and expected projected payouts rather than current income.
- 8. Contain costs of administering and managing the portfolio.

IV. CONTROL PROCEDURES

Disclosure

Any member of the Plan Administrators, Trustee or Investment Consultant must make full disclosure of any potential conflicts of interest annually (or more frequently, as conditions warrant), including any financial gain that may be received as a result of investment decisions made by those entities. This disclosure should be made before the investment of the plan assets governed by this Investment Policy Statement. Disclosure should be in written form and presented to the other members of the Plan Administrators.

Delegation of Authority

The NYSERDA Board shall be responsible for approving any changes to this Investment Policy Statement, and shall be responsible for reviewing the implementation of the Investment Policy Statement not less frequently than annually. The NYSERDA Board hereby delegates certain responsibilities in this Investment Policy Statement to professional experts in certain fields, who shall act in a fiduciary capacity.

These responsibilities include, but are not limited to:

<u>Plan Administrator</u>: The Plan Administrator is responsible for the investment of the plan assets, and selecting Funds. The Plan Administrator will have discretion to purchase, sell or hold the investment options that will be used to meet the Plan's investment objectives, consistent with the recommendations and advice of the Investment Consultant. An Authorized Agent will provide written instructions to the Trustee for the purchase or sale of Trust investments, consistent with investment decisions made by the Plan Administrator. An Authorized Agent shall also provide written approval to make payments of Benefits from the Trust.

<u>Investment Consultant:</u> The Investment Consultant will be responsible for: providing recommendations to the Plan Administrator for the selection of Funds, consistent with the Investment Policy Statement objectives and guidelines; reviewing the performance of such Funds over time; periodically reviewing and providing recommendations to the Plan Administrator for revisions to the Investment Policy Statement; and other tasks as deemed appropriate by the Plan Administrator.

<u>Trustee:</u> The Trustee will perform monthly accounting of all assets owned, purchased or sold, as well as movement of assets into and out of the Plan account. The Trustee will maintain possession of securities owned by the Plan, collect dividend and interest payments, redeem maturing securities, and effect receipt and delivery following purchases and sales. The Trustee will also be responsible for the payments to such persons and for such purposes in order to provide benefits to plan participants and the remittance of any tax related payments to the applicable State and Federal bodies.

Responsibilities

Plan Administrator

The Plan Administrator is charged with the responsibility for the management of the assets of the Plan. The Plan Administrator shall discharge its duties solely in the interest of the Plan, with the care, skill, prudence and diligence that a prudent person, acting in a like capacity and familiar with such matters should use in the circumstances then prevailing.

The specific responsibilities of the Plan Administrator relating to the investment management of the fund include:

- 1. Provide oversight on the actions of the Investment Consultant, including, but not limited to approving or disapproving actions of the Investment Consultant.
- 2. Prudently and diligently selecting qualified investment professionals, including Funds and the Investment Consultant.
- 3. Developing and enacting proper control procedures: For example, replacing Fund(s) due to fundamental change in investment management process, or failure to comply with established guidelines.
- 4. Exercising investment discretion (including holding cash equivalents as an alternative) within the IPS objective and guidelines set forth herein.

Investment Consultant

The Investment Consultant's role is that of a non-discretionary advisor to the Plan Administrator. Investment advice concerning the investment management of the fund assets will be offered by the Investment Consultant and will be consistent with the investment objectives, policies, guidelines and constraints as established in this statement.

The Investment Consultant shall act as an advisor to the Plan Administrator with regard to the definition of asset classes, asset allocation ranges, acceptable investments and monitoring of the performance of the Trust. Specific responsibilities include:

- 1. Communicating financial needs of the fund to the Funds in a timely manner.
- 2. Determining the fund's risk tolerance and investment horizon, and communicating these to the appropriate parties.
- 3. Defining acceptable asset classes and allocation ranges for the investment of Plan assets.
- 4. Assisting the Plan Administrator in the development of the investment policy statement and reviewing Funds implementation.
- 5. Provide for the regular evaluation of the performance of the Funds to assure adherence to policy guidelines and monitoring investment objective progress.
- 6. Conducting Funds searches when requested by the Plan Administrator.
- 7. Selecting Funds candidates for approval of the Plan Administrator.
- 8. Providing "due diligence" or research on Funds.
- 9. Monitoring the performance of the Fund(s) to provide the Plan Administrator with the ability to determine the progress toward the investment objectives.
- 10. Communicating matters of policy, manager research, and manager performance to the Plan Administrator.

- 11. Reviewing the Fund's investment history, historical capital markets performance and the contents of this investment policy statement to any newly appointed members of the Plan Administrator.
- 12. Providing the Plan Administrator a report of their decisions and actions at least annually.

V. INVESTMENT GUIDELINES

Investment Horizon: The investment guidelines are based on the expectation that the investment horizon will be many years in length. Short-term variability in returns should be expected.

Because of this, the Plan's strategic asset allocation is established with long-term perspective in mind.

The Plan is required to pay post-retirement medical premiums as they come due. Therefore, sufficient liquid reserves must be available to satisfy this obligation.

Risk Tolerances: It is understood by the Plan Administrator that achieving the Plan's investment objectives is not guaranteed and there will be time periods for which these objectives will not be met. The Plan Administrator also recognizes that some risk must be assumed to achieve the Plan's long-term investment objectives and accepts the inevitable fluctuations in returns that will occur. While it is understood that a certain level of risk is expected in the Plan's portfolio, the ability to withstand short and intermediate term variability was specifically considered in the development of the IPS risk tolerances. Factors considered were:

- 1. NYSERDA is in an industry that should experience milder fluctuations than the general economy.
- 2. NYSERDA's intent to fund the annual contribution each year should provide ample liquidity.
- 3. Future projected benefit payments and expenses of the Plan.

As a result of the above-named considerations, the Plan Administrators believes that the Plan can tolerate some interim variability in market value and rates of return in order to achieve its long-term objectives.

Liquidity Policy: The trust will be required to provide periodic distributions in the form of retirement benefit payments to participants. The actuary provides annual assessments of the funding requirements and payments necessary to meet the plans benefit obligations.

Rebalancing: The percentage allocation to each asset class may vary based on the table within the Overall Asset Allocation Policy section on the following page of this IPS, depending on market conditions. When necessary and/or available, cash inflows/outflows will be deployed in a manner consistent with the strategic asset allocation of the Plan as stated in this Policy. If the Plan Administrator judges cash flows to be insufficient to bring the Plan within the strategic allocation ranges, the Plan Administrator shall decide whether to effect transactions to bring the strategic allocation within the threshold ranges (strategic allocation). The Plan Administrator retains the right to rebalance the portfolio at its discretion.

Social Responsibility: The Plan Administrator will put the economic interests of the Plan first when considering alternative investment options and, in consultation with the Investment Consultant, shall consider Funds which minimize investments in the fossil-fuel industry, provided that they generally meet performance and risk criteria where available and are appropriate alternative Fund investments.

Overall Asset Allocation Policy

Based on the Plan's time horizon, risk tolerances, liquidity needs, and asset class preferences and constraints, an efficient or optimal portfolio was identified.

This allocation shall be reviewed at least annually and modified as necessary to meet the needs of the Plan Administrators. The strategic asset allocation of the Plan is as follows:

Asset Class	Range	Target
Cash	0% - 6%	1%
Short Term Bonds	1% - 6%	1%
Intermediate Term Bond	9% - 19%	14%
Inflation Protected Securities	5%-15%	10%
Long Term Bond	1% - 11%	6%
High Yield Bonds	7- 17%	12%
Large Cap	5%-26%	15%
Mid Cap	1%-11%	1%
Small Cap	3%-16%	6%
Foreign Developed Equity	10% - 20%	15%
Emerging Markets Equity	10% - 20%	15%
Global Real Estate	1% - 6%	1%
Non-US bonds	1% - 6%	1%

The above ranges will be considered the long-term or policy allocation. The current "Policy" is the target for such respective Asset Class of investment. Any deviations beyond the "Range" must have prior approval by the Plan Administrator, unless caused by market actions. Any deviations will be cured within 90 days of discovery.

The Plan will diversify its investment portfolio to avoid incurring unreasonable risks.

The only allowable investments of the Plan will be in cash and equivalents and Funds:

Cash Policy

Cash equivalents will be invested in an appropriate cash-like fund. Returns should be equal to or better than the 90-day Treasury Bill Index (3-month).

Money market mutual funds may be used, so long as these funds meet the high standards suitable for funds of this nature.

Fixed Income Policy

Investment Objectives

These assets are to be invested in a Fund of high-grade index or active fixed income portfolio subject to the limitations set forth below. The investment objectives of the fixed income portion in order of importance are:

1. Preservation of capital.

- 2. Provide for regular dividend and or interest payments.
- 3. Maintenance of liquidity to provide for recurring benefit payments.
- 4. Stability of Returns Obtain fairly consistent annual returns.

<u>Investment Guidelines</u>

Generally, the Fixed Income portion of the Trust shall be comprised of high-grade, intermediate—term, fixed income Funds. While high levels of risk are to be avoided, as evidenced by Funds with high volatility and low quality rated securities, the assumption of a moderate and reasonable risk may be warranted and encouraged in order to achieve satisfactory long-term results consistent with the objectives of the Plan. The following restrictions apply to the fixed income holdings of the Plan:

- 1. No more than 20 percent of the market value of any fixed income Fund shall be rated less than single A quality.
- 2. The exposure of any fixed income Fund to any one issuer, other than securities of the U.S. government or agencies, shall not exceed 10 percent of the market value of the fixed income fund.
- 3. No more than 25 percent of any fixed income Fund shall be invested in one industry category, other than securities of the U.S. government.

Equity Policy

Investment Objectives

Equity assets are to be invested in Funds. Within this framework, the investment objectives of the equity portion are

- 1. Long Term Growth of Capital Assets, exclusive of contributions and withdrawals, should grow in the long run and earn returns equal to the market while risk should be less than the market.
- 2. Follow a predefined market style (e.g. large cap vs. small cap) strategy.

Investment Guidelines

The Plan's equity assets will be managed in accordance with the following:

- 1. All Funds selected for the equity portion must have a readily ascertainable market value and must be readily marketable.
- 2. Fund investments must be U.S. dollar denominated.
- 3. Not more than 25 percent of the market value of any Fund should be invested in any one industry as defined by Standard and Poors.
- 4. A Fund's investment in any single company should not exceed 10 percent of the Plan's assets.
- 5. Funds selected will be diversified and generally conform to the above-mentioned industry and company guidelines.

VI. SELECTION OF FUNDS

The Plan Administrator, with the assistance of the Investment Consultant, will select Funds meeting the following minimum criteria:

- 1. Is a bank, insurance company, investment management company, or investment advisor as defined by the Registered Investment Advisers Act of 1940.
- 2. Provide at a minimum, historical quarterly performance numbers calculated on a time-weighted basis, based on a composite of all the fully discretionary accounts of similar investment style, and reported net and gross of fees.
- 3. Provide performance evaluation reports prepared by an objective third party that illustrate the risk/return profile of the Funds relative to other managers of like investment style.
- 4. Provide detailed information on the history of the firm, key personnel, key clients, fee schedule, and support personnel. This information can be supplied by a third party vendor comparable to Lipper or Morningstar.
- 5. Clearly articulate the investment strategy that will be followed and document that the strategy has been successfully adhered to over time.
- 6. Ranked within the top 50 percent of their respective styles on the Investment Consultant's internal ranking program, as well as rankings using widely used third-party sources (such as Morningstar).
- 7. Some of the measures that may be included in the statistical analysis of a Fund would be:
 - a. Performance historical annualized average return for 1 year, 3 year, and 5 year periods
 - b. Return Rank the ranking of the Fund's performance relative to other funds in its asset category
 - c. Alpha a measure of fund performance compared to its expected return
 - d. Beta the general level of influence a fund's market has over its performance
 - e. Standard Deviation a measure of a fund's variation of returns over time
 - f. Sharpe Ratio a measure of a fund's risk-adjusted return compared to its risk
 - g. Duration a measure of sensitivity to interest rate fluctuations over time
 - h. *Carbon Metrics* a measure of the Fund's exposure to carbon risk, including the percentage of Fund investments invested in fossil fuels, as may be reported by a third party source (Morningstar, fossilfreefunds.org)

VII. INVESTMENT EVALUATION

Not more than 90 days after the end of each calendar quarter, the Investment Consultant shall report investment positions and performance results to the NYSERDA Board and the Plan Administrator, based on performance reported by each Funds, to monitor and evaluate progress toward the attainment of longer-term targets.

The target rate of return for the Plan has been based on the assumption that future real returns will approximate the long-term rates of return experienced for each asset class in the IPS. The real rate of return is the return in excess of the anticipated rate of inflation as measured by the Consumer Price Index (CPI).

Total Plan Portfolio: Over a complete business cycle, the Plan's overall annualized total return (net of expenses) should perform at or above the weighted average of a customized index comprised of market

indexes weighted by the strategic asset allocation of the Plan. This customized index is composed of the following benchmarks and weights:

Index	Target
Bank of Amercia ML 91-dya TBill Auction Avg	1%
BBgBarc US 1-5 Yr Gov/Credit Fl Adj TR	3%
BBgBarc US Govt/Credit 5-10 Yr TR	14%
BBgBarc US Treasury US TIPS TR	10%
BB Long Government/Credit	6%
BB High Yield Corporate Bond	12%
CRSP US Large Cap TR	15%
CRSP US Mid Cap TR	1%
CRSP US Small Cap TR	6%
FTSE Developed Ex US	15%
FTSE EM AC China A Incl (US RIC)	15%
FTSE EPRA/NAREITGlobal NR	1%
BBgBarc Global Agg Float Adj TR	1%

Individual Funds: During its periodic meetings but not less than annually, the Plan Administrator, with consultation from the Investment Consultant, will review the following specifics with regard to each Fund:

- 1. The Fund's adherence to their prospectus.
- 2. Material changes in the Fund's organization, investment philosophy, and/or personnel.
- 3. Performance compared against an appropriate peer group and benchmark, as listed in the Executive Summary of this IPS, over various time periods.

The Plan Administrator expects the following criteria to be met by each Fund. If a manager fails to meet these, a further review of the manager will be warranted. The Plan Administrator reserves the right to replace an Funds at their discretion at any time.

- 1. The Plan Administrator with recommendation from the Investment Consultant may consider replacing an actively managed Fund if the Return Rank versus its peer group remains in the bottom 50 percent for four consecutive quarters versus its peer group and if statistical analysis concludes that the Fund's level of return does not provide an acceptable ratio as compared to its general level of risk.
- 2. The Fund's risk over 3 and 5 years, as measured by the Relative Standard Deviation, should be equal to or less than 1 when compared to the Fund's appropriate benchmark. If the Relative Standard Deviation is greater than 1, an increase in performance is expected.
- 3. The Fund's Sharpe ratio over 3 and 5 years should be ranked above the peer group median.
- 4. The Fund's Alpha should be positive over a 3 and 5 year period and should be ranked above the peer group median.
- 5. For passive-index investments, a Beta between 0.95 and 1.05 and a Tracking Error from 0 to 1 when compared to the index the Fund is designed to follow. Each statistic should be measured over 3 and 5 year time periods.

6.	The Plan Administrator may consider a Fund for replacement when the Funds or policy of the Fund is changed. In addition, if there are any substantial transactions with regard to the Fund management company or holding, or other types of instabilities in the Fund company, replacement will be considered.
7.	The Plan Administrator may also consider replacing a Fund if its relative performance over a complete market cycle trails its benchmark.

RESOLVED, that the "NYSERDA OPEB Trust Investment Report" for the year ended March 31, 2020, as presented at this June 23, 2020 meeting is hereby approved and adopted as the annual investment report of the NYSERDA OPEB Trust required by Section 2800 and Section 2925(6) of the Public Authorities Law; and

BE IT FURTHER RESOLVED, that the "Policy Statement for the NYSERDA OPEB Trust (Retiree Health Insurance Benefits Trust)" as presented at this June 23, 2020 meeting, is hereby approved.



KPMG LLP 515 Broadway Albany, NY 12207-2974 Telephone +1 518 427 4600 kpmg.com

June ___, 2020

Ms. Alicia Barton
President and Chief Executive Officer
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, New York 12203-6399

Dear Ms. Barton:

This letter (the Engagement Letter) confirms our understanding of our engagement to provide professional services to the New York State Energy Research and Development Authority (the Authority).

Objectives and Limitations of Services

Audit Services

You have requested that we audit the Authority's financial statements (the financial statements) as set forth in Appendix I.

We have the responsibility to conduct and will conduct the audit of the financial statements in accordance with auditing standards generally accepted in the United States of America and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, with the objective of expressing an opinion as to whether the presentation of the financial statements that have been prepared by management with the oversight of those charged with governance, conforms with U.S. generally accepted accounting principles.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. In conducting the audit, we will perform tests of the accounting records and such other procedures, as we consider necessary in the circumstances, based on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to error or fraud, to provide a reasonable basis for our opinion on the financial statements. We also will evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, and evaluate the overall financial statement presentation.

Our audit of the financial statements will be planned and performed to obtain reasonable, but not absolute, assurance about whether the financial statements are free from material misstatement, whether due to fraud or error. Absolute assurance is not attainable because of the nature of audit evidence and the characteristics of fraud. Because of the inherent limitations of an audit, together with the inherent limitations of internal control, there is an unavoidable risk that some material misstatements, fraud, and noncompliance with laws and regulations may exist and not be detected by an audit of financial statements even though the audit is properly planned and performed in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*. Also, an audit is not designed to detect matters that are immaterial to the financial statements, and because the determination of the abuse is subjective, *Government Auditing Standards* do not expect auditors to detect abuse.



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We will also perform certain limited procedures to the required supplementary information as required by auditing standards generally accepted in the United States of America. However, we will not express an opinion or provide any assurance on the information. Our report relating to the financial statements will include our consideration of required supplementary information.

Subject to the remainder of this paragraph, we will issue a written report upon completion of our audit of the Authority's financial statements addressed to the Audit and Finance Committee of the Authority. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add emphasis-of-matter or other-matter paragraphs or withdraw from the engagement. If, during the performance of our audit procedures such circumstances arise, we will communicate to the Audit and Finance Committee our reasons for modification or withdrawal.

Internal Control over Financial Reporting and Compliance and Other Matters

In making our risk assessments as part of planning and performing our audit of the financial statements, we will consider the Authority's internal control relevant to the preparation and fair presentation of the financial statements in order to determine the nature, timing and extent of our audit procedures for the purpose of expressing an opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.

The objective of our audit of the financial statements is not to report on the Authority's internal control and we are not obligated to search for material weaknesses or significant deficiencies in internal control as part of our audit of the financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Authority's compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, our objective is not to provide an opinion on compliance with such provisions.

In accordance with Government Auditing Standards, we will prepare a written report, Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards (GAGAS report), on our consideration of internal control over financial reporting and tests of compliance made as part of our audit of the financial statements. This report will include any material weaknesses and significant deficiencies to the extent they come to our attention, and this report will also include instances of:

Fraud and noncompliance with provisions of laws or regulations that have a material effect on the financial statements or any other financial data significant to the audit objectives and any other instances that warrant the attention of those charged with governance;

Noncompliance with the provisions of contracts or grant agreements that has a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives; or

Abuse that is material, either quantitatively or qualitatively.



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The report will describe its purpose and will state it is not suitable for any other purpose.

In accordance with *Government Auditing Standards*, we will also issue a management letter to communicate instances of noncompliance with provisions of contracts or grant agreements or abuse that have an effect on the financial statements that is less than material but warrant the attention of those charged with governance.

In accordance with *Government Auditing Standards*, we are also required in certain circumstances to report fraud, noncompliance with the provisions of laws, regulations, contracts or grant agreements, or abuse directly to parties outside the auditee.

Investment Compliance Attestation Services

We will also report upon our examination of the Authority's compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rule and Regulations of the State of New York* during the fiscal year ended March 31, 2021. The following paragraphs describe the objectives of our engagement and the nature and limitations of the services we will provide.

We will conduct the examination in accordance with standards established by the American Institute of Certified Public Accountants and the standards applicable to attestation engagements contained in *Government Auditing Standards* issued by the Comptroller General of the United States with the objective of expressing an opinion as to whether the Authority complied with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes, Rules and Regulations of the State of New York.* Accordingly, we will perform such procedures as we consider necessary in the circumstances to provide a reasonable basis for our opinion.

In accordance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York, we are required to report any material weaknesses found in the internal controls, all non-compliance with the the Authority's own investment guidelines, applicable laws, regulations, the State Comptroller's investment guideline requirements for Public Authorities set forth in Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York, and such public accounting directives that are issued by the State Comptroller and any other material deficiency or finding identifed during our examination.

In additon, in accordance with *Government Auditing Standards*, we are required to report findings of deficiencies in internal control, violations of provisions of contracts or grant agreements, and abuse that are material to the Authority's compliance with Section 201.3 of Title Two of the *Official Compilation of Codes*, *Rules and Regulations of the State of New York* and any fraud and illegal acts that are more than inconsequential that come to our attention during our examination. While the objective of our examination of the Authority's compliance with the requirements of Section 201.3 of Title Two of the *Official Compilation of Codes*, *Rules and Regulations of the State of New York* is not to report on the Authority's legal compliance, and we are not obligated to search for significant deficiencies in internal control as part of our examination, this report will include any significant deficiencies in internal control to the extent they come to our attention. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Authority's ability to comply with the specified regulations. The definition of significant deficiency does not include potential future internal control problems, that is, control problems coming to our attention that do not affect compliance for the period under examination. This report will also include any instances of illegal acts and fraud identified, unless clearly inconsequential and any material violation of grants, contracts, and abuse. It will indicate that it is



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intended solely for the information and use of the Members and management of the Authority and that it is not intended to be and should not be used by anyone other than these specified parties.

Offering Documents

Should the Authority wish to include or incorporate by reference these financial statements and our audit reports thereon into an offering of exempt securities, prior to our consenting to include or incorporate by reference our reports on such financial statements, we would consider our consent to the inclusion of our report and the terms thereof at that time. We will be required to perform procedures as required by the standards of the American Institute of Certified Public Accountants, including, but not limited to, reading other information incorporated by reference in the offering document and performing subsequent event procedures. Our reading of the other information included or incorporated by reference in the offering document will consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements. However, we will not perform procedures to corroborate such other information (including forward-looking statements). The specific terms of our future services with respect to future offering documents will be determined at the time the services are to be performed.

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities without obtaining our consent to include or incorporate by reference our reports on such financial statements, and we are not otherwise associated with the offering document, then the Authority agrees to include the following language in the offering document:

"KPMG LLP, our independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this official statement."

Our Responsibility to Communicate with the Audit and Finance Committee

We will report to the Audit and Finance Committee, in writing, the following matters:

- Material, corrected misstatements that were brought to the attention of management as a result of audit procedures.
- Uncorrected misstatements accumulated by us during the audit and the effect that they, individually or in the aggregate, may have on our opinion in the auditor's report, and the effect of uncorrected misstatements related to prior periods.
- Significant difficulties and disagreements with management, if any, encountered during our audit.
- Other matters required to be communicated by auditing standards generally accepted in the United States
 of America.

We will also read minutes, if any, of relevant committee meetings for consistency with our understanding of the communications made to the Audit and Finance Committee and determine that the Audit and Finance Committee has received copies of all material written communications between ourselves and management. We will also determine that the Audit and Finance Committee has been informed of i) the initial selection of, or the reasons for any change in, significant accounting policies or their application during the period under audit, ii) the methods used by management to account for significant unusual transactions, and iii) the effect of



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significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

To the extent they come to our attention, we will inform the appropriate level of management about any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements and any instances of fraud. Further, to the extent they come to our attention, we also will communicate directly to the Audit and Finance Committee any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements, and any instances of fraud that involve senior management that, in our judgment, cause a material misstatement of the financial statements.

Management Responsibilities

Management of the Authority acknowledges and understands that they have responsibility for the preparation and fair presentation, in accordance with U.S generally accepted accounting principles, of the financial statements and all representations contained therein. Management also is responsible for identifying and ensuring that the Authority complies with laws, regulations, contracts, and grant agreements applicable to its activities, and for informing us of any known instances of noncompliance or suspected noncompliance with laws and regulations and provisions of contracts and grant agreements.

Management also is responsible for preventing and detecting fraud, including the design and implementation of programs and controls to prevent and detect fraud, for adopting sound accounting policies, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of the financial statements and to provide reasonable assurance against the possibility of misstatements that are material to the financial statements whether due to error or fraud. Management is also responsible for informing us, of which it has knowledge, of all material weaknesses and significant deficiencies in the design or operation of such controls. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Management of the Authority also acknowledges and understands that it is their responsibility to provide us with: i) access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements and the compliance requirements applicable to its programs such as records, documentation and other matters, ii) additional information that we may request from management for purposes of the audit, and iii) unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence. As required by auditing standards generally accepted in the United States of America, we will make specific inquiries of management and when appropriate, those charged with governance about the representations embodied in the financial statements and the effectiveness of internal control, and obtain a representation letter from management about these matters. The responses to our inquiries, the written representations, and the results of audit tests, among other things, comprise the evidential matter we will rely upon in forming an opinion on the financial statements.

To facilitate our audit planning, in accordance with *Government Auditing Standards*, management agrees to identify and provide copies of reports, if applicable, of previous audits, attestation engagements, or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented, prior to March 31, 2021.



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Management is responsible for adjusting the financial statements to correct material misstatements and for affirming to us in the representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements being reported upon taken as a whole. Because of the importance of management's representations to the effective performance of our services, the Authority will release KPMG LLP (KPMG) and its personnel from any claims, liabilities, costs and expenses relating to our services under this letter attributable to any misrepresentations in the representation letter referred to above. The provisions of this paragraph shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, tort (including but not limited to negligence) or otherwise.

Management is also responsible for providing us with written responses in accordance with *Government Auditing Standards* to the findings included in the GAGAS report within 30 days of being provided with draft findings. If such information is not provided on a timely basis prior to release of the report, the report will indicate the status of management's responses.

Management is responsible for the distribution of the reports issued by KPMG.

Dispute Resolution

Any dispute or claim between the parties shall be submitted first to non-binding mediation and if mediation is not successful within 90 days after the issuance by one of the parties of a request for mediation then to binding arbitration in accordance with the Rules for Non-Administered Arbitration of the International Institute for Conflict Prevention and Resolution ("IICPR"). Any issue concerning the extent to which any dispute is subject to arbitration, or any dispute concerning the applicability, interpretation, or enforceability of these dispute resolution procedures, including any contention that all or part of these procedures is invalid or unenforceable, shall be governed by the Federal Arbitration Act and resolved by the arbitrators. By operation of this provision, the parties agree to forgo litigation over such disputes in any court of competent jurisdiction.

Mediation shall take place at a location to be designated by the parties using Mediation Procedures of the IICPR, with the exception of paragraph 2 (Selecting the Mediator). Arbitration shall take place in New York, New York and shall be governed by the Federal Arbitration Act, 9 U.S.C. §§ 1, et seq. Party-selected arbitrators shall be selected from the lists of neutrals maintained by either the IICPR or by JAMS, Inc., but the chair of the arbitration panel does not have to be selected from those specific lists. The arbitration panel shall have no power to award non-monetary or equitable relief of any sort except as provided in IICPR Rule 13 (Interim Measures of Protection). Damages that are inconsistent with any applicable agreement between the parties, that are punitive in nature, or that are not measured by the prevailing party's actual damages shall be unavailable in arbitration or any other forum. In no event, even if any other portion of these provisions is held to be invalid or unenforceable, shall the arbitration panel have power to make an award or impose a remedy that could not be made or imposed by a court deciding the matter in the same jurisdiction.

Either party may seek to enforce any written agreement reached by the parties during mediation, or to confirm and enforce any final award entered in arbitration, in any court of competent jurisdiction, provided that any party moving to enforce, confirm or vacate any such agreement or award, as the case may be, will file such motion under seal unless prohibited under applicable court rules. Notwithstanding the agreement to such procedures, either party may seek equitable relief to enforce its rights in any court of competent jurisdiction.



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Other Matters

In the event that any term or provision of this Engagement Letter shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.

Except as permitted by law or as set forth in this paragraph, neither party shall acquire hereunder any right to use the name or logo of the other party or any part thereof, and any such use shall require the express written consent of the owner party. The Authority agrees that KPMG may list the Authority as a client in KPMG's internal and external marketing materials, including KPMG websites and social media, indicating the general services rendered (e.g., "The Authority is an Audit client of KPMG LLP"). Further, for purposes of the services described in this Engagement Letter only, the Authority hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of the Authority solely for presentations or reports to the Authority or for internal KPMG presentations and intranet sites.

The Authority and KPMG acknowledge and agree that each shall comply with all applicable United States export control laws and regulations in the performance of each party's respective responsibilities under the Engagement Letter. Unless requested by KPMG to allow it to complete its audit, the Authority will not provide KPMG, or grant KPMG access to, (a) information (including technical data or technology), verbally, electronically, or in hardcopy, (b) software or (c) hardware, that is controlled for export by the United States government under the Arms Export Control Act of 1976, Export Control Reform Act of 2018, the International Traffic in Arms Regulations ("ITAR"), Export Administration Regulations ("EAR"), Department of Energy Part 810 Regulations or Nuclear Regulatory Commission Part 110 Regulations, except information, software or hardware that is classified as EAR99 under the EAR ("Export Controlled Information"). If KPMG requests Export Controlled Information from the Authority, the Authority shall provide KPMG with notice of provision of Export Controlled Information at least 48 hours prior to providing such Export Controlled Information to KPMG.

KPMG is a limited liability partnership comprising both certified public accountants and certain principals who are not licensed as certified public accountants. Such principals may participate in the engagements to provide the services described in this Engagement Letter.

The audit documentation for this engagement is the property of KPMG. If KPMG receives a subpoena or other validly issued administrative, judicial, government or investigative regulatory demand/request ("Legal Demand") requiring it to disclose the Authority's confidential information, KPMG shall, unless prohibited by law or demand of a law enforcement agency, provide prompt written notice to the Authority of such demand. So long as KPMG gives notice as provided herein, KPMG shall be entitled to comply with such Legal Demand to the extent required by law, subject to any protective order or the like that may have been entered in the matter. In the event KPMG is requested or authorized by the Authority or is required by law, rule or regulation, Legal Demand, or other legal process to produce KPMG's documents or personnel as witnesses or for interviews, or otherwise to make information relating to the service under the Engagement Letter available to a third party or the Authority or its agents, the Authority shall reimburse KPMG for its professional time at its then-current standard hourly rates, and expenses, including reasonable attorney's fees and expenses, incurred in producing documents or personnel or providing information pursuant to such requests, authorizations or requirements.

Pursuant to *Government Auditing Standards*, and subject to applicable provisions of laws and regulations, we are required to make certain audit documentation available in a full and timely manner to others, including



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regulators, upon request. In addition, we may be requested to make certain audit documentation available to regulators pursuant to authority provided by law or regulation. If so requested, access to the requested audit documentation will be provided. Furthermore, regulators may obtain copies of selected audit documentation. Such regulators may intend, or decide, to distribute the photocopies or information contained therein to others, including other government agencies.

KPMG, as an accounting firm, has an obligation to comply with applicable professional standards. Certain professional standards, including AICPA Code of Professional Conduct Section 1.700, "Confidential Client Information Rule," adopted by the American Institute of Certified Public Accountants and similar rules adopted by the boards of accountancy of many states, prohibit the disclosure of client confidential information without client consent, except in limited circumstances. KPMG represents to the Authority that KPMG will treat the Authority's confidential information in accordance with applicable professional standards.

KPMG may work with and use the services of other members of the international KPMG network of independent firms and entities controlled by, or under common control with, one or more KPMG member firms (together with KPMG, the "KPMG Firms") to provide services to the Authority. In connection with the performance of services under this Engagement Letter, the KPMG Firms may, in their discretion, utilize the services of third party service providers within or outside of the United States to complete the services under this Engagement Letter. KPMG Firms and such third parties may have access to your confidential information from offshore locations. In addition, KPMG uses third party service providers within and outside of the United States to provide, at its direction, back-office administrative and clerical services to KPMG and these third party service providers may in the performance of such services have access to your confidential information. In particular, KPMG's audit technologies, software productivity tools and certain technology infrastructure and, necessarily, your confidential information, may be hosted in cloud environments operated by KPMG Firms or such third party service providers. In addition, for purposes of fulfilling our professional responsibilities, such as maintaining independence and performing conflict checks, NY Green Bank, a Division of NYSERDA, will be listed as a client in internal KPMG systems accessible on a need to know basis to certain professionals in KPMG International member firms. KPMG represents that it has technical, legal and/or other safeguards. measures and controls in place to protect your confidential information from unauthorized disclosure or use.

You also understand and agree that the KPMG Firms, with the assistance of third parties as outlined above, may use the Authority's confidential information for other purposes, consistent with our professional standards, such as improving the delivery of audit and other services or technology to you and to other clients, thought leadership projects, to allow you and other clients to evaluate various business transactions and opportunities, and for use in presentations to you, other clients and non-clients. When your information is used outside of the KPMG Firms or third parties assisting them as outlined above, the Authority will not be identified as the source of the information.

It may be necessary or convenient for the Authority to use KPMG-owned or -licensed software, software agents, scripts, technologies, tools or applications (collectively "KPMG Technology") designed to extract data from the Authority's electronic books and records systems or other systems (collectively, "Systems"), in connection with the audit. The Authority understands and agrees that it is solely responsible for following appropriate change management policies, processes and controls relating to use of such technology (including without limitation appropriate backup of the Authority information and Systems) (collectively, "Change Management Processes") before such KPMG Technology is utilized to extract data from the Systems. In the event the Authority fails to use such Change Management Processes or if such Change Management Processes prove to be inadequate, the Authority acknowledges that the Systems and/or KPMG Technology



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may not function as intended. In consideration of the foregoing, KPMG hereby grants the Authority the right to use KPMG Technology solely to facilitate the Authority's necessary or convenient provision of information to KPMG in connection with the audit, and this grant does not extend to any other purposes or use by third parties outside of your organization without our prior written approval, provided that third party contractors of the Authority having a need to know in order to perform their services to the Authority are permitted to use KPMG Technology to the extent necessary for such parties to perform such services, so long as the Authority has technical, legal and/or other safeguards, measures and controls in place to protect such KPMG Technology and the KPMG confidential information therein from unauthorized disclosure or use. Other than as expressly permitted hereby, the Authority agrees to keep KPMG Technology confidential, using no less than a reasonable standard of care to protect it from unauthorized disclosure or use, and to notify KPMG of any legal compulsions to disclose it, in accordance with the provisions governing legal demand of confidential information which appear in this engagement letter with respect to which the KPMG Technology is being used, mutatis mutandis. If the KPMG Technology is subject to any third party license terms and conditions before being provided to the Authority, the Authority may be required to accept such terms and conditions before using the KPMG Technology, in which case KPMG will provide such license terms and conditions to the Authority in writing before the Authority elects to use the KPMG Technology.

Except as otherwise provided for in this Engagement Letter, neither party may assign, transfer or delegate any of its rights, obligations, claims or proceeds from claims arising under or relating to this Engagement Letter (including by operation of law, in which case the assigning party will, to the extent legally permissible, give as much advance written notice as is reasonably practicable thereof) without the prior written consent of the other party, such consent not to be unreasonably withheld. Any assignment in violation hereof shall be null and void.

Other Government Auditing Standards Matters

As required by *Government Auditing Standards*, we have attached a copy of KPMG's most recent peer review report.

Additional Reports and Fees for Services

Appendix I to this Engagement Letter lists the additional reports we will issue and the services we will provide as part of this engagement and our fees for professional services to be performed under this Engagement Letter.

In addition, fees for any special audit-related projects, such as research and/or consultation on special business or financial issues, will be billed separately from the audit fees for professional services set forth in Appendix I and may be subject to written arrangements supplemental to those in this Engagement Letter.

* * * * * * *

Our engagement herein is for the provision of annual audit services for the financial statements and for the periods described in Appendix I, and it is understood that such services are provided as a single annual engagement. Pursuant to our arrangement as reflected in this Engagement Letter we will provide the services set forth in Appendix I as a single engagement for each of the Authority's subsequent fiscal years until expiration of our contract, or until the date of our agreement is extended or modified by mutual agreement. The annual fees for each subsequent year will be in accordance with our response to RFP 3243 Audit Services, unless otherwise amended.



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This Engagement Letter and any exhibits, attachments and appendices hereto, and amendments thereto agreed in writing by the parties, shall constitute the entire agreement between KPMG and the Authority with respect to the subject matter hereof and thereof, and supersedes all other previous oral and written representations, understandings or agreements relating to the subject matter of this agreement.

We shall be pleased to discuss this Engagement Letter with you at any time. For your convenience in confirming these arrangements, we enclose a copy of this Engagement Letter. Please sign and return it to us to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Very truly yours,	
KPMG LLP	
Martin R. Dunbar Partner	
ACCEPTED	
New York State Energy Research	h and Development Authority
Authorized Signature	
Title	
Date	

Fees for Services

Based upon our proposal dated April 7, 2016, our fees for services are as follows:

Audit of the financial statements and related notes to the financial statements of the New York Energy Research and Development Authority as of and for the year ended March 31, 2021

\$86,250

Other Reports:

The reports that we will issue as part of this engagement included in the fee above are as follows:

Independent Auditors' Report on the Authority's Financial Statements

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing* Standards

Report on Investment Compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules and Regulations of the State of New York

The above estimates are based on the level of experience of the individuals who will perform the services. Circumstances encountered during the performance of these services that warrant additional time or expense could cause us to be unable to deliver them within the above estimates. We will endeavor to notify you of any such circumstances as they are assessed.

All fees, charges and other amounts payable to KPMG under the Engagement Letter do not include any sales, use, excise, value added, income or other applicable taxes, tariffs or duties, payment of which shall be the Authority's sole responsibility, excluding any applicable taxes based on KPMG's net income or taxes arising from the employment or independent contractor relationship between KPMG and its personnel.



KPMG LLP 515 Broadway Albany, NY 12207-2974 Telephone +1 518 427 4600 kpmg.com

June ___, 2020

Ms. Alicia Barton President and Chief Executive Officer New York State Energy Research and Development Authority 17 Columbia Circle Albany, New York 12203-6399

Dear Ms. Barton:

This letter (the Engagement Letter) confirms our understanding of our engagement to provide professional services to the New York State Energy Research and Development Authority (the Authority).

Objectives and Limitations of Services

Audit Services

You have requested that we audit the Authority's enterprise fund financial statements for NY Green Bank (the financial statements) as set forth in Appendix I.

We have the responsibility to conduct and will conduct the audit of the financial statements in accordance with auditing standards generally accepted in the United States of America and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, with the objective of expressing an opinion as to whether the presentation of the financial statements that have been prepared by management with the oversight of those charged with governance, conforms with U.S. generally accepted accounting principles.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. In conducting the audit, we will perform tests of the accounting records and such other procedures, as we consider necessary in the circumstances, based on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to error or fraud, to provide a reasonable basis for our opinion on the financial statements. We also will evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, and evaluate the overall financial statement presentation.

Our audit of the financial statements will be planned and performed to obtain reasonable, but not absolute, assurance about whether the financial statements are free from material misstatement, whether due to fraud or error. Absolute assurance is not attainable because of the nature of audit evidence and the characteristics of fraud. Because of the inherent limitations of an audit, together with the inherent limitations of internal control, there is an unavoidable risk that some material misstatements, fraud, and noncompliance with laws and regulations may exist and not be detected by an audit of financial statements even though the audit is properly planned and performed in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*. Also, an audit is not designed to detect matters that are immaterial to the financial statements, and because the determination of the abuse is subjective, *Government Auditing Standards* do not expect auditors to detect abuse.

We will also perform certain limited procedures to the required supplementary information as required by auditing standards generally accepted in the United States of America. However, we will not express an opinion



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or provide any assurance on the information. Our report relating to the financial statements will include our consideration of required supplementary information.

Subject to the remainder of this paragraph, we will issue a written report upon completion of our audit of the Authority's financial statements addressed to the Audit and Finance Committee of the Authority. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add emphasis-of-matter or other-matter paragraphs or withdraw from the engagement. If, during the performance of our audit procedures such circumstances arise, we will communicate to the Audit and Finance Committee our reasons for modification or withdrawal.

Internal Control over Financial Reporting and Compliance and Other Matters

In making our risk assessments as part of planning and performing our audit of the financial statements, we will consider the Authority's internal control relevant to the preparation and fair presentation of the financial statements in order to determine the nature, timing and extent of our audit procedures for the purpose of expressing an opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.

The objective of our audit of the financial statements is not to report on the Authority's internal control and we are not obligated to search for material weaknesses or significant deficiencies in internal control as part of our audit of the financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Authority's compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, our objective is not to provide an opinion on compliance with such provisions.

In accordance with Government Auditing Standards, we will prepare a written report, Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards (GAGAS report), on our consideration of internal control over financial reporting and tests of compliance made as part of our audit of the financial statements. This report will include any material weaknesses and significant deficiencies to the extent they come to our attention, and this report will also include instances of:

Fraud and noncompliance with provisions of laws or regulations that have a material effect on the financial statements or any other financial data significant to the audit objectives and any other instances that warrant the attention of those charged with governance;

Noncompliance with the provisions of contracts or grant agreements that has a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives; or

Abuse that is material, either quantitatively or qualitatively.

The report will describe its purpose and will state it is not suitable for any other purpose.



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In accordance with *Government Auditing Standards*, we will also issue a management letter to communicate instances of noncompliance with provisions of contracts or grant agreements or abuse that have an effect on the financial statements that is less than material but warrant the attention of those charged with governance.

In accordance with *Government Auditing Standards*, we are also required in certain circumstances to report fraud, noncompliance with the provisions of laws, regulations, contracts or grant agreements, or abuse directly to parties outside the auditee.

Offering Documents

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities, prior to our consenting to include or incorporate by reference our report(s) on such financial statements, we would consider our consent to the inclusion of our report and the terms thereof at that time. We will be required to perform procedures as required by the standards of the American Institute of Certified Public Accountants, including, but not limited to, reading other information incorporated by reference in the offering document and performing subsequent event procedures. Our reading of the other information included or incorporated by reference in the offering document will consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements. However, we will not perform procedures to corroborate such other information (including forward-looking statements). The specific terms of our future services with respect to future offering documents will be determined at the time the services are to be performed.

Should the Authority wish to include or incorporate by reference these financial statements and our audit report(s) thereon into an offering of exempt securities without obtaining our consent to include or incorporate by reference our report(s) on such financial statements, and we are not otherwise associated with the offering document, then the Authority agrees to include the following language in the offering document:

"KPMG LLP, our independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this official statement."

Our Responsibility to Communicate with the Audit and Finance Committee

We will report to the Audit and Finance Committee, in writing, the following matters:

- Material, corrected misstatements that were brought to the attention of management as a result of audit procedures.
- Uncorrected misstatements accumulated by us during the audit and the effect that they, individually or in the aggregate, may have on our opinion in the auditor's report, and the effect of uncorrected misstatements related to prior periods.
- Significant difficulties and disagreements with management, if any, encountered during our audit.
- Other matters required to be communicated by auditing standards generally accepted in the United States of America.

We will also read minutes, if any, of relevant committee meetings for consistency with our understanding of the communications made to the Audit and Finance Committee and determine that the Audit and Finance



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Committee has received copies of all material written communications between ourselves and management. We will also determine that the Audit and Finance Committee has been informed of i) the initial selection of, or the reasons for any change in, significant accounting policies or their application during the period under audit, ii) the methods used by management to account for significant unusual transactions, and iii) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative quidance or consensus.

To the extent they come to our attention, we will inform the appropriate level of management about any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements and any instances of fraud. Further, to the extent they come to our attention, we also will communicate directly to the Audit and Finance Committee any instances of noncompliance or suspected noncompliance with laws and regulations, unless they are clearly inconsequential, material errors in the financial statements, and any instances of fraud that involve senior management that, in our judgment, cause a material misstatement of the financial statements.

Management Responsibilities

Management of the Authority acknowledges and understands that they have responsibility for the preparation and fair presentation, in accordance with U.S generally accepted accounting principles, of the financial statements and all representations contained therein. Management also is responsible for identifying and ensuring that the Authority complies with laws, regulations, contracts, and grant agreements applicable to its activities, and for informing us of any known instances of noncompliance or suspected noncompliance with laws and regulations and provisions of contracts and grant agreements.

Management also is responsible for preventing and detecting fraud, including the design and implementation of programs and controls to prevent and detect fraud, for adopting sound accounting policies, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of the financial statements and to provide reasonable assurance against the possibility of misstatements that are material to the financial statements whether due to error or fraud. Management is also responsible for informing us, of which it has knowledge, of all material weaknesses and significant deficiencies in the design or operation of such controls. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Management of the Authority also acknowledges and understands that it is their responsibility to provide us with: i) access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements and the compliance requirements applicable to its programs such as records, documentation and other matters, ii) additional information that we may request from management for purposes of the audit, and iii) unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence. As required by auditing standards generally accepted in the United States of America, we will make specific inquiries of management and when appropriate, those charged with governance about the representations embodied in the financial statements and the effectiveness of internal control, and obtain a representation letter from management about these matters. The responses to our inquiries, the written representations, and the results of audit tests, among other things, comprise the evidential matter we will rely upon in forming an opinion on the financial statements.

To facilitate our audit planning, in accordance with *Government Auditing Standards*, management agrees to identify and provide copies of reports, if applicable, of previous audits, attestation engagements, or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented, prior to March 31, 2021.



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Management is responsible for adjusting the financial statements to correct material misstatements and for affirming to us in the representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements being reported upon taken as a whole. Because of the importance of management's representations to the effective performance of our services, the Authority will release KPMG LLP (KPMG) and its personnel from any claims, liabilities, costs and expenses relating to our services under this letter attributable to any misrepresentations in the representation letter referred to above. The provisions of this paragraph shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, tort (including but not limited to negligence) or otherwise.

Management is also responsible for providing us with written responses in accordance with *Government Auditing Standards* to the findings included in the GAGAS report within 30 days of being provided with draft findings. If such information is not provided on a timely basis prior to release of the report, the report will indicate the status of management's responses.

Management is responsible for the distribution of the reports issued by KPMG.

Dispute Resolution

Any dispute or claim between the parties shall be submitted first to non-binding mediation and if mediation is not successful within 90 days after the issuance by one of the parties of a request for mediation then to binding arbitration in accordance with the Rules for Non-Administered Arbitration of the International Institute for Conflict Prevention and Resolution ("IICPR"). Any issue concerning the extent to which any dispute is subject to arbitration, or any dispute concerning the applicability, interpretation, or enforceability of these dispute resolution procedures, including any contention that all or part of these procedures is invalid or unenforceable, shall be governed by the Federal Arbitration Act and resolved by the arbitrators. By operation of this provision, the parties agree to forgo litigation over such disputes in any court of competent jurisdiction.

Mediation shall take place at a location to be designated by the parties using Mediation Procedures of the IICPR, with the exception of paragraph 2 (Selecting the Mediator). Arbitration shall take place in New York, New York and shall be governed by the Federal Arbitration Act, 9 U.S.C. §§ 1, et seq. Party-selected arbitrators shall be selected from the lists of neutrals maintained by either the IICPR or by JAMS, Inc., but the chair of the arbitration panel does not have to be selected from those specific lists. The arbitration panel shall have no power to award non-monetary or equitable relief of any sort except as provided in IICPR Rule 13 (Interim Measures of Protection). Damages that are inconsistent with any applicable agreement between the parties, that are punitive in nature, or that are not measured by the prevailing party's actual damages shall be unavailable in arbitration or any other forum. In no event, even if any other portion of these provisions is held to be invalid or unenforceable, shall the arbitration panel have power to make an award or impose a remedy that could not be made or imposed by a court deciding the matter in the same jurisdiction.

Either party may seek to enforce any written agreement reached by the parties during mediation, or to confirm and enforce any final award entered in arbitration, in any court of competent jurisdiction, provided that any party moving to enforce, confirm or vacate any such agreement or award, as the case may be, will file such motion under seal unless prohibited under applicable court rules. Notwithstanding the agreement to such procedures, either party may seek equitable relief to enforce its rights in any court of competent jurisdiction.



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Other Matters

In the event that any term or provision of this Engagement Letter shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.

Except as permitted by law or as set forth in this paragraph, neither party shall acquire hereunder any right to use the name or logo of the other party or any part thereof, and any such use shall require the express written consent of the owner party. The Authority agrees that KPMG may list the Authority as a client in KPMG's internal and external marketing materials, including KPMG websites and social media, indicating the general services rendered (e.g., "The Authority is an Audit client of KPMG LLP"). Further, for purposes of the services described in this Engagement Letter only, the Authority hereby grants to KPMG a limited, revocable, non-exclusive, non-transferable, paid up and royalty-free license, without right of sublicense, to use all logos, trademarks and service marks of the Authority solely for presentations or reports to the Authority or for internal KPMG presentations and intranet sites.

The Authority and KPMG acknowledge and agree that each shall comply with all applicable United States export control laws and regulations in the performance of each party's respective responsibilities under the Engagement Letter. Unless requested by KPMG to allow it to complete its audit, the Authority will not provide KPMG, or grant KPMG access to, (a) information (including technical data or technology), verbally, electronically, or in hardcopy, (b) software or (c) hardware, that is controlled for export by the United States government under the Arms Export Control Act of 1976, Export Control Reform Act of 2018, the International Traffic in Arms Regulations ("ITAR"), Export Administration Regulations ("EAR"), Department of Energy Part 810 Regulations or Nuclear Regulatory Commission Part 110 Regulations, except information, software or hardware that is classified as EAR99 under the EAR ("Export Controlled Information"). If KPMG requests Export Controlled Information from the Authority, the Authority shall provide KPMG with notice of provision of Export Controlled Information at least 48 hours prior to providing such Export Controlled Information to KPMG.

KPMG is a limited liability partnership comprising both certified public accountants and certain principals who are not licensed as certified public accountants. Such principals may participate in the engagements to provide the services described in this Engagement Letter.

The audit documentation for this engagement is the property of KPMG. If KPMG receives a subpoena or other validly issued administrative, judicial, government or investigative regulatory demand/request ("Legal Demand") requiring it to disclose the Authority's confidential information, KPMG shall, unless prohibited by law or demand of a law enforcement agency, provide prompt written notice to the Authority of such demand. So long as KPMG gives notice as provided herein, KPMG shall be entitled to comply with such Legal Demand to the extent required by law, subject to any protective order or the like that may have been entered in the matter. In the event KPMG is requested or authorized by the Authority or is required by law, rule or regulation, Legal Demand, or other legal process to produce KPMG's documents or personnel as witnesses or for interviews, or otherwise to make information relating to the service under the Engagement Letter available to a third party or the Authority or its agents, the Authority shall reimburse KPMG for its professional time at its then-current standard hourly rates, and expenses, including reasonable attorney's fees and expenses, incurred in producing documents or personnel or providing information pursuant to such requests, authorizations or requirements.

Pursuant to *Government Auditing Standards*, and subject to applicable provisions of laws and regulations, we are required to make certain audit documentation available in a full and timely manner to others, including regulators, upon request. In addition, we may be requested to make certain audit documentation available to regulators pursuant to authority provided by law or regulation. If so requested, access to the requested audit



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documentation will be provided. Furthermore, regulators may obtain copies of selected audit documentation. Such regulators may intend, or decide, to distribute the photocopies or information contained therein to others, including other government agencies.

KPMG, as an accounting firm, has an obligation to comply with applicable professional standards. Certain professional standards, including AICPA Code of Professional Conduct Section 1.700, "Confidential Client Information Rule," adopted by the American Institute of Certified Public Accountants and similar rules adopted by the boards of accountancy of many states, prohibit the disclosure of client confidential information without client consent, except in limited circumstances. KPMG represents to the Authority that KPMG will treat the Authority's confidential information in accordance with applicable professional standards.

KPMG may work with and use the services of other members of the international KPMG network of independent firms and entities controlled by, or under common control with, one or more KPMG member firms (together with KPMG, the "KPMG Firms") to provide services to the Authority. In connection with the performance of services under this Engagement Letter, the KPMG Firms may, in their discretion, utilize the services of third party service providers within or outside of the United States to complete the services under this Engagement Letter. KPMG Firms and such third parties may have access to your confidential information from offshore locations. In addition, KPMG uses third party service providers within and outside of the United States to provide, at its direction, back-office administrative and clerical services to KPMG and these third party service providers may in the performance of such services have access to your confidential information. In particular, KPMG's audit technologies, software productivity tools and certain technology infrastructure and, necessarily, your confidential information, may be hosted in cloud environments operated by KPMG Firms or such third party service providers. In addition, for purposes of fulfilling our professional responsibilities, such as maintaining independence and performing conflict checks, NY Green Bank, a Division of NYSERDA, will be listed as a client in internal KPMG systems accessible on a need to know basis to certain professionals in KPMG International member firms. KPMG represents that it has technical, legal and/or other safeguards, measures and controls in place to protect your confidential information from unauthorized disclosure or use.

You also understand and agree that the KPMG Firms, with the assistance of third parties as outlined above, may use the Authority's confidential information for other purposes, consistent with our professional standards, such as improving the delivery of audit and other services or technology to you and to other clients, thought leadership projects, to allow you and other clients to evaluate various business transactions and opportunities, and for use in presentations to you, other clients and non-clients. When your information is used outside of the KPMG Firms or third parties assisting them as outlined above, the Authority will not be identified as the source of the information.

It may be necessary or convenient for the Authority to use KPMG-owned or -licensed software, software agents, scripts, technologies, tools or applications (collectively "KPMG Technology") designed to extract data from the Authority's electronic books and records systems or other systems (collectively, "Systems"), in connection with the audit. The Authority understands and agrees that it is solely responsible for following appropriate change management policies, processes and controls relating to use of such technology (including without limitation appropriate backup of the Authority information and Systems) (collectively, "Change Management Processes") before such KPMG Technology is utilized to extract data from the Systems. In the event the Authority fails to use such Change Management Processes or if such Change Management Processes prove to be inadequate, the Authority acknowledges that the Systems and/or KPMG Technology may not function as intended. In consideration of the foregoing, KPMG hereby grants the Authority the right to use KPMG Technology solely to facilitate the Authority's necessary or convenient provision of information to KPMG in connection with the audit, and this grant does not extend to any other purposes or use by third parties



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outside of your organization without our prior written approval, provided that third party contractors of the Authority having a need to know in order to perform their services to the Authority are permitted to use KPMG Technology to the extent necessary for such parties to perform such services, so long as the Authority has technical, legal and/or other safeguards, measures and controls in place to protect such KPMG Technology and the KPMG confidential information therein from unauthorized disclosure or use. Other than as expressly permitted hereby, the Authority agrees to keep KPMG Technology confidential, using no less than a reasonable standard of care to protect it from unauthorized disclosure or use, and to notify KPMG of any legal compulsions to disclose it, in accordance with the provisions governing legal demand of confidential information which appear in this engagement letter with respect to which the KPMG Technology is being used, *mutatis mutandis*. If the KPMG Technology is subject to any third party license terms and conditions before being provided to the Authority, the Authority may be required to accept such terms and conditions before using the KPMG Technology, in which case KPMG will provide such license terms and conditions to the Authority in writing before the Authority elects to use the KPMG Technology.

Except as otherwise provided for in this Engagement Letter, neither party may assign, transfer or delegate any of its rights, obligations, claims or proceeds from claims arising under or relating to this Engagement Letter (including by operation of law, in which case the assigning party will, to the extent legally permissible, give as much advance written notice as is reasonably practicable thereof) without the prior written consent of the other party, such consent not to be unreasonably withheld. Any assignment in violation hereof shall be null and void.

Other Government Auditing Standards Matters

As required by Government Auditing Standards, we have attached a copy of KPMG's most recent peer review report.

Additional Reports and Fees for Services

Appendix I to this Engagement Letter lists the additional reports we will issue and the services we will provide as part of this engagement and our fees for professional services to be performed under this Engagement Letter.

In addition, fees for any special audit-related projects, such as research and/or consultation on special business or financial issues, will be billed separately from the audit fees for professional services set forth in Appendix I and may be subject to written arrangements supplemental to those in this Engagement Letter.

* * * * * * *

Our engagement herein is for the provision of annual audit services for the financial statements and for the periods described in Appendix I, and it is understood that such services are provided as a single annual engagement. Pursuant to our arrangement as reflected in this Engagement Letter we will provide the services set forth in Appendix I as a single engagement for each of the Authority's subsequent fiscal years until expiration of our contract, or until the date of our agreement is extended or modified by mutual agreement. The annual fees for each subsequent year will be in accordance with our response to RFP 3243 Audit Services, unless otherwise amended.

This Engagement Letter and any exhibits, attachments and appendices hereto, and amendments thereto agreed in writing by the parties, shall constitute the entire agreement between KPMG and the Authority with respect to the subject matter hereof and thereof, and supersedes all other previous oral and written representations, understandings or agreements relating to the subject matter of this agreement.



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We shall be pleased to discuss this Engagement Letter with you at any time. For your convenience in confirming these arrangements, we enclose a copy of this Engagement Letter. Please sign and return it to us to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Very truly yours,	
KPMG LLP	
Martin R. Dunbar Partner	
<u>ACCEPTED</u>	
New York State Energy Research	h and Development Authority
Authorized Signature	
Title	
Date	•

Fees for Service

Based upon our proposal dated April 7, 2016, as amended in October 2018 with the approval of management and the Audit and Finance Committee, our fees for services are as follows:

Audit of the financial statements and related notes to the financial statements of the Authority's enterprise fund, NY Green Bank, as of and for the year ended March 31, 2021

\$32,910

Other Reports:

The reports that we will issue as part of this engagement included in the fee above are as follows:

Independent Auditors' Report on the Financial Statements of NY Green Bank

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing* Standards

The above estimates are based on the level of experience of the individuals who will perform the services. Circumstances encountered during the performance of these services that warrant additional time or expense could cause us to be unable to deliver them within the above estimates. We will endeavor to notify you of any such circumstances as they are assessed.

All fees, charges and other amounts payable to KPMG under the Engagement Letter do not include any sales, use, excise, value added, income or other applicable taxes, tariffs or duties, payment of which shall be the Authority's sole responsibility, excluding any applicable taxes based on KPMG's net income or taxes arising from the employment or independent contractor relationship between KPMG and its personnel.

Resolution N	0.
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RESOLVED, the Board authorizes the President and CEO to retain the firm of KPMG, LLP as independent auditors for the Authority and for NY Green Bank for the fiscal year ending March 31, 2021.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

ANNUAL BOND SALES REPORT

Fiscal Year Ended March 31, 2020

TABLE OF CONTENTS

List of issuances, refundings, and conversions

List of outstanding bonds as of March 31, 2020

ISSUANCES

Company/Series	Date Issued	Date of Maturity	Amount Issued (\$000s)	Savings (\$000s)	Initial Interest Rate Mode	Initial Interest Rate	M/WBE Participation
			None				

REFUNDINGS

Company/Series	Date Issued	Date of Maturity	Amount Issued (\$000s)	Savings (\$000s)	Initial Interest Rate Mode	Initial Interest Rate	M/WBE Participation
None							

CONVERSIONS

Company/Series	Date Converted	Date of Maturity	Principal Amount (\$000s)	Additional Savings (\$000s)	Initial Interest Rate Mode	Initial Interest Rate	M/WBE Participation	
None								

							Amount	Amount
Company Central Hudson Gas & Electric Co.	Project description Pollution Control Refunding Revenue Bonds	Series 1999 B	<u>CUSIP</u> 649845 EW 0	<u>Date Closed</u> 8/3/1999	<u>Date Issued</u> 7/27/1999	Maturity 7/1/2034	<u>Issued (000's)</u> \$33,700	Outstanding (000's) \$33,700
Central Hudson Gas & Electric Co. Total							\$33,700	\$33,700
Consolidated Edison Company	Facilties Revenue Bonds	2004C-1	64984E DF9	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilties Revenue Bonds	2004C-2	64984E DE2	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilties Revenue Bonds	2004C-3	64984E DD4	11/12/2004	11/5/2004	11/1/2039	\$33,000	\$33,000
Consolidated Edison Company	Facilities Revenue Bonds	2010A	64984E DN2	11/16/2010	11/9/2010	6/1/2036	\$224,600	\$224,600
Consolidated Edison Company	Facilities Revenue Bonds	2005 A-1	649848E DJ1	5/26/2005	5/26/2005	5/1/2039	\$42,100	\$42,100
Consolidated Edison Company Consolidated Edison Company	Facilities Revenue Bonds Facilities Revenue Bonds	2005 A-2 2005 A-3	649848E DG7 649848E DH5	5/26/2005 5/26/2005	5/26/2005 5/26/2005	5/1/2039 5/1/2039	\$42,100 \$42,100	\$42,100 \$42,100
Consolidated Edison Company Total	racilities Revenue Bolius	2005 A-3	049046E DH3	3/20/2003	3/20/2003	3/1/2039	\$449,900	\$449,900
KeySpan Generation LLC	Electric Facilities Revenue Bonds	1997 A	649841 CR 2	12/30/1997	12/30/1997	12/1/2027	\$24,880	\$24,880
KeySpan Generation LLC	Pollution Control Refunding Rev Bonds	1999A	649845 FA7	10/27/1999	10/20/1999	10/1/2028	\$41,125	\$41,125
KeySpan Generation LLC Total							\$66,005	\$66,005
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1988 A	649845 FE9	12/22/1988	12/22/1988	12/1/2023	\$69,800	\$69,800
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1985 B	649845 FT6		12/26/1985	12/1/2025	\$37,500	\$37,500
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1985 C	649845 FU3		12/26/1985	12/1/2025	\$37,500	\$37,500
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1986 A	649845 FS8	12/18/1986	12/18/1986	12/1/2026	\$50,000	\$50,000
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 A	649845 FV1	3/26/1987	3/26/1987	3/1/2027	\$25,760	\$25,760
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 B-1	649845 FK5	7/16/1987	7/16/1987	7/1/2027	\$68,200	\$68,200
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	1987 B-2	649845 FM1	7/16/1987	7/16/1987	7/1/2027	\$25,000	\$25,000
Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds	2004 A	649845 GA6	5/27/2004	5/19/2004	7/1/2029	\$115,705	\$115,705
Niagara Mohawk Power Corporation Total							\$429,465	\$429,465
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2005 A	649845 GJ7	5/27/2005	5/18/2005	7/1/2026	\$65,000	\$65,000
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2004A	649845 GDO	8/26/2004	8/26/2004	12/1/2027	\$34,000	\$34,000
	Adj./Fixed Rate Pollution Control Refunding Revenue							
NYS Electric & Gas Corporation	Bonds Adj./Fixed Rate Pollution Control Refunding Revenue	1994 B	649845 DD 3	2/23/1994	2/23/1994	2/1/2029	\$37,500	\$37,500
NYS Electric & Gas Corporation	Bonds Adj./Fixed Rate Pollution Control Refunding Revenue	1994 C	649845 DK 7	6/15/1994	6/15/1994	6/1/2029	\$63,500	\$63,500
NYS Electric & Gas Corporation	Bonds	1994 D	649845 HD9	10/25/1994	10/25/1994	10/1/2029	\$74,000	\$74,000
NYS Electric & Gas Corporation	Pollution Control Revenue Bonds	2004C	649845 HH0	8/26/2004	8/26/2004	4/1/2034	\$100,000	\$100,000
NYS Electric & Gas Corporation Total		20010	01001011110	0/20/2001	0/20/2001	17 17 200 1	\$374,000	\$374,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	2004A	649845 HG2	8/26/2004	8/26/2004	5/15/2032	\$10,500	\$10,500
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	2004B	649845 HJ6	8/26/2004	8/26/2004	5/15/2032	\$50,000	\$50,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997A	649845 HE7	8/19/1997	8/1/1997	8/1/2032	\$34,000	\$34,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997B	649845 HF4	8/19/1997	8/1/1997	8/1/2032	\$34,000	\$34,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997C	649845 HK3	8/19/1997	8/1/1997	8/1/2032	\$23,900	\$23,900
Rochester Gas & Electric Company Total							\$152,400	\$152,400
Subtotal - Conduit Utility Bonds							\$1,505,470	\$1,505,470
Green - Jobs Green New York Program Final	ncing:							
Residential Energy Efficiency Financing Rev	enue Ronde Series 2013A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013∆	64985LAA6	8/1/2013	8/1/2013	7/1/2014	\$2,195	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAB4	8/1/2013	8/1/2013	7/1/2014	\$2,080	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAC2	8/1/2013	8/1/2013	7/1/2016	\$2,105	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAD0	8/1/2013	8/1/2013	7/1/2017	\$1,930	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAE8	8/1/2013	8/1/2013	7/1/2017	\$1,775	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAF5	8/1/2013	8/1/2013	7/1/2019	\$1,775 \$1,755	\$0 \$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		6498LAG3	8/1/2013	8/1/2013	7/1/2020	\$1,800	\$1,800
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAH1	8/1/2013	8/1/2013	7/1/2021	\$1,780	\$1,780
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAJ7	8/1/2013	8/1/2013	7/1/2022	\$1,590	\$1,590
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAK4	8/1/2013	8/1/2013	7/1/2023	\$1,445	\$1,445
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013A	64985LAL2	8/1/2013	8/1/2013	7/1/2024	\$1,385	\$1,385
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2025	\$1,350	\$1,350
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2026	\$1,375	\$1,375
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		64985LAL2	8/1/2013	8/1/2013	7/1/2027	\$1,075	\$1,075
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	Residential Energy Efficiency Financing Revenue Bonds	∠u i3A	64985LAL2	8/1/2013	8/1/2013	7/1/2028	\$660 \$24,300	\$660 \$12,460
							•	•
Residential Energy Efficiency Financing Rev NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	20154	not applicable	8/6/2015	8/20/2015	7/1/2016	\$2,420	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2010	\$3,385	\$0 \$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2017	\$3,408	\$0 \$0
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Company	Project description	Series	CUSIP	Date Closed	Date Issued	Maturity	Amount Issued (000's)	Amount Outstanding (000's)
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2019	\$3,410	S0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2020	\$3,305	\$3,305
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2021	\$3,120	\$3,120
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2022	\$3,100	\$3,100
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2023	\$3,160	\$3,160
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2024	\$3,200	\$3,200
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		not applicable not applicable	8/6/2015 8/6/2015	8/20/2015 8/20/2015	7/1/2025 7/1/2026	\$3,200 \$3,155	\$3,200 \$3,155
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2026	\$3,180	\$3,180
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2028	\$3,250	\$3,250
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2029	\$3,040	\$3,040
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2030	\$2,025	\$2,025
NYS Energy Res. & Development Auth. Total							\$46,358	\$33,735
Residential Solar Loan Revenue Bonds, Serie	ne 2015							
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	10/29/2015	10/29/2015	3/1/2026	\$12,812	\$5,508
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	2/10/2016	2/10/2016	6/1/2023	\$1,005	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	2/10/2016	2/10/2016	6/1/2026	\$6,058	\$4,694
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	4/8/2016	4/8/2016	9/1/2023	\$1,592	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	4/8/2016	4/8/2016	9/1/2026	\$6,136	\$4,781
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	7/11/2016	7/11/2016	12/1/2023	\$1,788	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	7/11/2016	7/11/2016	12/1/2026	\$7,017	\$5,560
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	9/28/2016	9/28/2016	3/1/2024	\$1,256	\$0
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	9/28/2016	9/28/2016	3/1/2027	\$5,011	\$4,005
NYS Energy Res. & Development Auth. Total							\$42,675	\$24,548
Residential Energy Efficiency Financing Reve	onue Bonde Series 2016A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016Δ	not applicable	9/22/2016	9/22/2016	7/1/2017	\$1,045	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2018	\$1,585	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2019	\$1,600	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2020	\$1,620	\$1,620
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2021	\$1,635	\$1,635
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2022	\$1,505	\$1,505
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2023	\$1,460	\$1,460
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2024	\$1,490	\$1,490
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2025	\$1,520	\$1,520
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2026	\$1,555	\$1,555
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2027	\$1,565	\$1,565
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2028	\$1,595	\$1,595
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2029	\$1,635	\$1,635
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2030	\$1,680	\$1,680
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2031	\$1,690 \$23,180	\$1,690 \$18,950
1410 Energy 163. & Development Addi. 10tal							\$25,100	\$10,500
Residential Solar Loan Green Revenue Bonds	s, Series 2018A							
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds	2018A		3/21/2018	3/21/2018	4/1/2020	\$1,600	\$580
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds	2018A		3/21/2018	3/21/2018	4/1/2021	\$1,500	\$1,500
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2022	\$1,500	\$1,500
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2023	\$1,300	\$1,300
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2024	\$1,100	\$1,100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018	3/21/2018	4/1/2025	\$1,100	\$1,100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds			3/21/2018 3/21/2018	3/21/2018 3/21/2018	4/1/2026 4/1/2034	\$1,000 \$9,400	\$1,000
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	NYSERDA Residential Financing Green Revenue Bonds	2016A		3/21/2016	3/21/2016	4/1/2034	\$9,400 \$18,500	\$7,615 \$15,695
N13 Ellergy Res. & Development Auth. Total							\$10,500	\$15,095
Residential Solar and Energy Efficiency Loan	Green Revenue Bonds, Series 2019A							
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energian	2019A	64986RAA2	31/21/19	3/21/2019	4/1/2020	\$1,165	\$1,165
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energian	2019A	64986RAB0	31/21/19	3/21/2019	4/1/2021	\$1,385	\$1,385
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy	2019A	64986RAC8	31/21/19	3/21/2019	4/1/2022	\$1,320	\$1,320
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAD6	31/21/19	3/21/2019	4/1/2023	\$1,255	\$1,255
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAE4	31/21/19	3/21/2019	4/1/2024	\$1,185	\$1,185
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAF1	31/21/19	3/21/2019	4/1/2025	\$1,095	\$1,095
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAG9	31/21/19	3/21/2019	4/1/2026	\$1,045	\$1,045
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energy		64986RAH7	31/21/19	3/21/2019	4/1/2027	\$995	\$995
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ		64986RAJ3	31/21/19	3/21/2019	4/1/2028	\$820	\$820
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth. Total	NYSERDA Green Jobs Residential Solar Level and Energia	2019A	64986RAK0	31/21/19	3/21/2019	4/1/1935	\$5,245 \$15,510	\$5,245 \$15,510
1110 Energy Nes. & Development Auth. Total							φ13,310	\$15,510
Subtota - Green Jobs - Green New York Pro	gram Financing						\$170,522	\$120,898
Grand Total							\$1,675,992	\$1,626,368

Resolution No.	
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RESOLVED, that the Authority's Annual Bond Sales Report for the fiscal year April 1, 2019 through March 31, 2020, and the information contained therein, as presented at this June 23, 2020 meeting is hereby approved for submission pursuant to Section 2800 of the Public Authorities Law.

AUDIT AND FINANCE COMMITTEE CHARTER

Established September 18, 1980

Purposes

Pursuant to Article V, Section 5, of the Authority's By-laws, the purposes of the Audit and Finance Committee are to recommend the hiring of a certified independent auditing firm, including the compensation to be paid, and provide direct oversight of the performance of the independent audit performed; review the annual financial statements of the Authority prior to submission for approval to the Members of the Authority; and may examine and consider such other matters in relation to the internal and external audit of the Authority's accounts, the Authority's financings, and in relation to the financial affairs of the Authority and its accounts as the Audit and Finance Committee may determine to be desirable.

Powers of the Committee

The Committee will:

- recommend appointment, including compensation, and oversee the work, of the independent auditors and, as appropriate, any other public accounting firm employed by the Authority;
- conduct or authorize investigations into any matters within its scope of responsibility;
- seek any information it requires from Authority employees; and
- meet with Authority staff and independent auditors, as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition of Committee and Selection of Members

The Committee shall be established as set forth in and pursuant to Article V, Section 5, of the Authority's By-laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members. The Committee shall consist of not less than three independent Members who shall constitute a majority on the Committee and who shall possess the necessary skills to understand the duties and function of the Committee, provided however, that in the event that there are less than three independent Members, the Members may appoint non-independent Members, provided that the independent Members constitute a majority of the Members of the Committee. In addition, the membership of

the Committee shall include the Chair of the Authority who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Committee members shall be familiar with corporate financial and accounting practices and at least one should be a financial expert. The financial expert should have: (a) an understanding of generally accepted accounting principles and financial statements; (b) experience in preparing or auditing financial statements of comparable entities; (c) experience in applying such principles in connection with the accounting for estimates, accruals and reserves; (d) experience with internal accounting controls; and (e) an understanding of audit committee functions.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the Bylaws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

The Committee will meet with the independent auditor at least annually to discuss the financial statements of the Authority.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings will be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting on significant material matters related to its: (a) oversight of the independent auditors and financial statements; (b) oversight of internal audit activities; (c) oversight of management's internal controls, compliance, and risk assessment practices; (d) review and approval or recommendations concerning approval of Authority financings; (e) review and recommendations concerning approval of investments and investment activities; (f) oversight of special investigations and whistle blower policies; and (g) review or

oversight of any other issues related to the audit and finance practices of the Authority as it deems appropriate.

Independent Auditors and Financial Statements. The Committee will:

- recommend appointment and approval of compensation and oversee independent auditors retained by the Authority and approve all audit services provided by the independent auditor;
- review the procedures for the selection of the independent auditor to ensure compliance with procurement guidelines, internal controls, and any other applicable requirements. The independent auditors will be prohibited from providing non-audit services unless having received previous written approval from the Committee (Non-audit services include tasks that directly support operations, such as bookkeeping or other services related to the accounting records or financial statements of the Authority, financial information systems design and implementation, appraisal or valuation services, actuarial services, investment banking services, and other tasks that may involve performing management functions or making management decisions);
- review audited financial statements and the associated management letter, and report on internal controls and all other auditor communications;
- review significant accounting and reporting issues, new accounting requirements and understand their impact on the financial statements;
- meet with the independent audit firm and discuss any significant issues that may have surfaced during the course of the audit; and
- review and discuss any significant risks reported in the independent audit findings and recommendations and assess the responsiveness and timeliness of management's follow-up activities.

Internal Audit and Other Activities. The Committee will:

- approve the Internal Audit Section of the Internal Control Manual and the risk-based audit plan on an annual basis;
- provide input to the Director of Internal Audit on the internal audit function's budget and resource plan;
- review with management and the Director of Internal Audit, the audit plans and

activities of the internal audit function.

- approve significant changes to the risk-based audit plan;
- receive communications from the Director of Internal Audit regarding internal audit's performance related to the audit plan and other matters;
- approve the appointment or removal of the Director of Internal Audit;
- ensure that the internal audit function is organizationally independent from operations and that the Director of Internal Audit confirms, at least annually, the organizational independence of the internal audit activity;
- make appropriate inquiries of management and the Director of Internal Audit to determine whether there are inappropriate scope or resource limitations;
- review the internal audit function's conformance with the Institute of Internal Auditors' International Professional Practices Framework, including the Definition of Internal Auditing, the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, and the International Standards for the Professional Practice of Internal Auditing (the Standards), and action plans to address any significant conformance issues;
- as permitted by law, meet separately with the Director of Internal Audit to discuss any matters that the Audit and Finance Committee or the Director of Internal Audit believes should be discussed privately;
- review the results of audit activities and approve procedures for implementing accepted recommendations of the internal auditor; and
- review the results of audits performed by the Office of the State Comptroller and any other federal or State agencies, and procedures for implementing accepted recommendations of the audit.

Internal Controls, Compliance, and Risk Assessment Practices. The Committee will:

- review internal controls policies and procedures; and
- review annually management's assessment of the effectiveness of internal controls; and review the report on compliance with internal controls by the independent auditors as a part of the financial audit engagement.

Authority Financings. The Committee will:

- review and approve declarations of intent;
- review Authority financings;
- review and make recommendations concerning proposals for issuance of debt; and
- review and make recommendations concerning approval of an annual bond sale report.

Investment Activities. The Committee will:

- require the Authority's independent auditors to perform a review of, and issue a report on, the Authority's compliance with Section 201.3 of Title Two of the New York Codes, Rules, and Regulations, under *Government Auditing Standards* issued by the Comptroller General of the United States;
- review the quarterly, annual, and any other periodic investment reports, and recommend to the Members of the Authority such changes in the annual investment report as it deems necessary or appropriate; and
- review not less frequently than annually the Investment Guidelines, and recommend to the Members of the Authority such changes in the Investment Guidelines as it deems necessary or appropriate.

Special Investigations. The Committee will:

- ensure availability of an appropriate confidential mechanism for individuals to report suspected fraudulent activities, allegations of corruption, fraud, criminal activity, conflicts of interest or abuse by the directors, officers, or employees and any persons having business dealings with the Authority, and breaches of internal control;
- review and recommend approval of procedures for the receipt, retention, investigation and referral of complaints concerning accounting, internal controls, and auditing to the appropriate body;
- request and oversee special investigations as needed and refer specific issues to the appropriate body for further investigation; and
- review all reports delivered to it by the Inspector General and serve as a point of

contact with the Inspector General.

Other Responsibilities. The Committee will:

- report significant material issues to the Members;
- obtain information and assess training needs to enhance the Committee members' understanding of the role of internal audits and the independent auditor, the risk management process, internal controls, and familiarity with financial reporting standards;
- review the Committee's charter, reassess its adequacy, and recommend proposed changes, as it deems appropriate; and
- review and make recommendations concerning approval of the annual report required by the Public Authorities Law and such other guidelines, policies, procedures, and reports, as deemed appropriate.

GOVERNANCE COMMITTEE CHARTER

Established April 3, 2006

Purposes

Pursuant to Article V, Section 7 of the Authority's By-laws, the purposes of the Committee are to: keep the Members informed of current best practices of corporate governance, review and advise on corporate governance trends, update the Authority's corporate governance principles, as necessary, and advise appointing authorities on the skills and qualifications required of Members.

Powers of the Committee

The Committee will:

- develop qualifications applicable to Members;
- meet with and obtain advice and assistance from Authority staff, including inhouse counsel, and any other persons having special competencies, including legal, accounting or other consultants as the Committee deems necessary to fulfill its responsibilities;
- retain, at the Authority's expense, such outside counsel, experts and other advisors as the Committee may deem appropriate, as approved by the Members;
- conduct or authorize investigations into any matters within its scope of responsibility; and
- seek any assistance it requires from Authority employees.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be established as set forth in and pursuant to Article V, Section 7 of the Authority's By-laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members. The Committee shall consist of not less than three independent Members who shall constitute a majority on the Committee and who shall possess the necessary skills to understand the duties and function of the Committee, provided, however, that in the event that there are less than three independent Members, the Members may appoint non-independent Members,

provided that the independent Members constitute a majority of the Members of the Committee. In addition, the membership of the Committee shall include the Chair of the Authority who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

To the extent practicable, Committee members should be familiar with matters pertaining to governance, as it relates to public authorities and comparable corporations.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

The Committee will meet at least annually to discuss the developments in the area of good governance principles and practices, including enactment of legislation that may affect governance.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) identifying individuals qualified to become Members of the Authority, consistent with the qualifications established in its enabling statute and any other established criteria; (b) developing, reviewing, monitoring, and re-evaluating the Authority's governance principles and practices and, when appropriate, recommending changes to such principles and practices; (c) reviewing ethics standards and whistle blower protections; (d) developing and recommending performance criteria and an evaluation process to be used in

evaluating the Board's functioning as a whole and coordinating and overseeing such evaluation; and (e) performing such other functions as may be assigned.

Identifying Member Qualifications. The Committee will:

- consistent with the Authority's governance principles and the statutory requirements for Members, evaluate the needs of the Board to determine the qualifications of individuals suited to enhance the composition of the Board;
- assist in attracting candidates who meet Member qualifications and review the qualifications of persons identified to the Committee as prospective members of the various Authority committees and of the Board, as requested; and
- develop and provide recommendations regarding Member education, including but not limited to, new Member orientation and training to be obtained from State-approved or other trainers.

Governance Principles and Practices. The Committee will:

- develop, review, monitor, and re-evaluate no less than annually, and recommend such changes to governance principles and practices including those that address transparency, independence, accountability, fiduciary responsibilities, and management oversight, as it deems appropriate; and
- monitor compliance with the governance principles and practices.

Ethics Standards and Whistle Blower Protection. The Committee will:

- develop, review on a regular basis, and update as necessary the Authority's Code of Conduct and written policies regarding conflicts of interest, such code and policies to be no less stringent than the laws, rules, regulations, and policies applicable to State officers and employees;
- review and make recommendations as appropriate on revisions to the Authorities By-laws regarding the conduct of Board business; and
- periodically review and make recommendations, if necessary, on revisions to the Authority's written policies regarding the protection of whistle blowers.

Other Responsibilities. The Committee will:

• review compensation and related policies and procedures;

- review and recommend for approval such governance-related reports, guidelines, policies, procedures, assessments, and reports as may be required; and
- perform such other functions as may be assigned to it from time to time.

PROGRAM PLANNING COMMITTEE CHARTER

Established September 20, 1983

Purposes

Pursuant to Article V, Section 5 of the Authority's By-Laws, the purposes of the Committee are to: review the annual updating of the Authority's Strategic Program Plan; and preparation of the portions of the Authority's annual budget related to the energy research and innovation, market development, clean energy financing, and other related programs and initiatives; provide guidance to the Authority's officers and employees in the preparation of those plans and those portions of the budget; and shall consider such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee.

Powers of the Committee

The Committee will:

- review the annual update of the Authority's Strategic Program Plan;
- review preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives;
- consider such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee; and
- meet with and request information from Authority staff as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be established as set forth in and pursuant to Article V, Section 5 of the Authority's By-Laws. The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six Members, who shall be elected from among the Members of the Authority other than the Chair. A majority of these committee members shall be other than Members of the Authority who serve ex-officio. In addition, the membership of the Committee shall include the Chair of the Authority, who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the

Chair, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

Notices of meetings will be prepared in accordance with the By-Laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) the annual updating of the Authority's Strategic Program Plan; (b) the preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives; (c) such other matters related to the Authority's innovation, market development, clean energy financing, and other related programs and initiatives as the officers of the Authority may refer to the Committee;

Review the annual update of the Strategic Program Plan. The Committee will:

- review the process Authority staff uses to prepare the Strategic Program Plan;
- review a draft of the Strategic Program Plan document; and
- recommend such revisions to the process and document as the Members deem necessary.

Review the preparation of the portions of the Authority's annual budget related to innovation, market development, clean energy financing, and other related programs and initiatives. The Committee will:

- review drafts of the annual spending plan and the annual operating budget with respect to the program areas within its jurisdiction;
- recommend such revisions to these documents as the Members deem necessary;
- review any proposed revisions by the Officers to the operating budget with respect to the program areas within its jurisdiction.

<u>Provide guidance in the preparation of plans and budgets</u>. The Committee will:

- receive reports from Authority staff concerning progress in the various program areas within its jurisdiction;
- make such recommendations with respect to program direction and planning as the Members deem necessary.

Consider such other matters related to the Authority's programs within its jurisdiction as the officers of the Authority may refer to the Committee. The Committee will:

• receive reports on any other matters with respect to the program areas within its jurisdiction as the officers of the Authority may refer to the Committee and make such recommendations on such matters as the Members deem necessary.

WASTE AND FACILITIES MANAGEMENT COMMITTEE CHARTER

Established September 21, 1987

Purposes

Pursuant to Article V, Section 6 of the Authority's By-laws, the purposes of the Waste and Facilities Management Committee are to: review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination; to review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets; to provide guidance to the Authority's officers and employees in the preparation of the plans and in preparation of such annual program budgets; and to consider such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee.

Powers of the Committee

The Committee will:

- review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination;
- review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets;
- provide guidance to the Authority's officers and employees in the preparation of the plans and in preparation of such annual program budgets;
- consider such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee;
- meet with and seek assistance from Authority staff as necessary.

The Committee shall have sufficient resources to carry out its duties.

Composition and Selection

The Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than six members, who shall be elected from among the Members of the Authority other than the Chair. A majority of these committee members shall be other than Members of the Authority who serve ex-officio. In addition, the membership of the Committee shall include the Chair of the Authority, who shall serve ex-officio and who shall enjoy all the rights and privileges of membership, including the right to vote. A majority of the members of the Committee then in office, not including the Chair of the Authority, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum, and the Chair of the Authority if present shall be counted toward a quorum.

The Members of the Authority will appoint the Chair of the Committee.

Meetings

The Committee will meet, as necessary, and special meetings may be called in accordance with the By-laws. Members of the Committee are expected to attend each committee meeting, in person or by video conference. The Committee may invite other individuals to attend meetings and provide pertinent information, as necessary.

Notices of meetings will be prepared in accordance with the By-laws and agendas and briefing materials will be prepared and provided to the Committee members. To the extent practicable, briefing materials will be provided to the Committee members not less than 5 business days prior to each meeting. Minutes of each meeting will be maintained in a central location at the Authority's principal office.

Meetings shall be conducted in accordance with the open meetings law.

Responsibilities

The Committee will be responsible for reporting to the Members on significant and material matters related to: (a) the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for radioactive waste policy and nuclear coordination; (b) the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets; and (c) such other matters related to West Valley site management and radioactive waste policy and nuclear coordination as the officers of the Authority may refer to the Committee;

Review the Authority's program and plans for management of the Western New York Nuclear Service Center, including the West Valley Demonstration Project, and for

radioactive waste policy and nuclear coordination. The Committee will:

- receive and review reports from the Authority's officers and staff regarding the program and plans;
- recommend such revisions to the program and plans as the Committee deems necessary.

Review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets. The Committee will:

- review drafts of the annual spending plan and the annual operating budget with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs;
- recommend such revisions to these documents as the Members deem necessary;
- review any proposed revisions by the Officers to the operating budget with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs.

Consider such other matters related to the Authority's programs within its jurisdiction as the officers of the Authority may refer to the Committee. The Committee will:

• receive reports on any other matters with respect to the West Valley site management and radioactive waste policy and nuclear coordination programs as the officers of the Authority may refer to the Committee and make such recommendations on such matters as the Members deem necessary.

RESOLVED, the Audit and Finance Committee Charter, the Governance Committee Charter, the Program Planning Committee Charter, and the Waste and Facilities Management Committee Charter, as presented to the Members for consideration at this June 23, 2020 meeting, with such non-substantive, editorial changes and grammatical changes as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, are approved.

New York State Energy Research and Development Authority

Operations, Accomplishments, Mission Statement, and Performance Measurement

Annual Report

Fiscal Year Ended March 31, 2020

Pursuant to Public Authorities Law Section 2800(1)

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1 NYSERDA

NYSERDA is governed by a board consisting of 13 members, including the Commissioner of the Department of Transportation, the Commissioner of the Department of Environmental Conservation, the Chair of the Public Service Commission, and the President and CEO of the Power Authority of the State of New York, who serve ex officio. The remaining nine members are appointed by Governor Andrew M. Cuomo of the State of New York with the advice and consent of the Senate and include, as required by statute, an engineer or research scientist, an economist, an environmentalist, a consumer advocate, an officer of a gas utility, an officer of an electric utility, and three at-large members.

2 Mission and Vision

NYSERDA's **mission** is to advance innovative energy solutions in ways that improve New York State's economy and environment.

NYSERDA's **vision** is to serve as a catalyst for advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

NYSERDA seeks to support the widespread development and use of innovative technologies to improve the State's energy, economy, and environment. NYSERDA's programs and services provide a vehicle for the State to work collaboratively with businesses, academia, industry, the federal government, the environmental community, public interest groups, and energy market participants.

3 Operational Changes and New Initiatives

This section begins with information on major clean energy policies that were enacted in 2019 and represent key drivers and context for NYSERDA's programs. This section continues to include a description of each of NYSERDA's new initiatives. Several of the new initiatives this year modify and build upon prior offerings by NYSERDA and are mainly driven by the continued rollout of the Clean Energy Fund (CEF).

3.1 Green New Deal and Climate Leadership and Community Protection Act (CLCPA)

Governor Cuomo announced New York's Green New Deal on January 15, 2019, which is the most aggressive climate change program in the nation and puts the State on a path to complete carbon-neutrality across all sectors of the economy, including power generation, transportation, buildings, industry, and agriculture. The Climate Leadership and Community Protection Act (CLCPA), signed in July 2019, has adopted the primary clean energy goals of the Green New Deal and has set the State target to reduce greenhouse gas (GHG) emissions from all anthropogenic sources 85% below 1990 levels by the year 2050, including an interim target of a zero-carbon emissions electricity sector by the year 2040. The CLCPA mandates the following:

- Six thousand megawatts (MW) of solar by 2025
- Seventy percent renewable electricity by 2030
- Nine thousand MW of offshore wind by 2035
- Carbon-free electricity by 2040
- Three thousand MW of Energy Storage by 2030
- Disadvantaged communities shall receive no less than thirty-five percent of the overall benefits of spending on clean energy and energy efficiency programs, projects or investments

With these goals, New York State is undertaking one of the most aggressive clean energy agendas in the nation. Through the CEF and its other portfolios, NYSERDA works to foster the transformation of markets, pushing them to accurately value clean energy, energy efficiency, and resilience while encouraging competition and innovation that delivers value to consumers so that New York can achieve its aggressive clean energy goals.

3.2 Offshore Wind

In his 2019 State of the State address, Governor Cuomo proposed a significant ramp-up of the State's renewable energy goal to 70% of electricity met by renewables by 2030, alongside other renewable energy goals of increasing New York's offshore wind target to 9,000 megawatts by 2035. On November 8, 2018 NYSERDA issued its inaugural solicitation for offshore wind energy pursuant to the New York State Public Service Commission's Order Adopting the Offshore Wind Standard which provides a framework for an initial phase of offshore wind energy solicitations. The solicitation sought to stimulate the development of the domestic offshore wind industry, reduce the cost of later offshore wind procurements, and allow New York State to realize the direct benefits associated with the construction, operation, and maintenance of offshore wind resources. In October 2019, NYSERDA finalized contracts for its first two offshore wind projects, Empire Wind (816 MW, Equinor US Holdings, Inc.) and Sunrise Wind (880 MW, Sunrise Wind LLC, a joint venture of Ørsted A/S and Eversource Energy) as the largest procurement for offshore wind in the nation.

In January 2020, NYSERDA sought authorization from the Public Service Commission to effectuate its second offshore wind procurement ranging from at least 1,000 MW and up to 2,500 MW in the 2020 solicitation. On April 23, 2020, the Public Service Commission released its second Order related to offshore wind.

The April 2020 Order calls for NYSERDA to issue its second offshore wind solicitation in 2020 and allows NYSERDA flexibility to award up to 2,500 MW. In its evaluation process, NYSERDA will consider the costs and benefits of procuring from a range of project proposals that may reflect a variety of project capacities and economic benefit proposals, including port infrastructure investments.

3.3 Clean Energy Fund

During 2019, NYSERDA accomplished several key milestones related to the CEF, including developing and receiving approval to launch many key initiatives. This section describes the establishment of the CEF portfolio, which began with the first initiatives introduced in 2016 and continued to build in 2019.

In June 2015, NYSERDA filed the Clean Energy Fund Information Supplement, paving the way for the 10-year, \$5 billion CEF. Through the CEF, NYSERDA seeks to build on its success and momentum to meet evolving market and customer needs. NYSERDA designed the CEF to pursue three long-term outcomes: thriving and self-sustaining clean energy industries able to operate without subsidies; greater levels of private capital invested in clean energy and jobs in New York State; and significant reductions

in greenhouse gas (GHG) emissions from the State's energy sector. This investment will span across four program portfolios: Market Development, Innovation and Research, NY Green Bank, and NY-Sun. NYSERDA designed these portfolios to complement the other pillars of the State's energy agenda, including the Reforming the Energy Vision (REV) Regulatory Proceeding, the Clean Energy Standard (CES), and initiatives advanced by the New York Power Authority.

The CEF employs innovative solutions that remove barriers, solve targeted customer needs, and provides value to all clean energy stakeholders. The CEF represents a shift in strategies toward engaging market forces and leveraging capital through investments that lower costs and make clean energy more affordable and accessible. Through the CEF, NYSERDA will continue to act as a catalyst for advancing energy innovation and technology, transforming New York State's economy and empowering consumers to make informed energy choices.

In positioning the organization for success under the CEF, NYSERDA is continuing to streamline operations to become more responsive, adaptive, and easier to engage. NYSERDA also orients more towards a strategic, market-based approach to identify and size market opportunities as well as to uncover and address customer value propositions in a meaningful way.

The following sections provide a description of new CEF initiatives approved in the reporting year, although some but not all have been launched in this period.

3.3.1 Low- to Moderate-Income

Under the CEF, NYSERDA administers twelve market development interventions with a comprehensive, three-pronged strategy for improving energy affordability and access to clean energy solutions for low- to moderate-income (LMI) communities, customers, and building owners. Eleven initiatives have been previously approved: RetrofitNY, REVitialize, Low-Income Forum on Energy, Healthy Homes
Feasibility Study, Single Family Residential Low Income, Single Family Residential Moderate Income,
Low-to-Moderate Income Multifamily, Low-to-Moderate Income Multifamily New Construction, Low-to-Moderate New Construction, Low-to-Moderate Income Low Rise New Construction and Low-to-Moderate Income Community Solar. Approved in 2020, the New York State Healthy Homes Value-Based Payment Pilot, funded at \$9.8 million, will seek to develop a replicable model for implementing a healthy homes approach to residential building improvements under the Medicaid Value-Based Payment (VBP) framework. By validating impacts such as healthcare cost savings and benefits to residents, as well as providing market development support, including specification of services and VBP contracting, the

Pilot will facilitate the adoption of healthy homes treatments by Medicaid managed care organizations (MCO) as part of their Medicaid VBP Arrangements that incorporate social determinants of health.

3.3.2 Multisector Solutions

NYSERDA administers six initiatives aimed at broadly supporting the development and deployment of clean and renewable sources of energy, a more efficient and responsive grid, and more energy-efficient buildings across more than one targeted market segment. These multisector solutions will address cross-cutting barriers and opportunities applicable to multiple sectors, including reducing soft costs, providing technical assistance, and increasing confidence in clean energy solutions. Five active initiatives, Aggregated Technical Services, Commercial and Industrial Carbon Challenge, and Clean Energy Siting, Soft Cost Reduction, Information Products and Brokering and Pay for Performance (P4P), were previously approved. The Consumer Awareness initiative, funded at \$5.27 million, was approved in 2019 and works across sectors to increase consumer awareness, familiarity, and demand for clean heating and cooling and energy efficiency technologies. The program supports attainment of the NYS SEP goals to reduce GHG emissions through increasing awareness and consideration of energy efficiency and clean heating and cooling technologies. The program will reinforce and expand the reach of other NYSERDA, NYPA and utility programs to maximize the benefits of these technologies in natural gas constrained areas. One other multisector initiative, the Energy Efficiency Soft-Cost Challenge, was cancelled during the year. The initiative was never launched as soft-cost reduction strategies are instead being embedded as components of other investment plans, therefore this separate initiative is no longer necessary.

3.3.3 Communities

The Clean Energy Communities and Community Energy Engagement initiatives are aimed at enabling local governments and communities to implement clean energy projects and were previously approved. The Clean Energy Communities Program will drive energy efficiency and deployment of clean energy by providing technical assistance, outreach, engineering support, tools, and guidance. The Community Energy Engagement Program leverages local organizations to perform outreach to drive energy efficiency and renewable energy adoption in low-to-moderate income (LMI) communities. The Clean Energy Communities initiative was modified during 2019 and added \$67 million to support the Clean Energy Communities Leadership Round, which is an update to the existing Clean Energy Communities program. In the Leadership Round, communities will work with regional coordinators to prioritize and implement high-impact actions, apply for grants that emphasize new activity and impact, and earn new forms of recognition. The modification also supports Community Choice Aggregation (CCA) partner

organizations, a statewide building energy benchmarking platform, and Property Assessed Clean Energy (PACE) financing.

3.3.4 Industrial

The Energy Management Practices initiative (formerly Continuous Energy Improvement) was approved in 2016 and aims to integrate the adoption of energy efficiency and clean energy into companies' core business processes. This initiative includes a pilot to prove the benefit of a fulltime on-site energy manager dedicated to implementing energy efficiency projects in a manufacturing setting. Also, NYSERDA launched Strategic Energy Management system pilots to demonstrate how this continuous improvement approach can lead to sustained energy savings. The initiative was modified during 2019 to add an additional \$18 million in funding. These funds expanded eligibility for the Strategic Energy Management (SEM) component to the commercial sector, adding \$5 million in support for the commercial sector. This modification also added \$3 million to support self-serve SEM activities, and \$10 million in funding to support additional industrial cohorts, with a corresponding increase in benefits. The chapter name was also changed to Energy Management Practices.

3.3.5 REV Technical Assistance

The REV Connect initiative was approved in 2016 and offers a central forum where DER providers can submit project ideas and receive expert guidance and technical support. This can facilitate the matching of ideas with customers, communities, and utilities to advance high-quality REV demonstrations and other innovation projects. The initiative was modified during 2019 to add an addition \$10 million in funding for up to four additional years of continued operations, including maintenance of the submission portal and submission screening and partnership facilitation processes. The update also includes an increased budget to provide funding to support market tests of proposals that are not mature enough for a utility partnership.

3.3.6 Residential

The Residential initiative, formerly Engaging New Markets, was approved in 2017, takes a multifaceted approach to drive energy efficiency in the single-family residential market, through investments targeted at mid-stream and up-stream market actors training and consumer education. Intervention strategies include pilots to influence home purchasing decisions and training of contractors in energy efficiency offerings and tools, such as home energy ratings, with the overall objective to increase the number of businesses providing energy efficiency services, and consumer demand for these services and energy-

efficient homes. The initiative was modified during 2019 to add \$35.9 million to support two additional components; Heat Pump Ready and Green Jobs – Green New York Audits (GJGNY). Heat Pump Ready seeks to create a strong residential market for heat pumps by demonstrating that simplified packages of whole house load reduction measures (air sealing, insulation, duct repair/sealing, and windows) can facilitate sales of envelope improvements and prime customers for accelerated heat pump adoption by making them "heat pump ready." GJGNY supports the delivery of free energy audits to consumers. The new process will launch in 2020, coordinated with new tools developed to support the "heat pump ready" initiative, and will enable the use of remotely available data sources to pre-populate energy audit data, using the field visit to verify site conditions and provide health and safety checks as needed. Beginning in 2021, NYSERDA will seek to deploy additional automated remote data collection to further reduce the necessity of lengthy on-site inspections.

4 Program Accomplishments

NYSERDA's activities are focused on achieving the five strategic goals/outcomes titled, Efficient Use of Energy, Renewable and Diverse Energy Supplies, Clean Energy Economy, A Cleaner Environment, and Contract and Cycle Time/Accessibility, as shown in Table 1. NYSERDA's 2019 accomplishments are organized and reported in alignment with these five strategic outcomes. The accomplishments are stated in a cross-program manner, and notably, include results spanning pre-CEF and CEF initiatives.

Table 1. Mission, Vision, Outcomes

Mission	Advance innovative energy solutions in ways that improve the State's economy and environment.				
Vision	transforming New		my, and empoweri	g energy innovation ng people to choos	
Stakeholders	New York State er economy.	nergy users, busine	esses, and institutio	onsengaged in the c	clean energy
Core Value	NYSERDA will se	rve as a source of c	bjective, credible i	nformation.	
Strategic Goals/Outcomes	Efficient Use of Energy	Renewable and Diverse Energy Supplies	Clean Energy Economy	A Cleaner Environment	Contract and Cycle Time, Accessibility
	NYSERDA reduces market barriers and spurs demand for energy solutions that reduce the energy consumption and increase the energy efficiency of New York State's residents and businesses.	NYSERDA diversifies New York State's portfolio of energy resources by accelerating development of renewable and distributed generation resources.	NYSERDA catalyzes technology innovation, new business opportunities, and private investment in clean energy in New York State.	NYSERDA enables markets for new clean energy products and services that can produce meaningful reductions in the environmental impact of energy production and use.	NYSERDA is responsive to customer needs by delivering accurate and timely information, services, and programs.

Tables 2 through 7 provide performance information for each of the five outcomes, including data that describes NYSERDA's annual incremental commitment performance for calendar year 2019 and the total cumulative acquired progress achieved through December 2019.

Targets for calendar year 2020 are also provided for performance measures, when possible.

NYSERDA's targets are expressed on a commitment basis (i.e., having to do with when funds are committed to a specific contractual activity), as commitment-based targets align target setting with the new strategies of the CEF that emphasize engaging market forces toward longer-term, more transformative clean energy outcomes, rather than quick turn-around resource acquisition. Commitment-based targets are the best measure of NYSERDA's success at engaging the market to uncover and address customer value propositions and of NYSERDA's continued endeavors to streamline operations and become more responsive, adaptive, and easier to use. Each metrics table contains three columns on the left side representing a commitment-based view and one column on the right side representing the cumulative total benefits achieved by NYSERDA from completed projects.

- The column **Target CY 2019 Commitments Addition** represents the expected target NYSERDA set in the prior year for additional commitments made during this calendar year.
- The column **Achieved CY 2019 Commitments Addition** represents the commitments NYSERDA achieved during this calendar year.
- The column **Target CY 2020 Commitments Addition** represents NYSERDA's expected target for new commitments made during the calendar year, representing work to build the project pipeline.
- The column Cumulative Acquired Benefits at end of CY 2019 represents the total benefits NYSERDA achieved from projects that have been completed through 2019.

The quantitative performance measurement data are supplemented with contextual information, as needed and when available, and highlights of additional 2019 accomplishments.

While the listed performance measures are used to evaluate NYSERDA's progress toward goals, many of the measures are influenced by factors that are out of NYSERDA's direct control, such as economic conditions, changes in energy markets and prices, and federal and State policy and funding decisions. The measures are intended to serve as indicators of progress in the context of these external factors.

Acknowledging COVID-19 Impact

NYSERDA's forecasts are typically done on an annual basis during the first two months of the new calendar year so they can be fully informed by how the last calendar year ended. As such, the forecasts developed in early 2020 were completed prior to the COVID-19 pandemic and the resulting New York on PAUSE Executive Order and subsequent executive orders which placed a priority on the safety and health of every New Yorker. As a result, NYSERDA paused all on-site work conducted by contractors for all of

its clean energy programs through May 15th. Even as field work resumes, the pandemic will have had farreaching impacts on the economy significantly affecting both residents and businesses but with the full extent of this impact still unknown. NYSERDA is committed to driving continued progress toward NY's clean energy goals and is examining ways that CEF programs can support those goals while also aiding in the State's economic recovery. At this time, NYSERDA's published CEF forecasts represent prepandemic expectations, with the recognition that adjustments will be necessary once the impact of the pandemic and all elements of the recovery are better understood.

Table 2 presents NYSERDA's progress toward the efficient use of energy performance measures. Under the CEF, NYSERDA was ordered to achieve minimum projected benefits of 10.6 million megawatt-hours (MWh) and 13.4 million British thermal units (MMBtu) of annual energy efficiency savings at the end of the 10-year funding period (2016-2025). During 2019, NYSERDA's prior round of programs under the Energy Efficiency Portfolio Standard continued to wrap up, while new initiatives under CEF continue to be developed and launched. Performance against energy efficiency delivery targets shown in Table 2 (electricity and fuel saved) exceeded the targets for both MWh, MMBtu, and energy bill savings. The overperformance on electricity saved can be substantially attributed the Energy Management Technology (EMT) and Industrial Transition initiatives. EMT has seen significant market interest and uptake of Real-Time Energy Management (RTEM) and adoption rates in commercial office and multifamily buildings are strong while Industrial transition maintained its consistently strong performance.

Table 2. Performance Measures—Efficient Use of Energy

	Commitment Pipeline			Acquired Benefits	
Performance Measures	TARGET CY 2019 Commitments Addition	Achieved CY 2019 Commitments Addition	TARGET CY 2020 Commitments Addition ^c	Cumulative Acquired Benefits at end of CY 2019	
Electricity ^{a,b} (GWh) saved annually due to improved energy efficiency in New York's buildings and facilities.	792.7	1,217	922.2	8,382	
Fossil Fuels ^{a,b} (MMBtu) saved (in millions) annually due to improved energy efficiency in New York's	4.1	4.9	4.5	21.8	

buildings and facilities.				
Energy Bill Savings Annual direct energy bill savings realized by participating customers (all programs).	\$158	\$238	\$159	\$1,492

- Starting in 2016, targets and achieved values include, consistent with NYSERDA CEF reporting, only the energy savings from CHP systems, electric vehicles, air source heat pumps, fuel cells and ground source heat pumps. However, CO₂e emission reductions and customer bill savings are fully net, accounting for both the energy savings and the energy use of these measures.
- The system benefit charge (SBC) was authorized in 1998 and NYSERDA began programs the following year. Substantial installations had taken place beginning in 2001 and based on an average 16-year measure life, NYSERDA's 341-GWh installations will be "retired" in 2019. These amounts and the associated emission reduction and customer bill savings have been netted out of the Total Acquired Benefits at End of CY 2019 values reported.
- As noted, the forecasts driving NYSERDA's targets were completed in early 2020, prior to the novel coronavirus pandemic. The target has not been adjusted in any way to account for the NY on PAUSE Executive Order or the expected economic impact associated with the pandemic. Actual performance will be monitored and reported but is expected to vary from the target."

Table 2a. Comparison Points—Efficient Use of Energy

	Comparison Points				
Electricity (GWh)	2018 statewide annual sales of electricity—149,930 GWh ^a				
Fossil Fuels (MMBtu) 2016 statewide annual (Residential, Commercial, Industrial) natural gas a petroleum usage—1,003 million MMBtu ^a					
Number of New York households served	2018 occupied housing units in NYS—7,367,015 ^b				
Number of commercial and industrial customers served	2017 business establishments in NYS—547,034 ^c				

- ^a NYSERDA, Patterns and Trends, Energy Information Administration (EIA), 2020
- b American Community Survey
- c U.S. Census Bureau: State and County Quickfacts

Additional highlights for strategic goal/outcome Efficient Use of Energy:

- Since 1998, NYSERDA-administered energy efficiency programs have saved enough electricity to power more than 1.32 million homes each year and enough natural gas, propane, oil, and other heating fuels to heat 311,818 homes each year.
- More than 930,000 households and 40,100 commercial, industrial, and institutional customers reduced their energy use and annual energy bills by participating in NYSERDA programs since 1998.

The contribution from renewable energy resources to meet New York's electric load rose to 26.8% in 2018 from 2014 baseline of 25.9%, an overall increase of 0.9%. Table 3 presents NYSERDA's progress toward the renewable and diverse energy performance measures. Under the CES, NYSERDA was ordered to conduct regularly scheduled solicitations for the long-term procurement of qualifying RECs to achieve anticipated and minimum results for the years 2017-2021. In January of 2020, the Public Service Commission amended the form of NYSERDA's RES procurements by formally adopting the Index REC price structure that has been successfully employed by the Offshore Wind program to NYSERDA's land-based large-scale renewables procurements, which will be offered for the first time under its 2020 RFP.

In addition to the state's baseline of renewable energy, the State will see significant contributions over the coming years as the result of several procurement programs, including annual solicitations for new large scale renewables, offshore wind, solar incentive programs, and other State procurements. New York has a contracted pipeline of more than 21,000 GWh of renewable generation projects.

NY-Sun commitments in 2019 were greater than expected and were driven heavily by new Community Solar development. Several policy improvements enabled this robust development. The Phase Two VDER Order (April 22, 2019) made significant improvements to the Value Stack compensation tariff and introduced greater revenue certainty to developers. The Order also introduced a new incentive for Community Solar in the form of the Community Credit, which drove significant development, especially in NYSEG and National Grid territories. In addition to strong Community Solar development, the market saw significant development in ConEd territory in both the residential and the nonresidential sectors. Finally, opportunities in the energy storage market, including the new NYSERDA Energy Storage retail incentive, drove development of PV projects paired with storage.

Table 3. Performance Measures—Renewable and Diverse Energy

	Co	Acquired Benefits		
Performance Measures	TARGET CY 2019 Commitments Addition	Achieved CY 2019 Commitment Addition	TARGET CY 2020 Commitments Addition ^b	Cumulative Acquired Benefits at end of CY 2019
Renewable resources electricity produced 1) Annual Electricity Production (GWh) delivered to wholesale power market from incentivized installations ^c	8,655 ^a	9,688ª	5,770	2,207°
Annual Electricity Production (GWh)	863	1,152	1,282	2,299

from on-site installations ^d				
Solar PV capacity (GW) from all NYSERDA funded solar PV programs, including NY-Sun 3 GW goal ^c	0.6	0.8	0.8	1.651

- The target and achieved addition for 2019 have been adjusted based to include actual commitments for Offshore Wind which had previously not been included. The Offshore wind target and actual MWhs assumptions were based on a NYSERDA capacity factor estimate of 48%.
- As noted, the forecasts driving NYSERDA's targets were completed in early 2020, prior to the novel coronavirus pandemic. The target has not been adjusted in any way to account for the NY on PAUSE Executive Order or the expected economic impact associated with the pandemic. Actual performance will be monitored and reported but is expected to vary from the target
- Amount is net of any NYSERDA-contracted facilities which have reached their terminus year, after which NYSERDA no longer has the rights to claim the attributes of their generation.
- NYSERDA does not, by filing this report, make any claim to the environmental attributes associated with those megawatt-hours. NYSERDA has relinquished all such rights and disavows any and all rights to any environmental claims or renewable energy to which it had made claims under previous policies.

Table 3a: Comparison Points—Renewable and Diverse Energy

Comparison Points			
New York Load Served by Renewables ^a	2018 Renewable Energy Serving Load – 26.8% (42,162 GWh's)		

a CES Annual Progress Report – 2018 https://www.nyserda.ny.gov/-/media/Files/Publications/Energy-Analysis/RPS/2019-Clean-Energy-Standard-Annual-Progress-Report.pdf

Additional highlights for strategic goal/outcome Renewable and Diverse Energy supplies:

- NYSERDA is currently supporting 116 large-scale renewable generation projects representing 5,243
 MW of renewable generation capacity. There are 46 facilities operating with the remainder of the
 projects under design and construction.
- NYSERDA is also supporting two offshore wind generating projects, which are both under design and construction, and once operating will represent 1,696 MW of renewable capacity.
- Of 83 communities awarded funding to conduct feasibility assessments at Stage 1 of the NY Prize Competition, all but one completed their Stage 1 assessment and the completed assessments are posted to the NY Prize website. Of those communities that vied for funding to conduct detailed engineering design and commercial/financial plans at Stage 2 of the competition, 11 were awarded nearly \$11 million and the Stage 2 projects have completed their work. Several projects completed final designs and business models while a few projects determined they were not financially viable and terminated design work.

Table 4 presents NYSERDA's progress toward the clean energy economy performance measures. Procurement activities by NYSERDA include the issuance of the third RES solicitations in 2019.

Combined with the renewable energy projects previously announced under Governor Cuomo's Clean Energy Standard, New York has now awarded 67 projects worth more than \$4 billion.

Table 4. Performance Measures—Clean Energy Economy

	Commitment Pipeline		
Performance Measures	TARGET CY 2019 Commitment Addition	Achieved CY 2019 Commitment Addition	TARGET CY 2020 Commitments Addition ^d
Total funding leveraged from all NYSERDA investments (\$million) ^{a,b}	\$11,401 ^c	\$11,968 ^c	\$8,457

Acquired Benefits
Cumulative Acquired Benefits at end of CY 2019
\$15,620

- a NYSERDA's data set for leveraged funds began in 2010.
- b Data collection for leveraged funds associated with NYSERDA's Technology and Business Development programs is an ongoing effort and the reported values included in this figure represent incomplete data that will be supplemented in future years.
- The target and achieved addition for 2019 has been adjusted based to include actual commitments for Offshore Wind which had previously not been included.
- d As noted, the forecasts driving NYSERDA's targets were completed in early 2020, prior to the novel coronavirus pandemic. The target has not been adjusted in any way to account for the NY on PAUSE Executive Order or the expected economic impact associated with the pandemic. Actual performance will be monitored and reported but is expected to vary from the target

Additional highlights for strategic goal/outcome Clean Energy Economy:

- As a component of the leveraged funding presented in Table 4, NYSERDA's investment in technology and business development has leveraged \$275 million in 2019 for a total of \$1,703 million through the end of calendar year 2019.
- As a result of NYSERDA's technology and business development investments, there are
 more than 526 new and improved clean energy products in the market (including 59 new products
 added in 2019) in all end-use energy sectors from high-efficiency furnaces to
 advanced lighting controls and hybrid electric buses.
- As of the end of 2019, there are currently 114 new clean energy products in development with support from NYSERDA's technology and business development programs.
- As of the end of 2019, annual sales of products developed with NYSERDA support have reached approximately \$2,521 million.
- As of the end of 2019, there are currently 94 clean energy businesses receiving financial support from NYSERDA's technology and business development programs.
- NYSERDA's incubator program, which supports six cleantech incubators across the State, assisted 84 clients and helped these startups raise more than \$472 million in private capital as well as almost \$108 million of non-NYSERDA grant funding, while generating and retaining, 1,910 jobs and bringing dozens of new clean energy and clean technology products to the market.

Table 5 presents NYSERDA's progress toward cleaner environment performance measures. The 2019 target for carbon reductions was exceeded (achieving 110%) and can be attributed to the increased overall procurement amount in excess of the anticipated target from the 2019 CES solicitation.

Table 5. Performance Measures—A Cleaner Environment

	Commitment Pipeline			Acquired Benefits
Performance Measures	TARGET CY 2019 Commitment Addition	Achieved CY 2019 Commitment Addition	TARGET CY 2020 Commitments Addition ^b	Cumulative Acquired Benefits at end of CY 2019
CO ₂ equivalent emission reductions due to NYSERDA's energy efficiency, renewable and diverse energy programs (annual metric tons) (All programs)	5,556,056 ^a	6,172,915 ^a	4,208,209	8,396,350

- a The target and achieved addition for 2019 has been adjusted based to include actual commitments for Offshore Wind which had previously not been included.
- As noted, the forecasts driving NYSERDA's targets were completed in early 2020, prior to the novel coronavirus pandemic. The target has not been adjusted in any way to account for the NY on PAUSE Executive Order or the expected economic impact associated with the pandemic. Actual performance will be monitored and reported but is expected to vary from the target

Table 5a: Comparison Points—A Cleaner Environment

Comparison Points				
CO ₂ equivalent emission reductions ^a	2016 annual NYS power sector emissions—22 million metric tons CO ₂			

a (1) U.S. Energy Information Administration. "Table 4. 2017 State energy-related carbon dioxide emissions by sector." https://www.eia.gov/environment/emissions/state/. Includes emissions from in-state power generation only. GHG emissions associated with imported power as well as the upstream impacts of fossil fuel extraction, processing, and transportation are being assessed in collaboration with DEC as part of a separate GHG emissions reporting process established by the CLCPA.

Energy-related environmental policies in 2019 informed by NYSERDA reports/studies:

- Program Staff in coordination with the New York State Department of Environmental Conservation (NYSDEC), and the Responsible Offshore Development Alliance hosted an offshore wind related fishing transit workshop to gather feedback relating to how commercial fishermen transit the New York Bight. The workshop outputs will inform the Bureau of Ocean Energy Management (BOEM) about how offshore wind lease areas could be designed in the New York Bight.
- NYSERDA Environmental Research held a two-day multi-disciplinary workshop on Energy-related Air Quality and Health Effects Research Workshop in Albany, NY. The 145 participants included staff from federal and state energy, air quality, and public health agencies, researchers and graduate students in these areas, as well representatives from the power industry.

- June 2019, NYSERDA hosted a workshop, Developing Effective State and Local Government Programs to Control Emissions from Residential Wood Heating Devices. Participants were primarily state air regulators or public health staff from states across the country and regional air quality organizations. Along with technical topics, the workshop included a strategic discussion of opportunities and challenges associated with developing state programs.
- The Program published New York State Mercury Connections, a communications document designed to educate policy makers and the general public about the impacts of mercury. The document served as the basis for NYSERDA and scientists briefing of the New York State Attorney General's Office and the NYSDEC as well as staff from the US Senate and House offices and the US Environmental Protection Agency (USEPA) on the efficacy of the MATS rule.
- NYSERDA developed the first of its kind offshore wind environmental and fisheries mitigation plan process that was a requirement of proposers to NYSERDA's first offshore wind procurement. The approach supports transparency and productive stakeholder engagement to advance responsible offshore wind development.
- NYSERDA released guidance to help non-coastal communities consider their current and future
 flood risk. The "toolkit" will help communities better understand these potential changes by using
 existing inland food assessment resources. It aims to help local planners and decision makers
 managers determine which resources to use for their communities and provides step-by-step
 guidance on how to use those resources.
- For the first time a pellet boiler manufacturer requested and was granted approval by US EPA to test five pellet boilers for certification using the Integrated-Duty Cycle (IDC) test protocol as an Alternative Test Method. The IDC protocol was developed with NYSERDA support and evaluates efficiency and emissions performance under more realistic in-use conditions than EPA's current test protocol.

Tables 6 and 7 present NYSERDA's progress toward the contract and cycle time performance measures, which NYSERDA assesses in terms of invoice payment and contract processing timelines. NYSERDA maintained strong performance with regard to prompt payment of invoices. Overall Cycle Time for the Authority improved with a 50% improvement in open enrollment (automated) and open enrollment / task work orders due to improvements made over the past several years. Cycle time increased slightly for direct contract/contract modifications and due date solicitations but is attributed to the nature of the solicitations and contracts that were managed during the year.

Table 6. Performance Measures—Contract and Cycle Time (Invoicing)

	CONTRACT AND CYCLE TIME—INVOICING NYSERDA is responsive to customer needs—delivering accurate and timely information, services, and programs.													
Performance Measures CY 2017 CY 2018 TARGET CY 2019 TAR CY 2018														
Invoice payment: 1) Number of invoices paid within 30 days	65,210 invoices	72,053 invoices	** a	79,756 invoices	**27									

2) Percent of payments					
made within 30 days	99.99%	99.99%	100%	99.99%	100%

The measure will be monitored and reported but a target has not been set. NYSERDA elected not to establish a target in cases where the measure is a function of a parameter that cannot be reliably predicted (e.g., energy costs) or in cases

where the metric is new to NYSERDA.

Table 7. Performance Measures—Contract and Cycle Time (Solicitations)

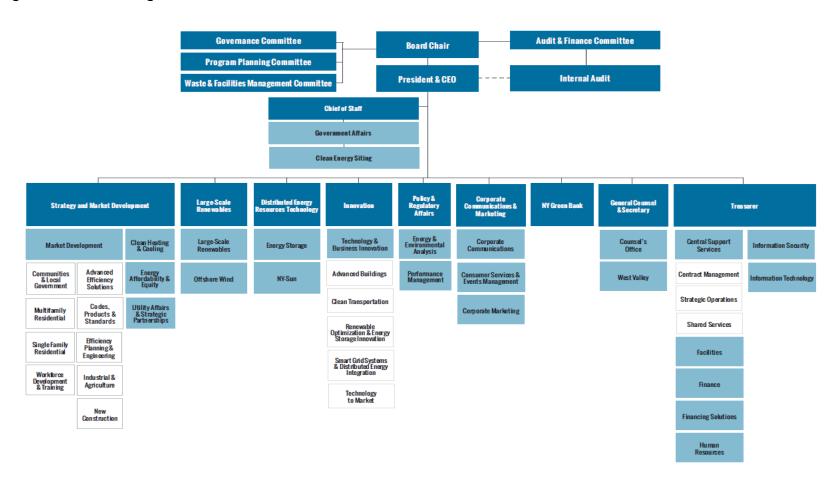
CONTRACT AND CYCLE TIME—SOLICITATIONS NYSERDA is responsive to customer needs—delivering accurate and timely information, services and programs. CY 2018 CY 2019 **Median Total Target CY** Median **Target CY Performance Measures** No. of 2019 Total No. of 2020 Weeks Weeks Contract Processing Time—Median time to Process (Weeks): 1) Due Date Solicitations 30.86 32 33.14 32 Open Enrollment and Task Work Orders 2 2 2 1 Open Enrollment (Automated)^a 1 0.85 0.43 1 4) All Other Actions (Direct Contracts and **Contract Modifications**) 1 3 1.86 2

The contracting process for Residential NY-Sun projects has been automated, leading to reduced cycle times. As these processes are fundamentally different than other open enrollment solicitations, we have broken them out into their own category.

5 Program Units

This section includes NYSERDA's program units, as represented on the organization chart below. Each unit includes a brief overview. The organization units not described in this section but included on the organization chart are operational and administrative rather than program units.

Figure 1. NYSERDA Organizational Structure



5.1 Communities and Local Government

The Communities and Local Government unit provides a unified approach toward local energy action to better serve local communities' needs and to advance clean energy policies statewide. The program is intended to implement a common framework that enables communities to embed clean energy into their planning, help facilitate and prioritize implementation, and recognize/showcase community energy and sustainability actions.

5.2 Multifamily Residential

The Multifamily Residential unit works to overcome market barriers in the multifamily sector (residential structures containing five or more dwelling units), pursuing strategies to create awareness and demand for energy-efficient and high-performance buildings; increase market capacity to deliver energy services; stimulate consumer demand for energy and environmentally friendly buildings through clear and widely used labeling; expand the pool of trusted energy professionals serving the needs of multifamily building owners by increasing their technical skill sets and tools; demonstrate viability of deep energy retrofits in multifamily affordable housing stock; and further the emergence of performance contracting.

5.3 Single-Family Residential

The Single-Family Residential unit works to overcome market barriers towards the development of a robust, self-sustaining, market-based energy efficiency industry for the existing homes sector (residential structure containing one to four dwelling units) and facilitates the growth of demand for energy services.

5.4 Workforce Development and Training

The Workforce Development and Training unit enables workforce development and training where the lack of a trained workforce inhibits growth in a particular energy industry, or where training is needed to perform critical functions; establishes energy training as a permanent and sustainable part of the community infrastructure; and enables growth of jobs in disadvantaged communities.

5.5 Advanced Efficiency Solutions

The Advanced Efficiency Solutions team is a cross-sectoral group whose primary goal is to accelerate the adoption of energy efficiency in buildings by increasing private sector investment in smart building technologies and services. Initiatives run by the Advanced Efficiency Solutions team advance commercially available solutions that deliver both energy efficiency and leverage

5.6 Codes, Products and Standards

The Codes, Products, and Standards team promotes energy efficiency across sectors through regulatory and supply chain interventions. The team supports building energy code advancement, education, and compliance, working with actors across the construction market, including building owners, developers, and elected officials, with a goal of promoting zero carbon or even net-carbon positive building performance. The team also drives the promotion of improved product and appliance standards, along with the adoption and expansion of building energy and water benchmarking. The team continues to find ways to improve the efficiency and success of program delivery models, including the promotion of statewide supply chain

5.7 Efficiency Planning and Engineering

The Efficiency Planning and Engineering Team is an inter-disciplinary group whose primary goal is to increase clean energy investment in commercial buildings. To accomplish this goal the Team engages with commercial stakeholders, sector organizations, service providers and customers to deliver monetary and informational incentives. Sector specific initiatives such as REV Campus Challenge, Commercial Tenant, and the P-12 Initiative are examples of targeted efforts the Team focuses on.

5.7 Industrial and Agriculture

The Industrial and Agriculture unit looks to advance the latest technologies and techniques to drive the adoption of energy efficiency and process improvements through new strategies, including optimizing energy use and productivity as well as providing credible information toward integrating clean energy into the business mission of the industrial and agriculture sectors.

5.8 New Construction

The New Construction unit works across all sectors, including low- to moderate-income (LMI) households, to build market capacity, demonstrate value propositions, and disseminate credible information to drive the market to deep energy savings and zero-net energy performance in construction and substantial renovation projects. This includes strategies to improve contracting,

design and construction practices, and promote zero- and positive-net carbon construction and renovation practices that maximize cost-effective carbon reductions.

5.9 Workforce Development and Training

The Workforce Development and Training unit enables workforce development and training where the lack of a trained workforce inhibits growth in a particular energy industry, or where training is needed to perform critical functions; establishes energy training as a permanent and sustainable part of the community infrastructure; and enables growth of jobs in disadvantaged communities.

5.10 Clean Heating and Cooling

The Clean Heating and Cooling unit will seek to enable a self-sustaining market for clean heating and cooling solutions, helping to increase the viability of net zero energy buildings in the State. Solar thermal, biomass heating, and air and ground source heat pump systems will be explored. Clean heating and cooling will address barriers to market growth, including low-customer awareness and confidence, limited trained service providers, high-upfront costs, significant soft costs, variable performance data, and lack of affordable financing solutions.

5.11 Energy Affordability and Equity

The Energy Affordability and Equity unit develops strategies and proposes policy, coordinating across all sectors and various State organizations to streamline and improve the effectiveness of energy services delivery to Low- to Moderate-Income households. The unit also manages single-family residential energy efficiency incentive programs.

5.12 Utility Affairs and Strategic Partnerships

The Utility Affairs and Strategic Partnerships unit manages the Authority's utility engagement strategy under REV, oversees our funding agreement with the Long Island Power Authority, and leads the development of a \$50 million energy efficiency Pay-for-Performance partnership program with National Grid and Con Edison.

5.13 Large-Scale Renewables

The Large-Scale Renewables unit will sustain and expand the penetration of large-scale renewables in the State and also support the development of the next frontier of renewable resources, including offshore wind. The program will document New York State's progress toward its renewable goals and facilitate New York State's renewables voluntary market through the management of the New York Generation Attribute Tracking System. The program will also provide stakeholder outreach, technical and predevelopment assistance to increase acceptance and reduce soft costs associated with the development of these assets as well as assess alternate energy market valuation and transmission solutions for renewables. The team will also manage over \$1 billion in existing Renewable Portfolio Standard Main Tier contracts, actively execute its Renewable Energy Standard procurement and contracting role, including management of the nearly \$4 billion in agreements awarded over the past three years, and execute on its offshore wind procurement responsibilities as assigned by the New York Public Service Commission.

5.14 Offshore Wind

The Offshore Wind unit will support the Large-Scale Renewables program through the expansion of offshore wind technology in the State. The unit will document New York State's progress toward its offshore wind development goals and provide stakeholder outreach and technical and pre-development assistance to increase acceptance and reduce soft costs associated with the development of these assets. Additionally, the team will actively execute regular generation project procurements for the State as authorized by the New York Public Service Commission to acquire offshore wind renewable energy credits (ORECs).

5.15 Energy Storage

The Energy Storage unit will develop and implement a robust energy storage strategy that removes the most impactful barriers preventing adoption in the electric grid, buildings, and transportation sectors. This will enable renewable generation to be used as "flexible resources," increase electric system utilization and resiliency, flatten peak demand, and reduce petroleum dependence to help achieve the State's GHG reduction goals. Initiatives will include targeting soft costs to reduce total installed cost, validating new financing and ownership models, participating in ratemaking and tariff design, removing safety and performance uncertainty, and developing and demonstrating new products and integrated systems—including microgrids. These strategies will be delivered in conjunction with public and private organizations and other NYSERDA teams.

5.16 NY-Sun

The NY-Sun unit has a multifaceted approach that aims to lower energy costs for all New Yorkers by increasing solar power capacity and the efficiency and reliability of the electric grid. Public-private

partnerships help make installing solar technology more affordable for New Yorkers while scaling up the State's solar industry. In addition to the Solar Electric Program, the NY-Sun initiative has programs to help lower statewide solar soft costs, including training for installers and public officials, a standardized permitting and interconnection process, customer aggregation, and consumer education.

5.17 Technology and Business Innovation

The Technology and Business Innovation unit facilitates the research, development, and commercialization of new and innovative clean energy technologies that when deployed at scale will deliver meaningful reductions in GHG emissions. Technology and Business Innovation employs a comprehensive strategy that integrates and leverages direct investment in startup and established clean energy companies, establishes sustainable multi-use assets in the State, and fully engages important stakeholders such as researchers, established corporate entities and the investment community. Technology and Business Innovation's direct investments help to determine technical feasibility, assess market opportunities, achieve key product development milestones, and validate new technologies at scale in real-world applications. Strategic investments in statewide multi-use assets provide business incubation, manufacturing support, mentorship, and access to private sector investors and potential development and commercialization partners. Technology and Business Innovation's overall strategy contributes toward the growth of a vibrant clean energy business ecosystem that delivers solutions to the State's pressing environmental, energy, and economic needs.

Technology and Business Innovation has five teams focused on the following areas:

- Smart Grid Systems and Distributed Energy Integration: Accelerate the evolution to a smarter more integrated grid that allows for new value-added services in pursuit of efficiency, sustainability, reliability, resiliency, and affordability.
- Renewable Resource Optimization: Accelerate market adoption and realization of grid and consumer benefits from distributed and renewable resources.
- Buildings: Accelerate development of technologies and systems that can enable net zero
 energy buildings, deep energy efficiency retrofits and smart buildings—providing value
 and comfort to occupants and owners.
- Clean Transportation: Accelerate the movement toward an efficient, low-GHG emissions transportation system—enhancing the quality of life in communities across the State.
- Innovation Capacity and Business Development: Catalyze and enable a vibrant, self-sustaining cleantech innovation ecosystem that will accelerate the pace and scale of clean energy and make NYS the place for innovation.

5.18 Energy and Environmental Analysis

The Energy and Environmental Analysis unit assists State policy decision-makers and stakeholders by objectively:

- Identifying and evaluating policy alternatives for addressing vital public needs related to the production, delivery, and use of energy as well as development of new technologies.
- Assessing the impact of energy and environmental policies, programs, and technologies on the State's residents, businesses, environment, and energy systems.
- Providing market intelligence across all energy and fuel types, including all energy systems, market participants, and customer sectors.
- Assessing operational status of energy delivery and fuel storage infrastructure components and advising corrective actions as necessary to expedite return to full operational capacity.
- Assessing retail petroleum fuels and natural gas prices, supplies, and production to enable analyses of and response to market conditions.
- Providing energy-related environmental accountability through analysis of long-term monitoring records and modeling.
- Evaluating the effectiveness of energy-related environmental protection strategies to support regulatory processes.
- Helping prioritize opportunities for mitigation and identifying cross-sector pollution control strategies.
- Coordinating the State's activities on nuclear energy matters, including the regulation of radioactive materials, and monitoring low-level radioactive waste generation and management.
- Fostering informed energy planning through economic analysis and modeling of energy and environmental issues.

5.19 Financing Solutions

The Financing Solutions unit will develop strategies for mobilizing private capital and market-based financing solutions to support scaled investments in clean energy across sectors and technology areas.

Resolution No.	
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RESOLVED, that the Authority's Operations and Accomplishments and Mission Statement and Measurements Annual Report as presented at this June 23, 2020 meeting is adopted and approved for submission under Section 2800 of the Public Authorities Law.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

ANNUAL REPORT ON ACQUISITION AND DISPOSITION OF REAL AND PERSONAL PROPERTY

For the Fiscal Year Ended March 31, 2020

Section 1. Real Property Acquired in the Name of NYSERDA April 1, 2019 through March 31, 2020

• Approximately 10,059 rentable square feet of office space at a building located at 1333 Broadway, Suite 300, New York, NY pursuant to a Lease with ESRT 1333 Broadway, LLC ("Landlord") dated December 19, 2019 and initially expiring October 2027. Monthly rent payments will be \$52,908.75 beginning on the rent commencement date through and including the fourth anniversary and will increase to \$55,324.50 a month thereafter through the expiration date. Under the terms of the lease, the Authority may only use contractors that are approved by the Landlord for janitorial and other services. Further, the Landlord has agreed that the leased space and all services will be in accordance with Executive Order 4, Establishing a State Green Procurement and Agency Sustainability Program.

Section 2. Real Property Held in the Name of NYSERDA as of March 31, 2020

- A parcel of land (approximately 3.67 acres) and a building (two-story office building with partial basement containing approximately 66,000 square feet of gross area) located at 17 Columbia Circle, Albany, Albany County, New York.
- A parcel of land (approximately 3,300 acres) known as the Western New York Nuclear Service Center located in West Valley, Cattaraugus County, New York.
- A parcel of land (approximately 280-acres) known as the Saratoga Technology + Energy Park® (STEP®), formerly known as the Saratoga Research and Development Center, which includes one +/-23,600 gross square foot building and one +/-43,300 gross square foot state-of-the-art workforce training facility, both owned by NYSERDA, one +/-105,000 square foot of building owned by the United Group of companies, pursuant to a ground lease, located in Malta, Saratoga County, New York, one +/- 130,000 square foot building owned by STEP Tech, LLC, pursuant to a ground lease, located in Malta, Saratoga County, New York, and one +/- 10,000 square foot parcel pursuant to a ground lease improved with a cellular tower owned by Verizon Wireless, located in Malta, Saratoga County, New York.
- A parcel of underwater land and an outfall structure for the release of cooling water located at the Indian Point Nuclear Generating Station, Village of Buchanan, Westchester County, New York, upon which is located. The land and structure is leased to the facility owner, Entergy (successor to Consolidated Edison Company of New York, Inc.), pursuant to a Lease dated July 1, 1971 with NYSERDA (successor to the New York State Atomic and Space Development Authority) scheduled to expire, subject to a renewal option, on March 31, 2027.
- Approximately 21,386 rentable square feet of office space at a building located at 1359 Broadway (19th floor), New York, NY pursuant to an Agreement of Sublease dated November 13, 2013 with LF USA, Inc. and LF North America Holdings Co. expiring October 30, 2027.
- Approximately 4,618 rentable square feet of office space at a building located at 1359 Broadway, Suite 1540, New York, NY pursuant to an Agreement of Lease with ESRT 1359 Broadway, L.L.C. dated August 15, 2018 expiring October 31, 2027, of which approximately 3,752 rentable square feet is subleased to New York City Economic Efficiency Corporation pursuant to a Sublease Agreement dated September 1, 2018 and initially expiring September 29, 2023.
- Approximately 10,059 rentable square feet of office space at a building located at 1333 Broadway, Suite 300, New York, NY pursuant to a Lease with ESRT 1333 Broadway, LLC dated December 19, 2019 and initially expiring October 2027.
- Approximately 29,941 rentable square feet of office space at a building located at 15 Columbia Circle, Albany, NY pursuant to a Lease with Columbia Circle Associates, LLC dated December 1,

- 2007, as amended, expiring June 30, 2024.
- Approximately 2,829 rentable square feet of office space at a building located at 726 Exchange Street, Buffalo, NY pursuant to a Lease with LCo Building, LLC dated February 16, 2007, as amended, expiring October 31, 2022.
- Approximately 4,824 rentable square feet of office space at a building located at Rt. 219 and County Road 53, Ashford, NY pursuant to a Lease with Peter L. Krog, Edwin Lorenz and Kenneth Lorenz dated February 1, 2016 expiring May 31, 2021.

Section 3. Personal Property with a Value in Excess of \$5,000 and Real Property Disposed of During the Fiscal Year Ended March 31, 2019

There were two dispositions of real property and no dispositions of personal property with a value in excess of \$5,000.

Purchaser	Description	Price Received
Town of Ashford	On May 17, 2019, NYSERDA and Town of	The annual rent is \$1.00 per year over the
	Ashford, entered into an agreement to lease	49 year term.
	52.97 acres of the West Valley New York	
	Nuclear Service Center property from	
	NYSERDA for a 49 year term.	

Purchaser	Description	Price Received
Cummins Enterprise LLC	On January 1, 2020, NYSERDA entered into a 5-year lease extension with Cummins Enterprise, LLC, formerly known as GE Fuel Cells, LLC. Cummins Enterprise LLC leases a +/+ 10,586 sq ft fuel cell demonstration pad. The lease was extended from January 1, 2020 – December 31, 2024, with rent increasing 3 per cent annually. All other terms and conditions remain unchanged.	The 2020 annual rent is \$5,957.28, paid in equal monthly installments of \$496.44, increasing 3% on the anniversary date of the lease through December 31, 2024 to \$6,704.93, paid in equal monthly installments of \$558.74.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS FOR THE DISPOSAL OF REAL AND PERSONAL PROPERTY

June 2020

Article I. Purpose and Applicability

- 1.0 These Guidelines for the Disposal of Real and Personal Property ("Guidelines"), adopted pursuant to Public Authorities Law Sections 2895, 2896, and 2897, set forth the operative policies of the Authority and instructions to its officers and employees regarding the disposal of real and personal property.
- 1.1 These Guidelines apply to any disposal of real or personal property taking place after they become effective pursuant to the provisions of Section 1853 of the Public Authorities Law.

Article II. Definitions

- 2.0 As used in these Guidelines, "Contracting Officer" means the Treasurer appointed herein by the Members to be responsible for the disposition of Property.
- 2.1 As used in these Guidelines, "dispose", "disposal" or "disposition" means the transfer of title or any other beneficial interest in personal or real property in accordance with Section 2897 of the Public Authorities Law.
- 2.2 As used in these Guidelines, "Property" means personal property in excess of five thousand dollars in value, real property, and any inchoate or other interest in such property, to the extent that such interest may be conveyed to another person for any purpose, excluding an interest securing a loan or other financial obligation of another party.

Article III. Designation of the Contracting Officer; Accountability for Property

- 3.0 The Treasurer is the Contracting Officer who will be responsible for compliance with, and enforcement of, these Guidelines.
- 3.1 The Authority shall maintain accountability and a system of internal controls for all Property under its control. The Contracting Officer will conduct no less than a biennial inventory of Property and reconcile such inventory against accounting records maintained for such Property. The Contracting Officer will also periodically inventory Property to determine which Property should be disposed of and will transfer or dispose of such Property as promptly as possible in accordance with Article IV below. The Contracting Officer and any other Officer authorized by resolution may execute such documents for the transfer of title or other interest in Property and take such other action as is required or deemed necessary and proper to dispose of such Property.

Article IV. Method of Disposal of Property Including Use and Awarding of Contracts for Disposal

- 4.0 Except as otherwise provided herein, Property may be disposed of for not less than its fair market value by sale, exchange, or transfer for cash, credit, or other property, with or without warranty, and upon such terms and conditions as the Contracting Officer deems proper. No disposition of real property, or any interest in real property, will be made unless an appraisal of the value of such property has been made by an independent appraiser and included in the record of the transaction, and, provided further, that no disposition of any other property, which because of its unique nature or the unique circumstances of the proposed transaction is not readily valued by reference to an active market for similar property, shall be made without a similar appraisal.
- 4.1 When it is deemed advantageous to the State, the Authority may enter into an agreement with the Commissioner of General Services for the disposal of Property pursuant to which such Commissioner may dispose of Property of the Authority under terms and conditions agreed to by the Authority and such Commissioner. In disposing of the Property, the Commissioner of General Services will be bound by the terms of these Guidelines and references to the Contracting Officer will be deemed to refer to such Commissioner.
- 4.2 A deed, bill of sale, lease, or other instrument executed by or on behalf of the Authority, purporting to transfer title or any interest in Property of the Authority will be conclusive evidence of compliance with the Guidelines insofar as concerns title or other interest of any bona fide grantee or transferee who has given valuable consideration for such title or other interest and has not received actual or constructive notice of lack of such compliance prior to closing.
- 4.3 All disposals or contracts for disposal of Property made or authorized by the Contracting Officer will be made after publicly advertising for bids, except as otherwise provided below in Sections 4.4 and 4.5. Whenever public advertising for bids is required under these Guidelines: (i) the advertisement for bids shall be made at such time prior to the disposal or contract, through such methods, and on such terms and conditions as will permit, full and free competition consistent with the value and nature of the Property; (ii) all bids shall be publicly disclosed at the time and place stated in the advertisement; and (iii) the award will be made with reasonable promptness by notice to the responsible bidder whose bid, conforming to the invitation for bids, will be most advantageous to the State, price and other factors considered; provided, that all bids may be rejected when it is in the public interest to do so.
- 4.4 Disposals and contracts for disposal of Property may be negotiated or made by public auction without public advertisement, but subject to obtaining such competition as is feasible under the circumstances, if: (i) the personal property involved has qualities separate from the utilitarian purpose of such property, such as artistic quality, antiquity, historical significance, rarity, or other quality of similar effect, that would tend to increase its value, or if the personal property is to be sold in such quantity that, if it were disposed of through public advertisement, would adversely affect the State or local market for such personal property, and the estimated fair market value of such personal property and other satisfactory terms of disposal can be obtained by negotiation; (ii) the fair market value of Property does not exceed fifteen thousand dollars; (iii) bid prices after advertising therefor are not reasonable, either to all or some part of

the Property, or have not been independently arrived at in open competition; (iv) the disposal will be to the State or any political subdivision, and the estimated fair market value of the Property and other satisfactory terms of disposal are obtained by negotiation; (v) under those circumstances permitted provided below by Section 4.6; or (vi) such action is otherwise authorized by law.

- 4.5 An explanatory statement will be prepared of the circumstances of each disposal by negotiation of: (i) any personal property which has an estimated fair market value in excess of fifteen thousand dollars; (ii) any real property that has an estimated fair market value in excess of one hundred thousand dollars, except that any real property disposed of by lease or exchange will only be subject to clauses (iii) and (iv) below; (iii) any real property disposed of by lease, if the estimated annual rent over the term of the lease is in excess of fifteen thousand dollars; (iv) any real property or real and related personal property disposed of by exchange, regardless of value, or any such real property or real and related personal property any part of the consideration for which is real property.
- 4.6 Disposal of Property for less than fair market value.
- a. No asset owned, leased or otherwise in the control of the Authority may be sold, leased, or otherwise alienated for less than its fair market value except if:
- (i) the transferee is a government or other public entity, and the terms and conditions of the transfer require that the ownership and use of the asset will remain with the government or any other public entity;
- (ii) the purpose of the transfer is within the purpose, mission or governing statute of the Authority; or
- (iii) in the event the Authority seeks to transfer an asset for less than its fair market value to other than a governmental entity, which disposal would not be consistent with the Authority's mission, purpose or governing statutes, the Authority shall provide written notification thereof to the Governor, the Speaker of the Assembly, and the Temporary President of the Senate, and such proposed transfer shall be subject to denial by the Governor, the Senate, or the Assembly. Denial by the Governor shall take the form of a signed certification by the Governor. Denial by either House of the Legislature shall take the form of a resolution by such House. The Governor and each House of the Legislature shall take any such action within sixty days of receiving notification of such proposed transfer during the months of January through June, provided that if the Legislature receives notification of a proposed transfer during the months of July through December, the Legislature may take any such action within sixty days of January first of the following year. If no such resolution or certification is performed within sixty days of such notification of the proposed transfer to the Governor, Senate, and Assembly, the Authority may effectuate such transfer.
- b. In the event a below fair market value asset transfer is proposed, the following information must be provided to the Members and the public:
 - (i) a full description of the asset;
- (ii) an appraisal of the fair market value of the asset and any other information establishing the fair market value sought by the Members;
- (iii) a description of the purpose of the transfer, and a reasonable statement of the kind and amount of the benefit to the public resulting from the transfer, including but not limited to the kind, number, location, wages or salaries of jobs created or preserved as required by the transfer,

the benefits, if any, to the communities in which the asset is situated as are required by the transfer;

- (iv) a statement of the value to be received compared to the fair market value;
- (v) the names of any private parties participating in the transfer, and if different than the statement required by subparagraph (iv) of this subsection, a statement of the value to the private party; and
- (vi) the names of other private parties who have made an offer for such asset, the value offered, and the purpose for which the asset was sought to be used.
- c. Before approving the disposal of any property for less than fair market value, the Members shall consider the information described in paragraph b of this section and make a written determination that there is no reasonable alternative to the proposed below market transfer that would achieve the same purpose of such transfer.
- 4.7 Notwithstanding the terms of any other section of this Article, applicable Property may be disposed of in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law.

Article V. Approval of Guidelines: Monitoring and Reporting on Disposal of Property

- 5.0 These Guidelines will be submitted to the Members annually for review and approval.
- 5.2 On or before March 31, of each year, the Authority will submit the most recently reviewed and approved Guidelines to the Comptroller. At the time of filing of such Guidelines, the Authority will post the Guidelines on its internet website and will maintain such site until the Guidelines for the following year are approved.
- 5.3 The Contracting Officer will annually prepare a report listing all real property of the Authority and a full description of all real and personal property disposed of during such period. Such report will include the name of the purchaser of such Property and the price received. Such report will be submitted to the Members for review and approval for submission to the Comptroller, the Director of the Budget, the Commissioner of General Services, the Legislature (i.e., the New York State Assembly Administrative Regulation Revision Commission, the New York State Senate Administrative Regulation Revision Commission, Majority Leader of The Senate, and the Speaker of the Assembly), and the Authorities Budget Office.
- 5.4 Each explanatory statement prepared pursuant to Section 4.5 of the Guidelines will be transmitted to the Comptroller, the Director of the Budget, the Commissioner of General Services, the Legislature (i.e., the New York State Assembly Administrative Regulation Revision Commission, the New York State Senate Administrative Regulation Revision Commission, Majority Leader of The Senate, and the Speaker of the Assembly), and the Authorities Budget Office not less than ninety days in advance of such disposal, and a copy thereof will be preserved in the files of the Authority.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY REAL PROPERTY ACQUISITION POLICY GUIDELINES September 2017

I. INTRODUCTION

- A. Pursuant to Public Authorities Law, the New York State Energy Research and Development Authority's ("NYSERDA") purposes include, but are not limited to, developing and implementing new energy technologies consistent with economic, social and environmental objectives; developing and encouraging energy conservation technologies; promoting, developing, encouraging and assisting in the acquiring, constructing, improving, maintaining, equipping and furnishing of industrial, manufacturing, warehousing, commercial, research and industrial pollution facilities at the Saratoga Research and Development Center; promoting, developing, encouraging and assisting special energy projects and thereby advancing job opportunities, health, general prosperity and economic welfare of the people of the state of New York; and stewardship of the State's interests at the Western New York Nuclear Service Center.
- B. Pursuant to the Public Authorities Law, which enumerates the General Powers NYSERDA may exercise in furtherance of its broad purposes, NYSERDA has the General Power to purchase, receive, lease or otherwise acquire, to hold in the name of the state or otherwise, and to sell, convey mortgage, lease, pledge or otherwise dispose of, upon such terms and conditions as the authority may deem advisable, real and personal property, together with such rights and privileges as may be incidental and appurtenant thereto. This policy shall apply to any acquisition of real property by NYSERDA.
- C. Notwithstanding the terms of any other section of these Guidelines, applicable Property may be acquired in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law.
- <u>C.D.</u> The Treasurer is the Contracting Officer who will be responsible for compliance with, and enforcement of, this policy.

II. GENERAL

- A. All acquisitions of real property shall comply with applicable State, federal and local law, including but not limited to Chapter 766 of the Laws of New York 2005, better known as the Public Authorities Accountability Act ("PAAA"), the State Environmental Quality Review Act ("SEQRA"), the Eminent Domain Procedure Law ("EDPL"), any requirements of NYSERDA's board resolutions, and any other applicable state and local law or regulation.
- B. The President and CEO or their designee is hereby authorized to negotiate the terms and conditions of the acquisition of real property necessary to accomplish NYSERDA's purposes and consistent with this policy. NYSERDA may acquire in the name of

NYSERDA or in the name of the state or otherwise, by purchase or condemnation, gift or grant, real property or rights therein, including but not limited to by lease, license and easement, on terms necessary or convenient in furtherance of its purposes. The Contracting Officer and any other Officer authorized by resolution may execute such documents for the transfer of title or other interest in real property and take such other action as is required or deemed necessary and proper to acquire such real property.

- C. NYSERDA shall maintain a record for each transaction that documents its compliance with this policy.
- D. NYSERDA shall maintain a system of inventory for all real property under its control.
- E. NYSERDA shall procure any outside professional services, such as title insurance and commercial real estate brokerage services, as necessary, pursuant to the NYSERDA's Contracting Guidelines.

III. IMPLEMENTATION

- A. The President and CEO or their designee shall identify real property necessary for NYSERDA's purposes.
- B. Once potentially acceptable real property has been identified, such real property shall be evaluated internally under the direction of the President and CEO of NYSERDA. When necessary or convenient, the President and CEO may seek participation from NYSERDA staff, real estate counsel, engineering, environmental, archeological, and other consultants, title insurance company and a licensed commercial real estate broker or brokers. Any evaluation of the affected real property shall examine such issues as ownership; zoning, road access, including access to interstates; easements and other encumbrances; parcel history; recent sales history; proximity to environmentally compromised areas; potential government funding sources for parcel remediation or developments; market availability; recent appraisals; brokerage arrangements; existing tenants and the terms and conditions of their leases.
- C. Prior to contract for the acquisition of real property, NYSERDA shall obtain either a broker's market analysis or two appraisals by Members of the Appraisal Institute ("AMI") or other reasonable and professionally prepared valuation projections consistent with then-current industry standards and practices. If the two appraisals are materially different, NYSERDA may attempt to reconcile the differences in value through determining an average of the two appraisals, or by seeking a third review appraisal which shall constitute the final determination of value. The contract price for acquiring real property is subject to the approval of the President and CEO of NYSERDA.
- D. NYSERDA may enter into a contract to obtain the right to enter onto real property being considered for acquisition for the purposes of conducting archeological, environmental, geotechnical and any other relevant studies and investigations of such property, either separately or as part of a contract for acquisition of such property.

IV. APPROVAL AND REPORTING REQUIREMENTS

- A. This policy will be submitted to the Members annually for review and approval.
- B. The Authority will post the policy on its internet website and will maintain such site until the policy for the following year is approved.
- C. The Contracting Officer will annually prepare a report that will be submitted to the Members listing all real property acquired during such period. Such report will include the name of the parties to the transaction and the price paid by the Authority as well as the terms of the lease term if applicable.
- D. The Authority shall maintain accountability and a system of internal controls for all Property under its control. The Contracting Officer will conduct no less than a biennial inventory of Property and reconcile such inventory against accounting records maintained for such Property. The Contracting Officer will also periodically inventory Property to determine which Property should be disposed of and will transfer or dispose of such Property as promptly as possible in accordance with the Authority's Property Disposition Guidelines.

Resolution No.	
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RESOLVED, that the "Real Property Acquisition Policy Guidelines (June 2020)," as presented at this June 23, 2020 meeting, are approved and adopted;

BE IT FURTHER RESOLVED, that the "Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2020)," as presented at this meeting, are approved and adopted; and

BE IT FURTHER RESOLVED, that the Annual Report on Disposition of Real and Personal Property (June 2020), as presented at this meeting, is adopted and approved as the Annual Report on Disposition of Real and Personal Property required by Section 2800 of the Public Authorities Law.

2019-2020 ANNUAL CONTRACTS REPORT

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY This annual report on procurement contracts has been prepared and approved pursuant to Section 2879 of the Public Authorities Law. The report covers the period April 1, 2019 through March 31, 2020.

Section 2879 of the Public Authorities Law provides that a public authority's procurement contracts guidelines shall set forth, among other things, areas of responsibility and oversight requiring the use of procurement and program contracts; the reasons for use of such contracts; requirements regarding selection of contractors, including circumstances relating to waiver of competition and provisions on board approval and annual review of contracts involving services to be rendered over a period greater than a year; provisions for the publication of a notice of proposed procurement contracts prior to award and the criteria for exemption from such publication; provisions applicable to participation by minority and women-owned business enterprises, service disabled veteran-owned business enterprises and by New York State business enterprises and New York State residents; a listing of types of provisions to be contained in procurement contracts; and provisions on such contracts which involve former officers or employees. This section of the law also includes requirements for periodic staff reports to the Members on procurement contracts and an annual report on such contracts by each public authority to the Division of the Budget, with copies to the Department of Audit and Control and the Legislature's fiscal committees.

A copy of the New York State Energy Research and Development Authority's ("Authority") procurement contract guidelines operative policy and instructions (Guidelines) is included in this Annual Report. These Guidelines comport with the requirements of Public Authorities Law Section 2879 for procurement contracts. Some key features of the Guidelines are described below.

Article III of the Guidelines outlines requirements for competitive selection of contractors, including factors to be considered in comparing offerers and requirements for documentation of selection processes. As permitted by PAL Section 2879, the Guidelines provide for the Members to waive competitive selection when waiver is in the best interest of the Authority. Section 3.2 waives competitive selection in certain limited circumstances. Section 3.3 of the Guidelines requires contract approval and annual review by the Members when the performance of personal services will extend more than one year.

Article VII contains provisions for promoting participation in procurement contracts by New York State businesses and New York State residents.

Article VIII provides for the submission of a notice for publication to the Commissioner of the Department of Economic Development providing notification and bidding information on procurement contract actions prior to their award. It also sets forth the criteria under which a procurement action is exempt from publication.

Article IX of the Guidelines provides for reports on procurement contracts to be made to the Members at the regularly scheduled meetings of the Members. It also requires Member approval

at the June meeting of an annual report to the Division of the Budget, with copies to be submitted to the Department of Audit and Control and the Legislature's fiscal committees and made available to the public.

AMENDMENTS TO THE PROCUREMENT AND PROGRAM CONTRACT GUIDELINES

Changes to the Procurement Contract Guidelines from those the Members approved in June 2019 include:

- September 2019 increased the discretionary threshold for MWBE to \$500,000 and to allow NYSERDA to align the guidelines with updates to New York State Law, as the new laws are enacted.
- January 2019, increased the discretionary threshold for SDVOB and SBE to \$500,000

At this time, to align NYSERDA's Guidelines as provided by Section 1902 of Title 9-B of Article 8 of the Public Authorities Law, the following additions are being made in accordance with the law:

- A competitive selection method for processes to award applicable personal or real property, and
- A provision to waive competitive processes to acquire applicable personal or real property.

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Annual Contracts Approvals

Contracts executed or modified during the period - 4/1/2019 to 3/31/2020

Category	Туре	Count of Contracts Committed this period		Count of Contracts for Annual Contract Approvals - Section 1	Committed to Date
PCMT	Competitive	272	\$69,746,272	533	\$364,025,032
	Discretionary	197	\$6,366,851	387	\$17,787,093
	Non-Competitive	16	\$1,923,068	61	\$16,301,381
	Total	485	\$78,036,192	981	\$398,113,506
Grand Tot	al	485	\$78,036,192	981	\$398,113,506

Annual Report - Section 2: Non-Contract Vendor Payments during the period - 4/1/2019 to 3/31/2020

Amt Paid this Period	Count of Contracts for Annual Contract Approvals - Section 2
\$6,166,273	58

ory Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
•	Competitive		140305	Allegis Group Holdings Inc	SA.050_TWO #8 - DER Coordinato	05/15/2019	\$186,643	\$186,643	\$28,126	\$28,126
	Competitive	N	139048	Mayer Brown LLP		04/10/2019	\$20,487	\$20,487	\$20,487	\$20,487
	Discretionary	N	136006	Alberto Aceves Cornejo	Agbotic - Tech. Due Diligence	01/11/2019	\$1,271	\$11,271	\$1,271	\$11,271
	Discretionary	N	136007	New Venture Advisors LLC	Agbotic - Market DD	01/11/2019		\$35,000	\$17,500	\$35,000
	Discretionary	N	147834	Houlihan Lokey Financial Advisors, Inc.		11/20/2019	\$25,000	\$25,000	\$25,000	\$25,000
	Competitive		150182	Randstad North America, Inc.	Temporary Services	01/14/2020	\$106,880	\$106,880	\$8,134	\$8,13
	Competitive	N	147904	Randstad North America, Inc.	Payroll Services	11/21/2019	\$21,600	\$21,600	\$8,288	\$8,28
	Competitive	Υ	46964	Luminate, LLC	Outside Technical and Eng. Srv	09/05/2014	\$42,321	\$42,321	\$42,198	\$42,19
	Discretionary		140402	Stance Renewable Risk Partners LLC		05/21/2019	\$8,000	\$8,000		
	Discretionary	N	139951	Stance Renewable Risk Partners LLC		05/06/2019	\$10,000	\$10,000		
	Discretionary	N	147618	Citadel SPV LLC		11/15/2019	\$52,500	\$52,500		
	Discretionary	N	151060	Christopher Alan Hunter		02/06/2020	\$50,000	\$50,000		
	Discretionary	N	151556	Citadel SPV LLC	Executed Services Agreement	02/19/2020	\$80,000	\$80,000		
	Non-Competitive	Υ	138090	General Electric International Inc	GE MAPS Software	03/15/2019		\$391,500		\$130,50
>200KW PV	Competitive		140543	Walter Snyder Printer, Inc.	Printing Services	05/21/2019	\$6,223	\$6,223	\$6,223	\$6,22
	Discretionary	N	139722	New York Solar Energy Industries Assoc.	2019 Policy Forum	04/29/2019	\$10,000	\$10,000	\$10,000	\$10,00
	Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$35,000	\$315,000	\$38,717	\$88,23
	Competitive	Y	104266	Couch White, LLP	RFP 3300 Outside Counsel Servi	09/27/2016		\$111,313		\$7,23
	Discretionary	Y	112974	CHA Consulting Inc.	SEQR Services	04/21/2017		\$50,000		\$11,46
ADVANCED BUILDINGS	Discretionary	Y	91066	Taitem Engineering, P.C.	Deep Energy Retrofits	02/19/2016	\$3,371	\$53,357	\$3,521	\$53,35
	Non-Competitive	Υ	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$240,000	\$0	\$240,00
ADVANCED ENERGY CODES	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$973,510		\$698,79
	Non-Competitive	Y	37589	International Code Council, Inc.	ECCCNYS Commentary IECC2015	11/21/2013		\$256,730		\$206,02
	Competitive	Υ	38888	Institute for Building Technology and Sa	Energy Code Training: EPros	01/10/2014		\$897,133	\$70,446	\$822,77
	Competitive	Υ	62667	Building Media, Inc.	Energy Code Training and Suppo	04/16/2015		\$349,921	\$127,000	\$214,63
	Competitive	Υ	64597	ICF Resources, LLC	ECode Microsite	05/13/2015		\$249,961	\$4,300	\$158,64
Advancing Ag Enrgy Technologie	Competitive	Υ	148164	C.J. Brown Energy, P.C.	AAET - Tech Review - CJ Brown	11/26/2019	\$9,320	\$9,320	\$5,791	\$5,79
	Competitive	Y	150947	Arcadis U.S., Inc.	AAET Tech Review_Arcadis TWO	02/04/2020	\$5,000	\$5,000		
AGRICULTURE ENERGY EFFICIENCY	Competitive	Y	35743	Ensave, Inc.	AEEP Implementation Contractor	09/26/2013		\$4,217,605	\$363,107	\$3,488,04
Air Source Heat Pumps	Discretionary	N	141638	Northeast Energy Efficiency Partnerships	2019 NEEP Electrification Symp	06/21/2019	\$10,000	\$10,000	\$10,000	\$10,00
	Competitive	N	145373	Frontier Energy, Inc.	TWO - ASHP Pro Forma	09/26/2019	\$47,000	\$47,000	\$33,850	\$33,8
	Competitive	N	147082	Apprise, Incorporated	TWO #3 - Survey Work	11/04/2019	\$39,204	\$39,204	\$36,822	\$36,83
	Competitive	Υ	148235	Energy & Resource Solutions, Inc.	TWO 6 - Performance Monitoring	11/27/2019	\$1,128,929	\$1,128,929	\$87,422	\$87,43
	Discretionary	N	134780	Frontier Energy, Inc.	Develop ASHP Pro Forma Tool	12/05/2018	\$39,000	\$43,980	\$43,903	\$43,90
	Discretionary	N	147959	ADM Associates, Inc.,	Performance Monitoring and Eva	11/22/2019	\$50,000	\$50,000		
	Discretionary	N	150442	Walter Snyder Printer, Inc.	Printing and Mailing services	01/21/2020	\$7,000	\$7,000	\$3,763	\$3,76
	Discretionary	N	151167	West Hill Energy & Computing, Inc.	Heat Pump Impact Evaluation	02/10/2020	\$50,000	\$50,000		

ategory	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
СМТ	Air Source Heat Pumps	Discretionary	Υ	151119	SBW Consulting	Heat Pump Impact Evaluation	02/07/2020	\$50,000	\$50,000	\$3,817	\$3,817
	ANAEROBIC DIGESTER	Competitive	Υ	29200A	Frontier Energy, Inc.	RPS CST QA/QC Support	03/30/2018		\$154,787	\$10,059	\$15,059
		Competitive	Υ	29203	Arcadis of New York, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$12,875	\$80,450
		Competitive	Υ	29202	L&S Energy Services, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$6,450	\$47,469
		Competitive	Υ	29204	Wendel WD Architecture, Engineering,	RPS-CST Quality Assurance/Qual	09/17/2012		\$71,292	\$5,100	\$65,244
-	Behavior Support for Pilots	Discretionary	Υ	127000	Action Research Inc.	Behavior Support for Pilots	05/17/2018		\$50,000		
-	Buildings of Excellence	Discretionary	N	147282	AVSC Holdings Corporation	2019 BOE Awards Ceremony	11/07/2019	\$22,914	\$22,914	\$22,914	\$22,914
-	Campus/Technical Assistance	Non-Competitive	N	111668	Yale University	Campus/Technical Assistance	03/17/2017		\$300,000	\$150,000	\$247,120
-	CI Carbon Challenge	Discretionary	N	151009	Level Agency for Infrastructure, LLC	C&I Carbon Challenge Insight	02/06/2020	\$50,000	\$50,000	\$10,000	\$10,000
		Discretionary	Υ	150607	Adam Hinge	CI Carbon Challenge_Empire Ret	01/27/2020	\$200,000	\$200,000		
	CI Engy Siting & Soft Cost Red	Competitive		142616	Randstad North America, Inc.	TS.001 - CES Coordinator	07/17/2019	\$160,542	\$160,542	\$48,767	\$48,767
		Competitive	N	139434	Arch Street Communications, Inc.	TWO 3: LSR RFP Outreach	04/23/2019	\$49,500	\$49,500	\$46,731	\$46,731
		Competitive	Y	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016		\$632,727	\$255,018	\$375,577
	Clean Energy Communities	Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019		\$5,000	\$5,000	\$5,000
		Discretionary	Υ	113765	iPROMOTEu.com Inc.	Branded Marketing	05/12/2017		\$12,000		\$11,625
		Competitive	Υ	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016	\$63,000	\$604,000	\$356,734	\$582,978
		Competitive	Υ	146720	DNV GL Energy Insights USA Inc.	TWO 9 - CEC	10/28/2019	\$727,961	\$727,961	\$217,596	\$217,596
	CLEAN TRANSPORTATION	Competitive	Y	22942	Poseidon Systems, LLC	Renewable, Clean Energy and En	06/01/2011		\$1,500,000	\$18,493	\$1,499,991
		Competitive	Y	27045	EV Connect Inc.	EV Connect, Inc. PON 2301 EVSE	03/05/2012		\$249,814		\$211,973
		Competitive	Υ	27553	Calstart	Implementation contractor for	04/17/2012		\$850,000		\$850,000
		Discretionary	Υ	93558	Emerald Alternative Energy Solutions, In	Tech. Assistance contractor fo	03/21/2016		\$11,000		\$4,000
		Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017	\$5,000	\$15,000	\$5,000	\$5,546
		Non-Competitive	Υ	27553	Calstart	Implementation contractor for	04/17/2012		\$711,643		\$604,447
		Non-Competitive	Υ	107657	New York Battery and Energy Storage	NYS Energy Storage Outreach	12/05/2016		\$150,000	\$150,000	\$150,000
		Competitive	Υ	114065	Center for Sustainable Energy	Centralized Services & Support	05/25/2017	\$679,950	\$850,184	\$129,957	\$152,372
		Competitive	Υ	140105	Industrial Economics, Incorporated	TWO 2 New York State Truck – V	05/09/2019	\$400,000	\$400,000	\$213,934	\$213,934
	CLEANER GREENER COMMUNITIES	Competitive	Υ	30426-1	CEC Stuyvesant Cove, Inc.	EDGE Territory 3	06/05/2013		\$2,707,506		\$2,702,068
		Competitive	Υ	33867	Ecology and Environment Engineering	CGC Implementation Contractor	07/16/2013		\$4,500,000	\$597,909	\$4,252,241
		Competitive	Υ	119375	Erdman Anthony & Associates, Inc.	RFP3628FlexTechConsultUmbrella	10/17/2017		\$56,408	\$2,172	\$12,064
		Competitive	Υ	120837-1	L&S Energy Services, Inc.	RFP3628FlexTechConsultUmbrella	01/30/2018		\$28,204		\$6,835
		Competitive	Υ	123212	Steven Winter Associates, Inc.	RFP3628FlexTechConsultUmbrella	02/07/2018		\$169,224	\$23,142	\$29,446
		Competitive	Υ	124442	Leidos Engineering of New York, P.C.	RFP3628FlexTechConsultUmbrella	03/20/2018		\$42,306	\$25,025	\$25,025
	Cleantech ICC Engage	Discretionary	N	136656	New York Academy of Sciences	2019 NY Green Innovation Showc	01/30/2019		\$35,000	\$23,493	\$30,408
		Discretionary	N	139295	Second Nature Inc	Overcoming University Barriers	04/18/2019	\$49,200	\$49,200	\$49,200	\$49,200
		Discretionary	N	140001	Smiley Brothers, Inc.	2019 Investors Portfolio Event	05/07/2019	\$50,000	\$50,000	\$43,848	\$43,848
		Discretionary	N	149540	Investors Circle	2020 Investor Circle Sponsor	12/27/2019	\$40,000	\$40,000	\$40,000	\$40,000
		Discretionary	N	150613	Global Change Associates Inc.	2020 Wall Street Green Summit	01/28/2020	\$5,000	\$5,000	\$5,000	\$5,000

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Cleantech ICC Engage	Discretionary	N	151352	National Renewable Energy Laboratory	2020 NREL Sponsorship	02/13/2020	\$6,000	\$6,000	\$6,000	\$6,000
	Discretionary	N	151640	DIBD NYC Inc.	Circular City Week Sponsorship	02/21/2020	\$10,000	\$10,000	\$10,000	\$10,000
	Competitive	Υ	140315	Randstad North America Inc	TS.003_TBI Coordinator	05/15/2019	\$111,440	\$111,440	\$42,482	\$42,48
	Discretionary	N	150529	Dynamo Energy Hub	support the growth of the clea	01/23/2020	\$50,000	\$50,000	\$46,000	\$46,00
	Discretionary	N	151909	Wood Mackenzie Power & Renewables, Inc.	2020 GTM Sponsorship	02/28/2020	\$5,000	\$5,000		
Code to Zero	Non-Competitive	N	126537	Battelle Memorial Institute	NYStretch Code (2018) support	05/07/2018		\$59,525		\$59,51
	Competitive	N	136436	Resource Refocus LLC	TWO#1 Res Rulemaking Support	01/24/2019		\$42,232	\$38,232	\$38,23
	Competitive	N	136611	Kelliher Samets Volk	TWO 26 Codes Marketing	01/29/2019		\$225,000	\$26,795	\$26,79
	Competitive	N	137172	Harris Beach PLLC	Code to Zero	02/14/2019		\$20,000	\$19,957	\$19,95
	Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016		\$1,577,229	\$189,335	\$1,014,66
	Competitive	Υ	140859	New Buildings Institute, Inc.	Task Wok Order #2	05/30/2019	\$100,000	\$100,000	\$1,350	\$1,38
	Competitive	Υ	148948	Newport Ventures, Inc.	Newport TWO #1 Training	12/16/2019	\$399,809	\$399,809		
	Competitive	Υ	152390	Willdan Energy Solutions	Staff Augmentation Services	03/11/2020	\$825,926	\$825,926		
	Discretionary		146554	Trust for Conservation Innovation	BCAP Alt Enforcement Research	10/24/2019	\$47,817	\$47,817	\$4,140	\$4,1
	Discretionary	Υ	123125	Laurie D Kerr	Code to Zero	02/05/2018		\$200,000	\$18,743	\$151,5
COMBINED HEAT AND POWER	Competitive	N	73679	Rafferty Enterprises, Inc.	Temp Employment Services	09/30/2015		\$21,528		\$3,4
FOWER	Competitive	Υ	55511A	Frontier Energy, Inc.	Technical Advisors to CHP	03/30/2018		\$225,844	\$1,425	\$9,8
	Discretionary	N	45865	Wichcraft Operating, LLC	Catering Manhattan CHP Expo	08/19/2014		\$6,497		\$6,4
	Discretionary	N	136267	Marriott Hotel Services	Onsite Resilient Power Conf	01/18/2019	\$71,658	\$156,658	\$146,658	\$156,6
	Competitive	N	151553	ICF Resources, LLC	TWO #5 - RNG Potential	02/19/2020	\$196,079	\$196,079		
	Competitive	Υ	68174A	Frontier Energy, Inc.	CHP System Inspection and ReCo	03/29/2018		\$3,165,108	\$220,759	\$326,3
	Competitive	Υ	122632	Energy & Resource Solutions, Inc.	RFP 3643 Tech To Market	01/16/2018		\$2,000,000	\$940,521	\$1,796,4
Commercial Market Mapping	Competitive	Υ	136264	Meister Consultants Group, Inc.	NYSERDA-Utility Collaboration	01/18/2019		\$200,000	\$85,277	\$85,2
Commercial Real Estate Ten	Competitive	N	123052	NYC Climate Action Alliance Inc.	NYC Climate Alliance - CT	02/01/2018		\$50,000	\$10,000	\$50,0
ren	Competitive	Υ	141442	Meister Consultants Group, Inc.	RFP3631 - CTP Support - Cadmus	06/17/2019	\$49,250	\$49,250	\$26,298	\$26,2
	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019		\$252,552	\$95,190	\$95,1
	Competitive	N	141634	DNV GL Energy Insights USA Inc.	TWO 1 - CRE Tenant MAR Survey	06/20/2019	\$163,589	\$163,589	\$114,831	\$114,8
	Competitive	Υ	104539	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	10/05/2016		\$1,285,871	\$26,245	\$450,9
	Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019		\$269,178	\$128,068	\$128,0
	Competitive	Υ	139043	R.W. Beck Group, Inc.	StakeholderEngagement_Outreach	04/10/2019	\$242,915	\$242,915	\$86,667	\$86,6
	Competitive	Υ	144829	Energy & Resource Solutions, Inc.	TWO 5 CEF Comm Impact_ERS	09/12/2019	\$424,000	\$424,000	\$5,343	\$5,3
Community RH&C	Competitive		143941	Stone Environmental, Inc.	Westchester Ground Source Heat	08/20/2019	\$194,188	\$194,188	\$119,838	\$119,8
	Competitive	N	149287	Randstad North America, Inc.	Payroll Services	12/19/2019	\$21,600	\$21,600	\$6,122	\$6,1
Consumer Awareness	Competitive	Υ	145983	Kelliher Samets Volk	KSV TWO 30 Consumer Awareness	10/10/2019	\$5,276,900	\$5,276,900	\$164,405	\$164,4
Consumer Ed and Market	Discretionary	N	143940	National Home Performance Council	2020 Home Performance Conf	08/20/2019	\$50,000	\$50,000	\$37,500	\$37,5
Support	Discretionary	N	148949	CMC Energy Services, Inc	Conduct HVAC Roundtables	12/16/2019	\$50,000	\$50,000		
	Discretionary	Υ	122871	Johnstone Group, LLC	Consumer Ed and Market Support	01/25/2018		\$50,000	\$1,925	\$33,43

/ Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
EDI Vendor	Discretionary	Υ	150484	EC Infosystems, Inc.	EC Infosys - EDI Processing	01/22/2020	\$181,300	\$181,300	\$22,125	\$22,125
Electric Vehicles - Innovation	Discretionary	N	123285	The Initiatives Group	HEVO Executive Training	02/09/2018		\$50,000	\$50,000	\$50,00
oraio.	Discretionary	N	134855	Clean Power Research	PO for 2019 WattPlan EV	12/06/2018		\$18,000	\$9,000	\$18,00
	Discretionary	N	136354	Electrification Coalition Foundation	EV Awareness Campaign Design	01/23/2019		\$50,000	\$50,000	\$50,00
	Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019		\$5,000	\$5,000	\$5,00
	Discretionary	N	146145	New York Power Authority,	2019 NY Auto Show	10/15/2019	\$15,000	\$15,000	\$15,000	\$15,00
	Non-Competitive	Υ	132467-1	Unique Electric Solutions of NYS LLC	Electric Vehicles - Innovation	11/29/2018		\$400,000	\$225,212	\$341,33
Electric Vehicles - Rebate	Competitive	Υ	137992	Center for Sustainable Energy	TWO #3 - Drive Clean Program	03/12/2019		\$1,331,278	\$431,190	\$431,19
EMERGING TECHNOLOGY /	Competitive	Υ	37379	Taitem Engineering, P.C.	Technical Review and Program S	11/15/2013		\$323,819	\$11,546	\$173,59
ACCELERATED	Competitive	Υ	37391	LaBella Associates, P.C.	Technical Review and Program S	11/15/2013		\$270,220	\$73,045	\$235,19
	Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$60,000	\$434,841	\$57,705	\$93,17
ENERGY ANALYSIS	Competitive	N	138139	PA Consulting Group	Con Ed NG Moratorium Study	03/19/2019	\$960,208	\$960,208	\$960,207	\$960,20
	Competitive	N	147824	General Electric International, Inc.	TWO 2 2019 T&D Reliability Upd	11/20/2019	\$49,900	\$49,900		
	Competitive	Υ	123450	General Electric International, Inc.	RFQL3685 Round 1	02/15/2018		\$175,000	\$15,000	\$175,00
	Competitive	Υ	137234	The Cadmus Group, LLC	TWO#3 -Supply Curve Analysis	02/19/2019		\$45,000	\$10,967	\$10,96
	Competitive	Υ	140905	Randstad North America, Inc.	Payroll Services	05/31/2019	\$16,694	\$16,694	\$7,630	\$7,63
	Discretionary	N	29899	CONEG Policy Research Center, Inc.	ENERGY ANALYSIS	10/22/2012		\$22,000		
	Discretionary	N	83751	Optimal Energy Inc.	Support for EE&RE Potential	12/15/2015		\$49,000		\$44,19
	Discretionary	N	104461	Interaction Associates	ENERGY ANALYSIS	10/03/2016		\$19,000		\$17,91
	Discretionary	N	108968	Interaction Associates	ENERGY ANALYSIS	01/13/2017		\$19,000		\$18,60
	Discretionary	N	119091	Varun Sivaram	ENERGY ANALYSIS	10/05/2017		\$49,025		\$4,95
	Discretionary	N	137639	IHS Global Inc.	IHS/CERA Subscription	03/01/2019		\$32,750	\$32,750	\$32,75
	Discretionary	N	138282	The Trustees of Columbia University	Sabin Center Monthly Reports	03/20/2019	\$5,000	\$5,000	\$3,750	\$3,75
	Discretionary	N	144923	Regional Economic Models, Inc	ENERGY ANALYSIS	09/16/2019	\$6,000	\$6,000	\$6,000	\$6,00
	Discretionary	N	151636	Argus Media Inc.	ENERGY ANALYSIS	02/20/2020	\$14,568	\$14,568	\$14,568	\$14,56
	Discretionary	Υ	124423	Jeffery B. Greenblatt	EEA Project Review	03/16/2018		\$24,000		\$90
	Non-Competitive	N	149969	Regional Greenhouse Gas Initiative, Inc.	2020 RGGI Funding Agreement	01/09/2020	\$612,619	\$612,619	\$612,619	\$612,6
	Non-Competitive	Υ	33465	Arch Street Communications, Inc.	ENERGY ANALYSIS	06/25/2013		\$240,000		\$239,9
	Competitive		148440	PA Consulting Group	TWO #1 Enbridge Pipeline Study	12/04/2019	\$35,000	\$35,000	\$28,835	\$28,8
	Competitive		149949	Randstad North America, Inc.	Payroll Services	01/08/2020	\$21,600	\$21,600	\$4,884	\$4,88
	Competitive	N	136796	Energy and Environmental Economics Inc.	TWO#15 Solar PV Adoption Forec	02/04/2019		\$75,000	\$46,393	\$46,3
	Competitive	N	137219	Energy and Environmental Economics Inc.	101127 TWO#14	02/15/2019	\$206,810	\$1,006,810	\$800,000	\$800,00
	Competitive	N	143569	ICF Resources, LLC	TWO #4 - Statewide NG Study	08/09/2019	\$1,048,361	\$1,048,361	\$696,552	\$696,55
	Competitive	N	145948	Frontier Energy, Inc.	TWO - Heat Pump Analysis	10/09/2019	\$49,750	\$49,750	\$20,546	\$20,5
	Competitive	N	150851	Eastern Research Group, Inc.	TWO #1 CLCPA GHG	01/31/2020	\$254,142	\$254,142		
	Competitive	N	151173	PA Consulting Group	TWO #2 Downstate Research	02/10/2020	\$50,000	\$50,000	\$49,984	\$49,98
	Competitive	N	152456	Rocky Mountain Institute	TWO# 2 Bldg. Elec. Roadmap	03/12/2020	\$50,000	\$50,000		

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PCMT	ENERGY ANALYSIS	Competitive	Υ	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$1,245,129		\$1,192,380
		Competitive	Υ	101128	ICF Resources, LLC	Tech Assist, REV Pool	07/15/2016	\$120,000	\$801,977	\$242,100	\$669,174
		Competitive	Υ	123055	ICF Resources, LLC	RFQL 3685 - Flexergy 3.0	02/01/2018	\$150,000	\$399,883	\$239,446	\$239,446
		Competitive	Υ	127158	The Cadmus Group, LLC	RFQL 3685 R2 Umbrella	05/22/2018	\$102,000	\$222,332	\$68,471	\$120,324
		Competitive	Υ	135251	Industrial Economics, Incorporated	TWO 1 EE Supply Curve Analysis	12/17/2018	\$49,000	\$298,668	\$220,398	\$241,180
		Competitive	Υ	137759	Kelliher Samets Volk	TWO 27: 2019 SEP Marketing	03/06/2019	\$250,000	\$250,000	\$1,275	\$1,275
		Competitive	Υ	138055	Four Points Group, Inc.	TWO #2 - NPP 60+	03/13/2019		\$75,000	\$74,242	\$74,242
		Competitive	Υ	147152	TRC Energy Services	Staff Augmentation Services	11/05/2019	\$253,078	\$253,078	\$33,000	\$33,000
		Competitive	Υ	151905	PA Consulting Group	TWO #3 Nat. Gas Tech. Support	02/27/2020	\$500,000	\$500,000		
		Competitive	Υ	152083	Energy and Environmental Economics Inc.	TWO#21 - NG Avoided Cost Tool	03/04/2020	\$150,000	\$150,000		
		Competitive	Υ	152281	Energy and Environmental Economics Inc.	TWO#22 Bldg. Elec. Roadmap	03/09/2020	\$250,000	\$250,000		
		Competitive	Υ	152640	Resources for the Future Inc	TWO #1 Social Cost of Carbon	03/17/2020	\$150,000	\$150,000		
		Discretionary		150710	ICE Data, LP	ENERGY ANALYSIS	01/29/2020	\$20,220	\$20,220		
		Discretionary	N	112765	Evolved Energy Research	ENERGY ANALYSIS	04/13/2017		\$45,000		\$44,235
		Discretionary	N	124448	Max Wei	Technical Assistance for EEA	03/21/2018		\$10,000		\$600
		Discretionary	N	128474-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$47,280	\$69,780	\$32,744	\$32,744
		Discretionary	N	141918	Resources for the Future Inc	ENERGY ANALYSIS	06/27/2019	\$50,000	\$50,000		
		Discretionary	Υ	114897	Energy & Environmental Research	EEA Project and Program Review	06/19/2017		\$25,000		\$2,000
		Discretionary	Υ	115210	Resources for the Future Inc	ENERGY ANALYSIS	06/26/2017		\$50,000		
		Non-Competitive	Υ	115215	Resources for the Future Inc	Macroeconomic Methods	06/27/2017		\$50,000		\$31,454
-	Energy Storage Tech/Pro Dev	Competitive	Υ	140315	Randstad North America Inc	TS.003_TBI Coordinator	05/15/2019	\$111,440	\$111,440	\$42,482	\$42,482
		Competitive	Υ	150368	Randstad North America, Inc.	Temporary Services	01/17/2020	\$120,823	\$120,823	\$8,095	\$8,095
	ENVIRONMENTAL RESEARCH	Competitive	N	140110	Navigant Consulting Inc.	TWO 1 - Assessment of Carbon C	05/09/2019	\$250,000	\$250,000	\$229,023	\$229,023
		Competitive	N	145446	Navigant Consulting Inc.	TWO #2 Equitable Cooling	09/27/2019	\$350,000	\$350,000	\$88,113	\$88,113
		Competitive	Υ	30191	Abt Associates Inc.	Flex Energy Tech Analysis 2	11/09/2012		\$870,943	\$169,566	\$829,260
		Competitive	Υ	40325	Cornell University	improve EE of crop production	03/18/2014		\$83,765	\$0	\$49,640
		Competitive	Υ	103852	Electric Power Research Institute	Climate & future electric syst	09/20/2016		\$299,652	\$88,434	\$299,652
		Competitive	Υ	141319	Randstad North America, Inc.	Payroll Services	06/12/2019	\$8,536	\$8,536	\$8,536	\$8,536
		Discretionary	N	119410	Clarkson Univ., Research Div.	MAP-AQ mobile platform	10/20/2017		\$45,000	\$35,235	\$45,000
		Discretionary	N	135322	Boecker Consulting Services	Facilitate Devlpmt Proces	12/19/2018		\$12,400	\$12,314	\$12,314
		Discretionary	Υ	127262	Research Foundation of SUNY	LISTOS	05/24/2018		\$46,048		
		Competitive		139864	Abt Associates Inc.	TWO#1 Pathways Health	05/02/2019	\$200,000	\$200,000	\$65,876	\$65,876
		Competitive	N	137641	The Cadmus Group, LLC	TWO 3 - RegionalFundingEntity	03/04/2019	\$18,523	\$122,615	\$111,066	\$111,066
		Competitive	Υ	34356	U.S. Geological Survey (Troy).	ALTM Stream Monitoring	08/07/2013		\$600,215	\$253,011	\$518,996
		Competitive	Υ	100415	Research Foundation of CUNY	Integrated Air Quality Monitor	06/29/2016		\$199,730	\$101,361	\$198,758
		Competitive	Υ	100416	Research Foundation of SUNY	Combining Measurements and Mod	06/29/2016		\$382,848	\$126,285	\$303,326
		Competitive	Υ	100417	Research Foundation of SUNY	IDEA-NYS air quality forecast	06/29/2016	\$49,361	\$408,142	\$59,277	\$334,281

ry Initiative	Туре	Term >		Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
ENVIRONMENTAL RESEARCH	Competitive	Υ	103851	SUNY - ESF	Biofiltration drainage media	09/20/2016		\$292,911	\$44,687	\$173,396
	Competitive	Υ	103853	DNV GL Energy Services USA Inc.	Building-Resiliency Assessment	09/20/2016		\$177,965	\$40,269	\$169,008
	Competitive	Υ	103862	The Trustees of Columbia University	Tropical Cyclone Risk Model	09/20/2016		\$299,873	\$73,613	\$237,329
	Competitive	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016		\$292,829	\$73,820	\$213,292
	Competitive	Υ	150181	Randstad North America, Inc.	Temporary Services	01/14/2020	\$96,194	\$96,194	\$2,795	\$2,79
	Competitive	Υ	152319	NESCAUM	TWO #7 LISTOS Air Quality Mode	03/10/2020	\$134,500	\$134,500		
	Competitive	Υ	152856	Industrial Economics, Incorporated	TWO#4 Climate Econ. Impact	03/24/2020	\$99,949	\$99,949		
	Discretionary	N	102959-1	Research Foundation of SUNY	Forest Biomass	05/15/2017		\$49,992		\$20,81
	Discretionary	N	123696	Kearns & West, Inc.	ETWG meeting prep & support	02/21/2018		\$49,940		\$49,62
	Discretionary	N	130230	Evoworld	KEBA Analysis; TRNSYS Modeling	08/16/2018		\$24,500	\$4,500	\$4,50
	Discretionary	N	140598	BLIX Consultancy BV	Procurement support	05/22/2019	\$50,000	\$50,000	\$49,446	\$49,44
	Discretionary	N	146630	Columbia University	Climate Info Needs Assessment	10/25/2019	\$49,910	\$49,910		
	Discretionary	N	146729	Philip Hopke	Health/Reduced Emissions	10/28/2019	\$20,000	\$20,000	\$17,000	\$17,00
	Discretionary	N	149850	Research Foundation of SUNY	Graduate Fellowship - Biomass	01/07/2020	\$45,000	\$45,000		
	Discretionary	N	150577	AAF Rye Hotel LLC	2020 State of the Science	01/24/2020	\$50,000	\$50,000		
	Discretionary	N	150905	BLIX Consultancy BV	GG Procurement Support	02/03/2020	\$33,758	\$33,758	\$7,434	\$7,43
	Discretionary	Υ	31577	Richard E. Gibbs, Ph.D., P.E.	env program science advisor	03/15/2013		\$35,000	\$1,500	\$11,3
	Discretionary	Υ	31663	John E. Batey	science advisor support env	03/21/2013		\$35,000		\$11,47
	Discretionary	Υ	34356	U.S. Geological Survey (Troy).	ALTM Stream Monitoring	08/07/2013	\$44,600	\$44,600	\$0	\$
	Discretionary	Υ	103081	Praveen Amar	Environmental Research Science	09/13/2016		\$40,000		\$24,1
	Discretionary	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016		\$47,487	\$0	
	Discretionary	Υ	104107	Watershed Assessment Associates, LLC	Aquatic Macroinvertebrate ID	09/22/2016		\$24,000	\$7,560	\$14,70
	Discretionary	Υ	134909	Praveen Amar	Amar ENV Rsch Science Advisor	12/07/2018		\$45,000	\$15,056	\$31,77
	Discretionary	Υ	152822	Randstad North America, Inc.	Temp Services	03/23/2020	\$112,223	\$112,223		
ESTOR:Consumer Education	Competitive	Υ	147151	Kelliher Samets Volk	KSV TWO 31 Energy Storage	11/05/2019	\$31,940	\$31,940	\$4,633	\$4,63
Eval MCDC Clean Transportation	Discretionary	N	149438	NMR Group, Inc.	Clean Transportation Evaluatio	12/23/2019	\$49,895	\$49,895	\$17,025	\$17,0
Eval MCDC Cross Cutting	Discretionary	N	148519	Consumerbase LLC	Email Addresses for Study	12/06/2019	\$14,177	\$14,177	\$14,177	\$14,1
	Competitive	Υ	144304	D & R International Ltd	Heating & Cooling Reports	08/29/2019	\$138,600	\$138,600	\$23,100	\$23,10
	Discretionary	Υ	150531	Dodge Data & Analytics	Business Intelligence Subscrip	01/23/2020	\$46,675	\$46,675		
	Non-Competitive	Υ	102013	Infogroup Government Division	Infogroup	08/05/2016		\$500,000	\$100,000	\$400,0
Eval MCDC EE Master S Cost	Off Competitive	Υ	137083	The Cadmus Group, LLC	TWO#4 Soft Cost study	02/12/2019	\$40,000	\$654,886	\$312,932	\$312,9
Eval MCDC LMI	Discretionary	Υ	136265	The Cadmus Group, LLC	Eval MCDC LMI	01/18/2019		\$50,000	\$23,978	\$23,9
EVALUATION	Competitive	N	141163	Optimal Energy Inc.	TWO #1 Downstate NG Peer Rev.	06/07/2019	\$49,928	\$49,928	\$49,928	\$49,9
	Competitive	N	145502	Carahsoft Technology Corporation	Qualtrics Software Renewal	09/30/2019	\$67,142	\$67,142	\$67,142	\$67,1
	Competitive	Υ	43672	Opinion Dynamics Corporation	Commercial Statewide Baseline	07/02/2014		\$5,741,667	\$1,032,940	\$4,897,47
	Competitive	Υ	104531	ADM Associates, Inc.,	RFQ3183 Umbrella Agreement	10/05/2016		\$230,000		\$173,94
	Competitive	Υ	104543	Energy & Resource Solutions, Inc.	Energy & Resource Sol. TWO	10/05/2016		\$920,000		\$693,27

gory I	Initiative	Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
г 1	EVALUATION	Competitive	Υ	104559	West Hill Energy & Computing, Inc.	RFQ3183 Umbrella Agreement	10/06/2016		\$267,150	\$124,770	\$184,469
		Competitive	Υ	123365	Energetics, Incorporated	RFQL3685 Round 1	02/13/2018		\$65,281	\$234	\$50,543
		Competitive	Υ	123365A	Akimeka, LLC	RFQL3685 Round 1	05/08/2019	\$14,972	\$14,972		
		Competitive	Υ	129931	The Cadmus Group, LLC	RFP3916 Res Bldg Stock Assessm	08/09/2018	\$93,472	\$2,129,353	\$411,555	\$2,128,026
		Competitive	Υ	138327	Energy & Resource Solutions, Inc.	TWO 2 - EEPS2 Closeout	03/21/2019	\$2,088,363	\$2,088,363	\$1,312,648	\$1,312,648
		Discretionary	N	108968	Interaction Associates	EVALUATION	01/13/2017		\$19,000		\$18,601
		Discretionary	N	136612	Association of Energy Engineers	EVALUATION	01/29/2019		\$18,550		\$17,345
		Discretionary	N	141701	International Energy Program	EVALUATION	06/21/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	145255	Consortium for Energy Efficiency, Inc.	2019 NYS Consumer Awrnss Study	09/24/2019	\$5,080	\$5,080	\$5,080	\$5,080
		Discretionary	N	150082	NASEO	USEER Support	01/10/2020	\$50,000	\$50,000	\$50,000	\$50,000
		Discretionary	Y	124424	Northeast Energy Efficiency Partnerships	NEEP CT EMV Project	03/16/2018		\$45,900	\$17,000	\$28,900
		Discretionary	Υ	132702	EC Infosystems, Inc.	EC Infosystems for EDI	10/17/2018		\$185,850	\$106,250	\$137,700
		Competitive	N	136171	The Cadmus Group, LLC	TWO#2-Top_Down_Analysis	01/16/2019		\$238,508	\$153,679	\$153,679
		Competitive	N	141164	Industrial Economics, Incorporated	TWO 1 Grid Moderniz Case Study	06/07/2019	\$46,736	\$46,736	\$34,549	\$34,549
		Competitive	N	143201	Energy & Resource Solutions, Inc.	TWO 3 - GJGNY Audit Only Study	08/01/2019	\$117,427	\$117,427	\$50,025	\$50,025
		Competitive	N	143212	ICF Incorporated LLC	TWO 1 -GJGNY Audit Only Impact	08/02/2019	\$49,346	\$49,346	\$41,286	\$41,286
		Competitive	Υ	104535	NMR Group, Inc.	RFQ 3183 NMR Group, Inc.	10/05/2016	\$101,823	\$297,921	\$193,586	\$281,199
		Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$24,342	\$2,661,553	\$521,420	\$810,967
		Competitive	Υ	104544A	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	04/03/2019	\$313,563	\$313,563	\$109,511	\$109,511
		Competitive	Υ	143776	DNV GL Energy Insights USA Inc.	TWO 7 - T&MD 2014-18 Impact Ev	08/15/2019	\$201,597	\$201,597	\$77,483	\$77,483
		Discretionary	N	148895	Plugged In Strategies	Data Privacy and Data Access	12/12/2019	\$49,999	\$49,999		
-	EXISTING FACILITIES	Competitive	Υ	37373	EME Consulting Engineering Group, LLC	Tech Review and Program Staff	11/15/2013		\$493,580		\$454,071
		Competitive	Υ	37381	Vermont Energy Investment Corporation	Umbrella Contract	11/15/2013		\$94,180		\$76,115
		Competitive	Υ	37385	Versar, Inc	Technical Review and Program S	11/15/2013		\$21,299	\$8,011	\$21,259
		Competitive	Υ	37393	ICF Resources, LLC	Technical Review and Program S	11/15/2013		\$149,072	\$3,389	\$127,019
		Competitive	Υ	37403	C.T. Male Associates Engineering,	Technical Review and Program S	11/15/2013		\$64,335		\$59,777
		Competitive	Υ	135071	Bergmann Associates	TWO_EFP/DMP_QA/QC	12/12/2018		\$17,600	\$8,174	\$8,174
		Discretionary	N	34225	Emacx Systems, Inc.	EXISTING FACILITIES	07/30/2013		\$30,000		\$3,000
		Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013		\$2,641,149		\$2,538,996
-	Financing Solutions	Discretionary	N	126709	The Cadmus Group, LLC	Financing Solutions	05/10/2018		\$50,000		\$49,989
	FLEXIBLE TECHNICAL ASSISTANCE	Competitive	Υ	37398	Nexant, Incorporated	Technical Review and Program S	11/15/2013		\$1,424,111		\$1,267,982
		Competitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$784,096		\$779,851
		Competitive	Υ	37402	Steven Winter Associates, Inc.	Technical Review and Program S	11/15/2013		\$228,574		
		Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$1,326,767	\$0	\$1,296,777
		Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$1,841,872		\$1,832,055
-	FUEL NY	Discretionary	N	138345	IHS Global Inc.	OPIS Rack Price Subscription	03/21/2019		\$8,736	\$8,736	\$8,736
		Competitive	N	48593	Buckeye Terminals, LLC	Upstate NY Strategic Fuels Res	09/25/2014	\$2,686,000	\$8,088,000	\$1,342,616	\$7,166,849

ategory I		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
CMT	FUEL NY	Competitive	Υ	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$12,524,930	\$717,536	\$10,101,095
		Competitive	Υ	39731	Garner Environmental Services, Inc.	Fuel NY Portable Emergency Gen	02/25/2014		\$51,000,000	\$19,136	\$951,989
		Discretionary	N	152860	IHS Global Inc.	OPIS Rack Price Subscription	03/25/2020	\$9,324	\$9,324		
	Geothermal Incentive Program	Competitive	N	147082	Apprise, Incorporated	TWO #3 - Survey Work	11/04/2019	\$39,204	\$39,204	\$36,822	\$36,822
		Competitive	Υ	127557	Frontier Energy, Inc.	3695 TWO Umbrella Agreement	06/04/2018		\$400,000	\$327,985	\$398,415
		Competitive	Υ	127559	L&S Energy Services, Inc.	3695 TWO Umbrella Agreement	06/04/2018		\$400,000	\$9,108	\$12,389
		Competitive	Υ	148235	Energy & Resource Solutions, Inc.	TWO 6 - Performance Monitoring	11/27/2019	\$1,128,929	\$1,128,929	\$87,422	\$87,422
		Discretionary	N	147959	ADM Associates, Inc.,	Performance Monitoring and Eva	11/22/2019	\$50,000	\$50,000		
		Discretionary	N	151167	West Hill Energy & Computing, Inc.	Heat Pump Impact Evaluation	02/10/2020	\$50,000	\$50,000		
		Discretionary	Υ	151119	SBW Consulting	Heat Pump Impact Evaluation	02/07/2020	\$50,000	\$50,000	\$3,817	\$3,817
-	GJGNY REVOLVING LOAN FUND	Competitive	N	18847	Lamont Financial Services Corporation	GJGNY REVOLVING LOAN FUND	04/29/2010		\$76,000		\$76,000
		Competitive	N	20822	Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND	10/07/2010		\$606,000	\$1,115	\$39,041
		Competitive	Υ	36976	Adirondack North Country Association	Green Jobs Green New York Outr	11/06/2013		\$313,383	\$5,860	\$313,383
		Competitive	Υ	36986	Long Island Progressive Coalition	GJGNY Outreach CBO	11/06/2013		\$1,389,985		\$1,336,541
		Competitive	Υ	60714A	Dentons US LLP	Bond Counsel Services	09/29/2015		\$26,000		\$25,834
		Non-Competitive	N	18847	Lamont Financial Services Corporation	GJGNY REVOLVING LOAN FUND	04/29/2010		\$561,913		\$502,825
		Non-Competitive	N	113648	Kroll Bond Rating Agency, Inc.	GJGNY REVOLVING LOAN FUND	05/10/2017		\$65,000		
		Non-Competitive	Υ	34250	First Associates Loan Servicing, LLC	GJGNY REVOLVING LOAN FUND	07/31/2013		\$564,700	\$36,114	\$269,076
		Competitive	Υ	60713	Hawkins Delafield & Wood LLC	Bond Counsel Services	03/13/2015		\$60,000		\$57,301
		Competitive	Υ	105451	Omnicap Group, LLC	Financial Advisory Services	10/21/2016		\$500,000		\$185,876
		Non-Competitive	Υ	34250A	Vervent Inc.	GJGNY REVOLVING LOAN FUND	11/04/2019	\$296,555	\$296,555	\$25,409	\$25,409
		Non-Competitive	Υ	68533	Bank of New York	\$3000 annual fee for 14 yrs	07/08/2015		\$57,000	\$4,000	\$24,000
		Non-Competitive	Υ	71389	Bank of New York	EFC REEF 2015 FEE 2015	08/19/2015		\$62,000	\$3,000	\$17,000
		Non-Competitive	Υ	104094	Bank of New York	GJGNY 2016 Bonds Trustee	09/21/2016		\$62,000	\$3,150	\$17,200
-	GREENING THE BRONX	Competitive	N	120837-2	L&S Energy Services, Inc.	Greening the Bronx	05/16/2018		\$99,934	\$27,409	\$99,934
		Discretionary	N	100963	L&S Energy Services, Inc.	GtB- Evaluation	07/13/2016		\$42,814		
ı	High Performing Grid	Discretionary	N	144924	Converge Strategies, LLC	FutureGrid Summit Facilitation	09/16/2019	\$48,800	\$48,800	\$48,800	\$48,800
		Competitive		139096	Pterra, LLC	PTerra work for ITWG	04/11/2019	\$250,000	\$250,000	\$16,200	\$16,200
		Competitive	N	141164	Industrial Economics, Incorporated	TWO 1 Grid Moderniz Case Study	06/07/2019	\$46,736	\$46,736	\$34,549	\$34,549
		Competitive	N	149446	Converge Strategies, LLC	Climate Resilience	12/23/2019	\$49,129	\$49,129		
		Competitive	Υ	140315	Randstad North America Inc	TS.003_TBI Coordinator	05/15/2019	\$111,440	\$111,440	\$42,482	\$42,482
		Competitive	Υ	150368	Randstad North America, Inc.	Temporary Services	01/17/2020	\$120,823	\$120,823	\$8,095	\$8,095
-	Home Perf w Energy Star	Competitive	N	123698	Randstad North America, Inc.	Home Perf w Energy Star	02/21/2018		\$100,000	\$15,574	\$84,172
		Competitive	Υ	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017		\$1,077,432	\$391,570	\$886,660
		Competitive	Y	121807A	Tendril Networks, Inc.	Residential Program MgtRFP3545	06/07/2019	\$190,772	\$190,772	\$3,200	\$3,200
		Discretionary	N	144051	JFK Hotel Owner LLC	2019 NY Res. Reg. Training-NYC	08/22/2019	\$5,000	\$5,000	\$3,285	\$3,285
		Discretionary	N	144318	First Republic Corp of America	2019 NY Res Home Reg Training	09/01/2019	\$5,185	\$5,185	\$5,185	\$5,185

	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
MT	Home Perf w Energy Star	Competitive	N	147909	Randstad North America, Inc.	Payroll Services	11/21/2019	\$10,000	\$10,000	\$2,674	\$2,674
		Competitive	N	151116	The Cadmus Group, LLC	Home Perf w Energy Star	02/07/2020	\$99,725	\$99,725	\$16,071	\$16,071
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$2,091,653	\$8,350,823	\$2,527,780	\$5,749,859
		Competitive	Υ	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017	\$3,803,965	\$9,170,102	\$3,122,551	\$6,495,255
		Competitive	Υ	121807B	Uplight, Inc.	Residential Program MgtRFP3545	10/23/2019	\$295,822	\$295,822	\$105,806	\$105,806
		Competitive	Υ	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$935,000	\$1,880,000	\$1,031,775	\$1,278,597
		Competitive	Υ	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018		\$500,000	\$93,226	\$208,498
		Competitive	Υ	141322	Randstad North America, Inc.	Payroll Services	06/12/2019	\$63,278	\$63,278	\$30,076	\$30,076
		Competitive	Υ	148087	Kelliher Samets Volk	KSV TWO 32 LMI Website Hub	11/25/2019	\$300,000	\$300,000		
		Discretionary	N	128727	BPCA NYS Inc.	Tech Consulting for RES	07/06/2018		\$35,075		\$32,294
		Discretionary	N	140003	Dick Kornbluth	Home Perf w Energy Star	05/07/2019	\$50,000	\$50,000		
		Discretionary	N	141159	BPCA NYS Inc.	Res Stakeholder Engagement	06/07/2019	\$49,000	\$49,000	\$5,128	\$5,128
		Discretionary	N	151096	Illume Advising LLC	Analysis Support for NYSERDA	02/07/2020	\$50,000	\$50,000		
		Discretionary	Υ	141211	Honeywell International Inc.	SQA HPwES/EmPower in LI	06/10/2019	\$25,000	\$25,000	\$11,400	\$11,400
	Industrial Process Effic	Competitive	Υ	104557	Michaels Energy, Inc.	RFQ 3183 Michaels Energy	10/06/2016		\$300,000	\$15,141	\$217,695
		Competitive	Υ	120138	Wendel Energy Services, LLC	RFP3628FlexTechConsultUmbrella	11/03/2017		\$150,000	\$44,682	\$150,000
		Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018		\$1,000,000	\$597,540	\$998,938
		Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$132,542	\$1,085,787	\$371,433	\$493,553
		Competitive	Υ	120915	Arcadis of New York, Inc.	RFP3628FlexTechConsultUmbrella	11/21/2017		\$248,500	\$105,825	\$228,231
		Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017		\$1,211,500	\$343,785	\$1,112,884
		Competitive	Υ	121439	O'Brien & Gere Engineers, Inc.	RFP3628FlexTechConsultUmbrella	12/07/2017		\$150,000	\$101,171	\$141,669
		Competitive	Υ	143461	Wendel Energy Services, LLC	SEM_WRRF_Wendel_TWO	08/07/2019	\$50,000	\$50,000		
		Competitive	Υ	143462	O'Brien & Gere Engineers, Inc.	SEM_WRRF_O'Brien&Gere_TWO	08/07/2019	\$50,000	\$50,000		
	INDUSTRIAL PROCESS EFFICIENCY	Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013		\$1,913,895	\$57,633	\$1,464,520
		Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$3,119,158		\$2,886,205
		Discretionary	N	140809	Conventures, Inc.	2019 Energy Solutions Summit	05/29/2019	\$25,000	\$25,000	\$25,000	\$25,000
	Informat. Products & Brokering	Discretionary	N	147561	Reed Midem SAS	2019 PropTech Challenge	11/14/2019	\$50,000	\$50,000	\$50,000	\$50,000
	·	Competitive	Υ	149303	Corelogic, Inc.	RFQL 3711 CoreLogic Bldg Data	12/20/2019	\$132,405	\$132,405	\$42,000	\$42,000
		Competitive	Υ	149307	Trove Predictive Data Science, Inc.	RFQL3711 TWO Bldg Assets	12/20/2019	\$300,000	\$300,000		
	INNOVATION CAPACITY & BUSINESS	Competitive	Υ	27592	Frank Communications	Copywriting and Technical Edit	04/23/2012		\$101,501		\$98,080
	DEVELOPMENT	Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$50,000		\$49,012
		Competitive	Υ	57387	Research Foundation of SUNY	EFRC co-funding	01/21/2015		\$391,000		\$197,240
_	K-12 SCHOOLS	Competitive	Υ	139043	R.W. Beck Group, Inc.	StakeholderEngagement_Outreach	04/10/2019	\$242,915	\$242,915	\$86,667	\$86,667
		Competitive	Υ	141499	CHA Consulting Inc.	SA.051_TWO #6_EP&E APM	06/18/2019	\$356,265	\$356,265	\$88,065	\$88,065
		Competitive	Υ	141697	EME Consulting Engineering Group, LLC	SA.052_TWO#9_EP&E PM	06/21/2019	\$416,643	\$416,643	\$121,598	\$121,598
_	LARGE SCALE RENEWABLES	Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$391,125		\$290,739
	VENADEEO	Competitive	Υ	104541	Industrial Economics, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$6,727	\$186,477	\$82,028	\$169,613

Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
LMI Single Family /2525	Competitive	Υ	139626	Opinion Dynamics Corporation	TWO 11 BPI Survey	04/25/2019	\$28,456	\$28,456	\$28,456	\$28,456
Low-Income Forum on Energy	Discretionary	N	111879	DNC Parks & Resorts at Gideon Putnam LLC	2017 LIFE Reg. Mtg Saratoga	03/22/2017		\$7,000		\$5,607
	Discretionary	N	123980	D C Hotels Two, LLC	2018 LIFE Hotel - Holiday Inn	02/28/2018		\$8,330		
	Discretionary	N	134957	SMG Partners	LIFE 2020 Statewide Confernece	12/10/2018		\$5,975	\$5,975	\$5,97
	Discretionary	N	138143	AFP 108 Corp	LIfe 2019 Reg Mtg - Western NY	03/20/2019		\$6,000	\$5,392	\$5,39
	Discretionary	N	140663	Scotto Brothers Woodbury Restaurant, LLC	LIFE meeting Long Island	05/23/2019	\$7,000	\$7,000	\$4,794	\$4,79
	Competitive	Υ	116343	TRC Energy Services	LIFE Implementation Services	07/26/2017	\$83,022	\$256,111	\$56,494	\$144,69
	Discretionary	N	149792	Impact by Design Inc.	Facilitation Support NYSERDA	01/03/2020	\$49,500	\$49,500	\$4,375	\$4,37
MARKET PATHWAYS	Discretionary	N	86068	CoStar Realty Information, Inc.	Research Subscription	12/30/2015		\$21,740		\$16,80
	Discretionary	Υ	40415	Rensselaer Polytechnic Institute-LRC	Outdoor Lighting Clearinghouse	03/21/2014		\$50,000	\$20,787	\$50,00
	Non-Competitive	Υ	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$240,000	\$0	\$240,00
Market Tests	Discretionary	N	139385	American Council for an Energy Efficient	2020 ACEEE Finance Forum	04/22/2019	\$45,000	\$45,000	\$45,000	\$45,00
	Competitive	N	132045	Kelliher Samets Volk	TWO 22 Building Labeling Mkt	10/03/2018	\$262,820	\$361,010	\$90,769	\$156,65
	Discretionary	N	145268	Embertec USA, LLC	Purchase 390 Tier 2 APS	09/24/2019	\$15,207	\$15,207	\$8,869	\$8,86
MF Market Transformation	Discretionary	N	144898	Russell Unger Consulting LLC	MF Energy Efficiency Consultin	09/13/2019	\$200,000	\$200,000	\$98,745	\$98,74
Mkt Char: Tech Assist	Competitive	Υ	101159	Navigant Consulting Inc.	Tech Assist, REV Pool	07/15/2016		\$500,000	\$77,209	\$77,20
	Discretionary	N	122097	Van Nostrand Energy & Environmental	Policy Development Services	12/27/2017		\$200,000	\$13,882	\$106,39
	Competitive	N	135615	Energy and Environmental Economics Inc	. TWO 13 - VDER Phase 2	12/28/2018		\$350,000	\$209,106	\$254,768
	Competitive	N	135945	Energy and Environmental Economics Inc	. TWO# 14 - Grid Value Model	01/09/2019	\$41,000	\$141,000	\$92,223	\$129,56
	Competitive	N	140796	Energy and Environmental Economics Inc	. TWO #17 Heat Pump Analysis	05/29/2019	\$160,000	\$160,000	\$147,446	\$147,44
	Competitive	N	149225	Brattle Group Inc.	TWO #1 Resource Adequacy	12/18/2019	\$327,000	\$327,000		
	Competitive	Υ	101127	Energy and Environmental Economics Inc	. Tech Assist, REV Pool.	07/15/2016		\$3,308,918	\$97,671	\$3,261,91
	Competitive	Υ	101161	National Economic Research	Tech Assist, REV Pool	07/15/2016		\$487,000	\$900	\$335,44
	Discretionary	N	133820	Grid Strategies, LLC	Bulk Power System Resource Ad.	11/09/2018		\$200,000	\$30,000	\$50,00
	Discretionary	Υ	101127	Energy and Environmental Economics Inc	. Tech Assist, REV Pool.	07/15/2016		\$50,000	\$0	\$6,73
Multifam Performance Pgm	Competitive	N	123698	Randstad North America, Inc.	Multifam Performance Pgm	02/21/2018		\$100,000	\$15,574	\$84,17
	Discretionary	N	138633	455 Hospitality LLC	2019 Multifamily Summit	03/28/2019	\$50,000	\$50,000	\$48,209	\$48,20
	Discretionary	N	145950	TRC Energy Services	Rose Hamm Multifamily Summit	10/10/2019	\$5,918	\$5,918	\$5,689	\$5,68
	Competitive	N	141694	Taitem Engineering, P.C.	RFQL 3434 - Standards and Qual	06/21/2019	\$464,250	\$464,250	\$210,064	\$210,06
	Competitive	Υ	113498	Taitem Engineering, P.C.	RFQL3434 Cat1 Biomass Boilers	05/05/2017		\$430,000	\$93,278	\$316,33
	Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$446,457	\$904,016	\$278,431	\$496,12
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$1,328,594	\$6,075,651	\$2,325,945	\$3,497,45
	Discretionary	Υ	129937	TRC Energy Services	Program Tool Services for MPP	08/10/2018		\$50,000	\$32,333	\$37,75
MULTIFAMILY PERFORMANCE PROGRAM	Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$11,730,970		\$11,730,97
PROGRAM	Competitive	Υ	29226	Taitem Engineering, P.C.	MEPP Quality Assurance Contrac	09/17/2012		\$2,539,539		\$2,539,53
	Non-Competitive	Υ	28551	Documentation Strategies, Inc.	Multifamily IT Support	07/18/2012		\$438,000		\$435,80
	Non-Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$2,694,017	\$58,716	\$2,693,958

NYSERDA ANNUAL CONTRACTS REPORT - Section 1: All Contracts Open During the Period 4/1/2019 to 3/31/2020

Category		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	PERFORMANCE PROGRAM	Discretionary	Υ	91807	Robison Energy LLC	Oil Monitoring Pilot	02/29/2016		\$50,000		\$48,655
	Nat'l OffShWind R&D Consortium	Competitive	N	131173	Alliance for Sustainable Energy, LLC	NREL for OSW Consortium	09/12/2018	\$85,000	\$205,000	\$100,000	\$180,000
	Constitution	Competitive	N	131325	Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	09/17/2018	\$76,000	\$136,000	\$90,500	\$120,500
		Competitive	Y	131674	The Renewables Consulting Group, LLC	RCG work for OSW Consortium	09/24/2018	\$372,897	\$612,897	\$411,033	\$588,633
	NEW CONSTRUCTION PROGRAM	Competitive	Υ	83741	Atelier Ten	ATEN - EMP	12/14/2015		\$53,145		\$44,890
		Competitive	Υ	ST10129	Einhorn Yaffee Prescott Architecture & E	NCP TA Contract - ST10129	04/03/2009		\$1,268,123	\$0	\$1,030,627
	New Construction- Commercial	Competitive	Υ	123329	New Buildings Institute, Inc.	New Construction- Commercial	02/12/2018		\$250,000	\$39,321	\$235,637
		Competitive	Υ	145723	VHB Engineering, Surveying and	New Construction- Commercial	10/04/2019	\$50,000	\$50,000	\$24,680	\$24,680
	New Construction- Housing	Discretionary	N	138285	The Research Foundation for the State	2019 NYS Green Buildings Conf	03/20/2019		\$5,250	\$5,250	\$5,250
		Discretionary	N	139897	New York Passive House Inc.	2019 NAPHN Annual Forum	05/03/2019	\$15,000	\$15,000		
		Discretionary	N	139897-1	North American Passive House Network, In	2019 NAPHN Annual Forum	07/24/2019	\$15,000	\$15,000	\$15,000	\$15,000
		Discretionary	N	142823	NESEA	2019 NESEA BENYC Conf	07/23/2019	\$26,000	\$26,000	\$26,000	\$26,000
		Discretionary	N	143733	Awards By Walsh's & Creative Marketing	Buildings of Excellence award	08/14/2019	\$7,575	\$7,575	\$7,575	\$7,575
		Discretionary	N	149719	North American Passive House Network, In	Passive House 2020	12/31/2019	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	149721	Passive House Institute US	PHIUS 2020	12/31/2019	\$50,000	\$50,000	\$50,000	\$50,000
		Discretionary	N	150654	Oliver Kinross Ltd.	Exhibit at NYBuild 2020	01/28/2020	\$5,895	\$5,895		
		Competitive	N	145128	Rocky Mountain Institute	140390 TWO#1	09/23/2019	\$484,375	\$484,375		
		Competitive	Y	128210	Newport Ventures, Inc.	New Construction- Housing	06/21/2018		\$200,000		\$112,273
		Competitive	Y	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	02/19/2019		\$268,500	\$196,971	\$196,971
		Competitive	Y	143617	Kelliher Samets Volk	TWO 28 Carbon Neutral Bldgs	08/12/2019	\$600,000	\$600,000	\$103,457	\$103,457
		Competitive	Y	145723	VHB Engineering, Surveying and	New Construction- Housing	10/04/2019	\$50,000	\$50,000	\$24,680	\$24,680
		Discretionary	N	149716	The Research Foundation for the State	2020 NYS Green Building Conf	12/31/2019	\$6,000	\$6,000		
		Discretionary	N	149717	NESEA	2020 NESEA ProTours	12/31/2019	\$25,000	\$25,000	\$15,000	\$15,000
		Discretionary	N	152018	Community Preservation Corp.	Carbon Neutral Summit	03/02/2020	\$35,000	\$35,000		
	NEW YORK GREEN BANK	Competitive	N	114696	Randstad North America, Inc.	Temporary Services	06/09/2017		\$186,000		\$135,881
		Competitive	N	144305	Citistaffing, LLC	TS.008 - NYGB Office Admin	08/29/2019	\$24,922	\$24,922	\$19,494	\$19,494
		Competitive	Υ	39066	Nixon Peabody LLP	Green Bank Outside Legal Serv.	01/21/2014	\$91,885	\$863,766	\$91,885	\$582,489
		Competitive	Υ	39067	Holland & Knight LLP	Green Bank Outside Legal Serv.	01/21/2014	\$404,681	\$1,428,829	\$404,681	\$1,393,600
		Competitive	Υ	39069	Loeb & Loeb LLP	Green Bank Outside Legal Couns	01/21/2014	\$15,762	\$599,396	\$15,762	\$599,396
		Competitive	Υ	39072	Clifford Chance US LLP	Green Bank Outside Legal Serv.	01/21/2014		\$36,000		\$26,038
		Competitive	Υ	39073	Davis Polk & Wardwell LLP	Green Bank Outside Legal Couns	01/21/2014	\$297,032	\$297,032	\$297,032	\$297,032
		Competitive	Υ	46963	Navigant Consulting Inc.	Outside Technical and Eng. Srv	09/05/2014	\$1,498	\$378,086	\$196,572	\$378,086
		Competitive	Υ	98838	DealCloud Inc.	DealCloud Licensing	05/24/2016	\$46,605	\$259,105	\$81,330	\$254,155
		Competitive	Υ	98839	SS&C Technologies, Inc.	Fund Administration/Loan Inves	05/24/2016		\$3,000,000	\$440,401	\$1,240,500
		Competitive	Y	140616	Randstad North America, Inc.	Payroll Services	05/22/2019	\$63,375	\$63,375	\$21,938	\$21,938
		Discretionary	N	102573	Chadbourne & Parke LLP	Investec/Sunrun Legal Fees	08/17/2016		\$16,567		\$16,566
		Discretionary	N	115878	Pedro Barretto Leite de Barros	Pedro Barros - Strategy	07/14/2017		\$50,000		\$17,900

ory Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
NEW YORK GREEN BANK	Discretionary	N	117771	JCRA Financial LLC	JRCA Hedging Strategy	08/31/2017		\$25,000		\$3,497
	Discretionary	N	122814	Caroprese & Company	Forecast Model Development	01/23/2018		\$50,000		\$40,438
	Discretionary	N	125569	Albright Solutions LLC	3rd Party Capital Support	04/11/2018		\$25,000	\$927	\$7,383
	Discretionary	N	127480	Margaret R Cayten	NEW YORK GREEN BANK	06/01/2018		\$50,000		
	Discretionary	N	128157	Latham & Watkins LLP	NEW YORK GREEN BANK	06/20/2018		\$25,000		\$7,417
	Discretionary	N	132773	Michael Farrell	Due Diligence Assistance	10/18/2018		\$50,000		\$20,396
	Discretionary	N	135908	Johnson Associates, Inc	JAI NYSERDA Consulting Cnt,	01/08/2019		\$50,000	\$1,870	\$43,870
	Discretionary	N	147228	Mamerck Solutions LLC	NEW YORK GREEN BANK	11/06/2019	\$50,000	\$50,000	\$50,000	\$50,000
	Discretionary	Υ	115075	Essense Partners Inc.	Material development for NYGB	06/21/2017		\$150,000		\$21,828
	Non-Competitive	N	123577	Proenergy Consulting LLC	Consulting NY Prize/Greenbank	02/20/2018		\$194,350	\$2,625	\$161,805
	Non-Competitive	N	147228	Mamerck Solutions LLC	NEW YORK GREEN BANK	11/06/2019	\$10,000	\$10,000	\$9,930	\$9,930
	Competitive	N	152237	Guidehouse Inc.	TWO #2 - Bulk Storage	03/06/2020	\$45,000	\$45,000		
	Competitive	Υ	109917	BDO USA LLP	Background Investigation Servi	02/07/2017	\$25,600	\$37,450	\$25,600	\$37,450
	Competitive	Υ	126362	Moelis & Company Group LP	3PC raise advisory Services	05/01/2018	\$100,000	\$850,000	\$252,851	\$779,172
	Competitive	Υ	149695	Holland & Knight LLP	RFP 12 - NYGB Legal Services	12/31/2019	\$125,708	\$125,708	\$125,708	\$125,708
	Competitive	Υ	152910	Guidehouse Inc.	TWO #1 - Price Forecast	03/25/2020	\$250,000	\$250,000		
	Discretionary		150958	PLB Oil & Gas Consult LLC	NEW YORK GREEN BANK	02/04/2020	\$50,000	\$50,000	\$11,585	\$11,585
	Discretionary	N	120012	Sunset Green Home LLC	Third-Party Capital Consulting	11/01/2017	\$50,000	\$250,000	\$104,524	\$227,798
	Discretionary	N	132478-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019		\$18,404	\$11,984	\$18,404
	Discretionary	N	136435	Intralinks, Inc.	3PC VDR Services	01/24/2019	\$6,750	\$11,250	\$9,742	\$9,742
	Discretionary	N	141636	Capital for Communities, LLC	NEW YORK GREEN BANK	06/20/2019	\$25,000	\$25,000		
	Discretionary	N	150761	Mendelsohn Consulting, Inc.	NEW YORK GREEN BANK	01/30/2020	\$50,000	\$50,000	\$13,298	\$13,298
	Discretionary	Υ	138377	Proenergy Consulting LLC	NEW YORK GREEN BANK	03/27/2019	\$100,000	\$100,000	\$72,360	\$72,360
	Non-Competitive	N	132478-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$54,000	\$54,000	\$13,500	\$13,500
NextGen HVAC	Discretionary	N	110961	Evoworld	NextGen HVAC	03/02/2017		\$48,089	\$29,400	\$48,089
	Competitive	Υ	140315	Randstad North America Inc	TS.003_TBI Coordinator	05/15/2019	\$111,440	\$111,440	\$42,482	\$42,482
	Competitive	Υ	150368	Randstad North America, Inc.	Temporary Services	01/17/2020	\$120,823	\$120,823	\$8,095	\$8,095
	Discretionary	N	139812	RD & Associates Consulting LLC	Innovation Advisor	05/01/2019	\$35,475	\$35,475	\$8,444	\$8,444
NY-SUN	Competitive	N	79049	Rafferty Enterprises, Inc.	Temp Services	10/28/2015		\$38,304		\$37,737
	Competitive	N	110029	Employee Leasing of Greater NY	Temporary Services	02/10/2017		\$59,543		\$53,075
	Competitive	Υ	29199	The Cadmus Group, LLC	RPS-CST Quality Assurance/Qual	09/17/2012		\$499,625		\$180,750
	Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$50,000		\$49,012
	Discretionary	N	146026	Greentech Media Inc.	NY-SUN	10/11/2019	\$26,000	\$26,000	\$26,000	\$26,000
	Discretionary	N	149637	D.K. & S Enterprises Inc	2019 2GW Solar Press Event	12/30/2019	\$14,915	\$14,915	\$14,915	\$14,915
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$2,025,000	\$13,999,772	\$3,371,729	\$7,424,839
	Discretionary	N	141696	Sustainable CUNY CUNY/RF	2019 Solar Storage Summit	06/21/2019	\$10,000	\$10,000		
NYCH: Comfort Home	Competitive	N	148531	TRC Energy Services	Comfort Home Implementation	12/07/2019	\$199,980	\$199,980		

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYCH: Comfort Home	Discretionary	N	145516	Caroline Hazard	Heat Pump Ready Participation	09/30/2019	\$50,000	\$50,000	\$26,731	\$26,731
		Discretionary	N	149954	Honeywell International Inc.	Technical Assurance	01/08/2020	\$48,000	\$48,000		
	NYCH: Supply Chain	Competitive	Υ	143834	Allegis Group Holdings Inc	SA.054_TWO #9 - SFR PM	08/16/2019	\$129,925	\$129,925	\$41,035	\$41,035
		Discretionary	N	124468	Seek More LLC	Consultant for SFR Upstream	03/23/2018		\$50,000	\$0	\$37,545
	NYSERDA ADMINISTRATION	Competitive		98193	Xerox Corp	NYSERDA ADMINISTRATION	05/11/2016		\$14,674		\$14,022
		Competitive		144926	Randstad North America, Inc.	TS.009 - Temp Office Admin	09/16/2019	\$106,880	\$106,880	\$2,862	\$2,862
		Competitive	N	30472	Fibertech Holdings Corp	NYSERDA ADMINISTRATION	11/29/2012		\$62,000		\$40,065
		Competitive	N	30994	mindSHIFT Technologies, Inc.	Hosting Cloud Solutions	01/24/2013		\$1,239,929		\$1,235,659
		Competitive	N	31421A	Lockheed Martin Corporation	Hotline & Fulfillment 2016	01/27/2016		\$189,999		\$171,196
		Competitive	N	35348	Gardiner & Theobald Inc	NYSERDA ADMINISTRATION	09/12/2013		\$138,000		\$79,136
		Competitive	N	36966	Time Warner Cable	NYC WAN and Internet Circuits	11/05/2013		\$317,086	\$42,354	\$253,639
		Competitive	N	43051	Xerox Corp	NYSERDA ADMINISTRATION	06/17/2014		\$19,071		\$19,067
		Competitive	N	50809	Sierra-Cedar, Inc.	Consulting Services for 9.2	10/28/2014		\$1,492,080		\$1,492,080
		Competitive	N	61208	Rafferty Enterprises, Inc.	NYSERDA ADMINISTRATION	03/24/2015		\$23,184		\$10,980
		Competitive	N	69111	Rafferty Enterprises, Inc.	Temp Services	07/15/2015		\$37,674		\$29,004
		Competitive	N	82152	Rafferty Enterprises, Inc.	Temp Employee Services	11/30/2015		\$59,000		\$58,968
		Competitive	N	86708	Verizon Wireless	Tablet upgrade - signout pool	01/14/2016		\$6,462		\$6,162
		Competitive	N	96886	Network Experts of New York, Inc.	PeopleSoft Administrator/DBA	04/22/2016		\$1,016,275	\$24,795	\$795,933
		Competitive	N	96887	Network Experts of New York, Inc.	Peoplesoft Development	04/22/2016		\$24,440		
		Competitive	N	109508	Direct Packet Inc.	Direct Response 2017	01/30/2017		\$5,055		
		Competitive	N	112665	Randstad North America, Inc.	Temp Services	04/11/2017		\$226,950		\$224,375
		Competitive	N	113214	Lincoln Life & Annuity Company of NY	Long Term Disability Premium	04/28/2017	\$738	\$243,760	\$87,312	\$243,760
		Competitive	N	115880	Randstad North America, Inc.	Temporary Services	07/14/2017		\$93,746	\$0	\$93,746
		Competitive	N	117866	The McAulay Smith Firm, LTD	SrLdr Smart Grid Search Firm	09/05/2017		\$50,000	\$257	\$16,627
		Competitive	N	121425	Oracle America, Inc.	UPK Developer Licenses - 2	12/07/2017		\$19,755		
		Competitive	N	121855	Pitney Bowes, Inc.	NYSERDA ADMINISTRATION	12/19/2017		\$5,682		
		Competitive	N	130914	Penda Aiken Inc.	Temporary Receptionist	09/06/2018	\$80,005	\$103,960	\$32,636	\$50,914
		Competitive	N	135474	Carahsoft Technology Corporation	Salesforces	12/21/2018		\$1,326,217	\$0	\$1,326,217
		Competitive	N	135707	Tech Valley Talent, LLC	SecureAuth 2 new + maint.	01/02/2019		\$26,851	\$1,500	\$26,848
		Competitive	N	138372	Systems Management Planning, Inc.	NetApp Flash Storage for VDI	03/26/2019	\$14,806	\$14,806	\$14,806	\$14,806
		Competitive	N	140113	Randstad North America, Inc.	Payroll Services	05/09/2019	\$25,000	\$25,000	\$20,137	\$20,137
		Competitive	N	140117	Randstad North America, Inc.	Payroll Services	05/09/2019	\$21,600	\$21,600	\$13,295	\$13,295
		Competitive	N	140547	Carter Ledyard & Milburn LLP	NYSERDA ADMINISTRATION	05/21/2019	\$10,000	\$10,000	\$6,904	\$6,904
		Competitive	N	140952	Direct Packet Inc.	Video Endpoint for CEO	06/03/2019	\$6,459	\$6,459	\$6,459	\$6,459
		Competitive	N	142510	Systems Management Planning, Inc.	SMP - Storage Upgrade Services	07/15/2019	\$5,600	\$5,600	\$2,400	\$2,400
		Competitive	N	143683	Dell, Inc.	Dell Desktops - 10 Order #1	08/13/2019	\$5,201	\$5,201	\$5,201	\$5,201
		Competitive	N	143975	Zones LLC	Cisco VoIP Service Router	08/21/2019	\$22,127	\$22,127	\$22,127	\$22,127

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Competitive	N	144209	Dell, Inc.	Laptops and Docking Qty.4	08/28/2019	\$5,307	\$5,307	\$5,307	\$5,307
		Competitive	N	144824	Industrial Economics, Incorporated	Research of Indian Point Purch	09/12/2019	\$41,400	\$41,400	\$31,397	\$31,397
		Competitive	N	145118	Dell, Inc.	DELL-Laptops and Docks 7	09/20/2019	\$9,288	\$9,288	\$9,288	\$9,288
		Competitive	N	145151	Carahsoft Technology Corporation	Salesforce Journey Builder	09/23/2019	\$30,896	\$30,896	\$30,896	\$30,896
		Competitive	N	145942	MVP Consulting Plus, Inc.	License Renewal for SAS Statis	10/09/2019	\$10,418	\$10,418	\$10,418	\$10,418
		Competitive	N	146439	SHI, Inc.	Storage - Virtual Environment	10/22/2019	\$49,976	\$49,976	\$49,976	\$49,976
		Competitive	N	146724	Dell, Inc.	25 Dell Desktops	10/28/2019	\$16,937	\$16,937	\$16,937	\$16,937
		Competitive	N	146818	Provantage, LLC	52 Monitors (Order 2)	10/29/2019	\$9,343	\$9,343	\$9,343	\$9,343
		Competitive	N	147437	Dell, Inc.	DELL Desktops - 25 Order 2	11/12/2019	\$16,937	\$16,937	\$16,937	\$16,937
		Competitive	N	149544	Carahsoft Technology Corporation	Salesforce cloud	12/27/2019	\$1,405,719	\$1,405,719	\$1,321,888	\$1,321,888
		Competitive	N	151120	Dell, Inc.	Dell - Precision Workstations	02/07/2020	\$7,295	\$7,295	\$7,295	\$7,295
		Competitive	N	151399	Nixon Peabody LLP	Loan Loss Reserve PON Review	02/14/2020	\$5,000	\$5,000		
		Competitive	N	151869	Dell, Inc.	DELL - Wyse 50 Thin Clients	02/26/2020	\$17,378	\$17,378		
		Competitive	N	151906	SHI, Inc.	SHI - Chromebooks 50 - order 1	02/27/2020	\$20,642	\$20,642		
		Competitive	Υ	18607	Zone 5, Inc.	RFQL and RFP 1224	04/05/2010		\$612,575		\$612,205
		Competitive	Υ	21727	Xerox Corp	NYSERDA ADMINISTRATION	01/26/2011		\$509,597	\$88	\$423,062
		Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$2,225,208		\$1,895,878
		Competitive	Υ	30272	Xerox Corp	NYSERDA ADMINISTRATION	11/14/2012		\$164,799	\$19,759	\$164,111
		Competitive	Υ	30472A	Fiber Technologies Networks, LLC	NYSERDA ADMINISTRATION	01/17/2017		\$20,935	\$935	\$20,935
		Competitive	mpetitive Y	33863	Intellidatum LLC	NYSERDA ADMINISTRATION	07/15/2013		\$895,050		\$696,494
		Competitive	Υ	34097	Tech Valley Talent, LLC	Identity and Access	07/24/2013		\$200,000		\$114,718
		Competitive	Υ	35293	Terremark Federal Group, LLC	NYSERDA ADMINISTRATION	09/11/2013		\$50,395		\$38,146
		Competitive	Υ	37366-1	Arcadis U.S., Inc.	Greenling the Bronx M&V	05/24/2016		\$259,940		\$226,520
		Competitive	Y	40300	Tech Valley Talent, LLC	Database Programmer - General	03/17/2014		\$200,000		\$190,229
		Competitive	Υ	40488	Tech Valley Talent, LLC	.Net SQL Metrics Database Supp	03/26/2014		\$200,000		\$161,650
		Competitive	Υ	42112	Xerox Corp	Xerox Maintenace	05/28/2014		\$187,673	\$2,883	\$186,417
		Competitive	Υ	44920	Tech Valley Talent, LLC	Server Operations - Supplement	07/31/2014		\$185,250		\$151,194
		Competitive	Υ	48120	Terremark Federal Group, LLC	GSA Cloud Services - Renewal	09/18/2014		\$65,928		\$46,004
		Competitive	Y	56630	Oracle America, Inc.	Renewal: Oracle PeopleSoft mai	01/12/2015		\$52,037		\$51,658
		Competitive	Υ	57857	inLogic, Inc.	RFID handheld scanners with 2	01/27/2015		\$6,149		\$6,118
		Competitive	Y	59143	mindSHIFT Technologies, Inc.	Application Support and Manage	02/19/2015		\$16,000		
		Competitive	Υ	64017	Rasky Baerlein Strategic Communications	Communications Services for Re	05/05/2015		\$172,692		\$172,095
		Competitive	Υ	67174	Unique Comp Inc.	Server Contractor	06/16/2015		\$167,700		\$161,049
		Competitive	Υ	69931	Amphora Consulting	Strategic Program Dev Training	07/28/2015		\$500,000		\$500,000
		Competitive	Υ	72126	Terremark Federal Group, LLC	Enterprise eCloud Renewal	09/01/2015		\$65,928		\$65,090
		Competitive	Υ	85026	Computer Aid, Inc.	RFP3143 Umbrella Agreement	12/18/2015		\$280,800		\$97,200
		Competitive	Y	86529	Oracle America, Inc.	Oracle Service and Maintenance	01/11/2016		\$53,598		\$53,208

	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Competitive	Υ	102626	NYS Office for Technology	Office 365 - 2015/2016	08/24/2016		\$67,766		\$67,709
		Competitive	Υ	102994	Terremark Federal Group, LLC	Enterprise ECloud - Renewal	08/31/2016		\$79,842		\$79,716
		Competitive	Υ	113863	Dell, Inc.	MS Project and Visio	05/16/2017		\$114,755		\$81,730
		Competitive	Υ	124438	Systems Management Planning, Inc.	Webex Services - 2018 - 2019	03/20/2018		\$20,511		\$18,231
		Competitive	Υ	127705	Oracle America, Inc.	Oracle - User Productivity Kit	06/07/2018		\$8,968	\$2,242	\$8,968
		Competitive	Υ	135247	Oracle America, Inc.	Peoplesoft -Oracle 2019 - 2020	12/17/2018		\$53,598	\$40,199	\$53,598
		Competitive	Υ	137225	Systems Management Planning, Inc.	Webex Services - 2019 2020	02/15/2019	\$105	\$19,116	\$7,108	\$7,108
		Competitive	Υ	137565	Systems Management Planning, Inc.	VMWare Airwatch 2019 - 2020	02/27/2019		\$6,439	\$6,439	\$6,439
		Competitive	Y	138079	SHI, Inc.	Adobe Creative Cloud Licenses	03/14/2019		\$12,312	\$12,312	\$12,312
		Competitive	Y	138418	Randstad North America Inc	TS.004 - Marketing_Coordinator	03/27/2019	\$112,275	\$112,275	\$4,000	\$4,000
		Competitive	Y	139038	SHI, Inc.	Adobe Enterprise Licensing 1yr	04/10/2019	\$44,512	\$44,512	\$44,512	\$44,512
		Competitive	Υ	139499	Randstad North America, Inc.	Payroll Services	04/24/2019	\$25,000	\$25,000	\$19,303	\$19,303
		Competitive	Υ	140550	Fusco Personnel, Inc.	Temp Services - Marketing PM	05/21/2019	\$189,810	\$189,810	\$12,273	\$12,273
		Competitive	Υ	140705	Randstad North America, Inc.	Payroll Services	05/24/2019	\$21,936	\$21,936	\$21,936	\$21,936
		Competitive	Y	140906	Randstad North America, Inc.	Payroll Services	05/31/2019	\$34,362	\$34,362	\$23,210	\$23,210
		Competitive	Y	141371	Triad Technology Partners LLC	Tableau Maintenance 1 yr	06/13/2019	\$70,275	\$70,275	\$70,275	\$70,275
		Competitive	Y	142763	ESRI, Incorporated	ArcGIS Desktop and Spatial	07/22/2019	\$22,200	\$22,200	\$22,200	\$22,200
		Competitive	Υ	143225	Hewlett-Packard Enterprise Company	HP Server Maintenance	08/05/2019	\$5,319	\$5,319	\$5,319	\$5,319
		Competitive	Y	143463	Direct Packet Inc.	Video Service Renewal - Cisco	08/07/2019	\$26,769	\$26,769	\$26,769	\$26,769
		Competitive	Υ	150713	SHI, Inc.	ADA - Compliance Sub. 2020 -21	01/29/2020	\$15,544	\$15,544	\$15,544	\$15,544
		Competitive	Υ	150906	Systems Management Planning, Inc.	AeroHive Subscription 1 year	02/03/2020	\$5,414	\$5,414	\$5,414	\$5,414
		Competitive	Υ	151551	SHI, Inc.	Embarcadero ER/ Studio	02/19/2020	\$17,502	\$17,502	\$17,502	\$17,502
		Competitive	Υ	152212	Systems Management Planning, Inc.	VMware Licensing - End User	03/05/2020	\$21,244	\$21,244		
		Competitive	Υ	152384	SHI, Inc.	Adobe DC Pro Creative Cloud	03/11/2020	\$55,457	\$55,457		
		Discretionary	N	40419	First Quality Maintenance II, LLC	Office Cleaning Contract	03/24/2014		\$10,285		\$10,006
		Discretionary	N	44235	Adirondack Area Network	2015 Video Recording Services	07/17/2014		\$17,000		\$16,425
		Discretionary	N	44278	Network Experts of New York, Inc.	Miscellaneous Network Services	07/17/2014		\$60,000		\$45,850
		Discretionary	N	49185	FTI Consulting Technology LLC	ITG-0083: Legal-Ringtail	10/06/2014		\$19,173		\$18,426
		Discretionary	N	61064	Tech Valley Talent, LLC	Metrics Database Buildings Por	03/20/2015		\$200,000		\$153,329
		Discretionary	N	73664	Tech Valley Talent, LLC	Infornatica, Data Quality Staf	09/24/2015		\$200,000		\$198,000
		Discretionary	N	91069	Unique Comp Inc.	Data Governance contractor	02/22/2016		\$199,500		\$195,140
		Discretionary	N	91079	mindSHIFT Technologies, Inc.	Mindshift - Offsite Hosting	02/22/2016		\$14,020		\$1,300
		Discretionary	N	93999	Bizodo Inc	Seamless Professional Services	03/25/2016		\$25,000		
		Discretionary	N	96887	Network Experts of New York, Inc.	Peoplesoft Development	04/22/2016		\$350,000	\$63,428	\$186,553
		Discretionary	N	100023	Concur Technologies, Inc.	Concur Tech Expense Expert	06/21/2016		\$18,000		\$16,784
		Discretionary	N	101162	Control Solutions Group, Inc.	Control Panel for HVAC in NYC	07/18/2016		\$9,852		\$9,714
		Discretionary	N	107295-1	New York State Ag & Markets	2017 NYS Fair Exhibit	05/26/2017		\$9,475		\$8,200

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PCMT	NYSERDA ADMINISTRATION	Discretionary	N	116250	Control Solutions Group, Inc.	NYSERDA ADMINISTRATION	07/25/2017		\$10,238		\$10,006
		Discretionary	N	116252	Kelliher Samets Volk	Salesforce Optimization	07/25/2017		\$46,480	\$1,020	\$45,723
		Discretionary	N	122566	205 Wolf Holdings, LLC	2018 NYSERDA All Staff Meeting	01/12/2018		\$6,500		\$5,826
		Discretionary	N	126096	Control Solutions Group, Inc.	HVAC Maintenance NYC Office	04/24/2018	\$2,584	\$15,155	\$5,754	\$14,795
		Discretionary	N	129291	Bishop House Consulting, Inc.	NYSERDA ADMINISTRATION	07/25/2018	\$32,000	\$80,000	\$44,000	\$80,000
		Discretionary	N	131050	Bynder LLC	WebDAM Photo Library	09/10/2018	\$8,975	\$17,950	\$8,975	\$17,950
		Discretionary	N	135135	Lumsden & McCormick, LLP	Tax Compliance 2018- 3yr cycle	12/13/2018		\$20,200	\$20,200	\$20,200
		Discretionary	N	135136	TEKSYSTEMS Global Services, LLC	Agile Team Training Camp	12/13/2018		\$17,743		
		Discretionary	N	136833	ThunderCat Technology LLC	Circuit for NYC Office	02/05/2019		\$34,689		
		Discretionary	N	136884	ThunderCat Technology LLC	Precise Peoplesoft - Remote	02/06/2019		\$15,120	\$15,120	\$15,120
		Discretionary	N	137216	Randstad North America Inc	Temporary mail room clerk	02/15/2019		\$22,425	\$8,161	\$11,077
		Discretionary	N	139040	Environment & Energy Publishing, LLC	NYSERDA ADMINISTRATION	04/10/2019	\$13,195	\$13,195	\$13,195	\$13,195
		Discretionary	N	139947	Employee Leasing of Greater NY	TS.006 - Facilities Support	05/06/2019	\$49,335	\$49,335	\$14,937	\$14,937
		Discretionary	N	140164	Energy Week Holdings, LLC	2019 New York Energy Week	05/10/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	140400	Fusco Personnel, Inc.	Temporary Services - Reception	05/20/2019	\$9,461	\$9,461	\$8,069	\$8,069
		Discretionary	N	140548	ThunderCat Technology LLC	NYC - Circuit 3 years	05/21/2019	\$39,750	\$39,750		
		Discretionary	N	141160	First Quality Maintenance II, LLC	NYC Office Cleaning-15th Floor	06/07/2019	\$19,292	\$19,292	\$19,292	\$19,292
		Discretionary	N	141207	Milliman, Inc.	GASB74 Liab GASB75 OPEB exp	06/10/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	141372	New York State Ag & Markets	2019 New York State Fair	06/14/2019	\$8,956	\$8,956	\$8,956	\$8,956
		Discretionary	N	142614	Network Experts of New York, Inc.	WAN Redundancy Prof Services	07/17/2019	\$30,960	\$30,960	\$22,560	\$22,560
		Discretionary	-	143980	Taylor Group LTD	NYS Fair 2019 Display	08/21/2019	\$7,820	\$7,820	\$7,820	\$7,820
		Discretionary	N	146369	OwnBackup Inc.	Ownbackup Archiver, Salesforce	10/21/2019	\$12,931	\$12,931	\$12,931	\$12,931
		Discretionary	N	147025	Network Craze Technologies	Network Data Center Project	11/01/2019	\$24,920	\$24,920	\$24,920	\$24,920
		Discretionary	N	148656	Low-Level Radioactive Waste Forum, Inc.	NYSERDA ADMINISTRATION	12/09/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	148951	Ringlead, Inc.	RingLead Software 2020-2023	12/16/2019	\$49,000	\$49,000	\$49,000	\$49,000
		Discretionary	N	149290	Tech Valley Talent, LLC	NYSERDA ADMINISTRATION	12/19/2019	\$32,090	\$32,090	\$32,090	\$32,090
		Discretionary	N	149729	Dowd-Witbeck Printing Corp.	Printing and mailing services	01/02/2020	\$11,848	\$11,848	\$1,680	\$1,680
		Discretionary	N	151910	Amazon Capital Servies, Inc.	Docking Stations - Chromebooks	02/28/2020	\$8,450	\$8,450		
		Discretionary	Υ	34744	Lumsden & McCormick, LLP	NYSERDA ADMINISTRATION	08/20/2013		\$10,000		
		Discretionary	Υ	35070	Network Experts of New York, Inc.	NYSERDA ADMINISTRATION	08/30/2013		\$20,276		\$19,312
		Discretionary	Υ	43155	Currier McCabe Associates	12 Month contractor - Help Des	06/19/2014		\$108,000		\$896
		Discretionary	Υ	49527	EC Infosystems, Inc.	EDI TransFulfillment Services	10/10/2014		\$200,000		\$197,955
		Discretionary	Υ	49897	Capital District Records Management, Inc	OffsiteTape Storage & Courier	10/16/2014		\$5,132		\$5,102
		Discretionary	Υ	53352	Tech Valley Talent, LLC	Data Quality - Data Quality An	11/26/2014		\$200,000		\$65,280
		Discretionary	Υ	56615	Coletree Security Corporation	NYSERDA ADMINISTRATION	01/08/2015		\$5,000		\$588
		Discretionary	Υ	56948	Tech Valley Talent, LLC	Firewall & Information securit	01/14/2015		\$191,100		\$187,508
		Discretionary	Υ	57420	Tech Valley Talent, LLC	Project Manager to Support NEI	01/22/2015		\$200,000		\$62,388

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PCMT	NYSERDA ADMINISTRATION	Discretionary	Υ	58719	Systems Management Planning, Inc.	Webex Support - Renewal	02/12/2015		\$28,469		\$16,709
		Discretionary	Υ	60438	Bizodo Inc	Seamless Doc license service	03/10/2015		\$25,000		\$22,500
		Discretionary	Y	61044	Tech Valley Talent, LLC	Data Warehouse Analyst	03/19/2015		\$200,000		\$30,624
		Discretionary	Y	61065	Tech Valley Talent, LLC	Project Manager for ITG-0058 D	03/20/2015		\$200,000		\$160,125
		Discretionary	Y	62154	ePlus inc	Bulk Service consulting servic	04/09/2015		\$5,000		
		Discretionary	Υ	63798	Network Experts of New York, Inc.	Off-Site Backup Replication	05/01/2015		\$12,000		\$8,000
		Discretionary	Υ	67410	Tech Valley Talent, LLC	Server Admin-#2	06/18/2015		\$195,000		\$181,375
		Discretionary	Υ	68016	Tech Valley Talent, LLC	Buiness Intelligence Dev.	06/29/2015		\$200,000		
		Discretionary	Υ	69266	Network Experts of New York, Inc.	Contract Project Manager	07/17/2015		\$196,650		\$194,425
		Discretionary	Υ	71766	Network Experts of New York, Inc.	Helpdesk Technician	08/26/2015		\$103,950		\$93,974
		Discretionary	Υ	72723	Network Experts of New York, Inc.	.Net Developer for Staff Aug -	09/09/2015		\$174,525		\$131,207
		Discretionary	Y	77909	Unique Comp Inc.	Tableau Developer -	10/15/2015		\$199,939		\$189,266
		Discretionary	Y	77910	Tech Valley Talent, LLC	Data Architect	10/15/2015		\$200,000		\$191,875
		Discretionary	Υ	82806	GCOM Software LLC	Salesforce Administrator Suppo	12/02/2015		\$199,500		\$158,745
		Discretionary	Υ	87393	Tech Valley Talent, LLC	Tableau BI Developer	01/19/2016		\$199,823		\$176,283
		Discretionary	Υ	92213	Systems Management Planning, Inc.	Webex Services - Renewal	03/03/2016		\$25,661		\$13,901
		Discretionary	Υ	104111	Network Experts of New York, Inc.	Helpdesk Technician	09/26/2016		\$120,000		\$103,470
		Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017	\$5,000	\$15,000	\$5,000	\$5,546
		Discretionary	Υ	110323	Systems Management Planning, Inc.	Webex Services - Renewal 17-18	02/15/2017		\$25,101		\$13,901
		Discretionary	Υ	113597	Network Experts of New York, Inc.	Adoption /Training Coordinator	05/09/2017		\$90,000		\$36,383
		Discretionary	Υ	117673	Network Experts of New York, Inc.	Helpdesk Technician	08/29/2017		\$130,000		\$128,863
		Discretionary	Υ	118940	EC Infosystems, Inc.	Electronic Data Interchange	09/29/2017		\$190,650		\$132,600
		Discretionary	Y	118970	Performance Systems Development	TREAT SITE License 17.18	10/02/2017		\$6,400		
		Discretionary	Y	130036	Fiber Technologies Networks, LLC	Renewal: Dark Fiber	08/13/2018		\$11,940	\$4,040	\$11,014
		Discretionary	Y	131667	Network Experts of New York, Inc.	Helpdesk Technician	09/24/2018		\$142,000	\$86,663	\$128,520
		Discretionary	Y	133472	ThunderCat Technology LLC	Atlassian (Jira) - Phase 1	11/02/2018	\$94,567	\$199,875	\$23,840	\$121,202
		Discretionary	Υ	133824	Troy Web Consulting, LLC	Troy Web Hosting - Cloud 1 yr	11/09/2018		\$7,380	\$5,625	\$7,380
		Discretionary	Y	137480	ThunderCat Technology LLC	Precise Peoplesoft Software	02/25/2019		\$66,842	\$66,842	\$66,842
		Discretionary	Y	140000	APPEXTREMES, LLC	Conga Composer 2019-2020	05/07/2019	\$7,200	\$7,200	\$7,200	\$7,200
		Discretionary	Y	140318	Systems Management Planning, Inc.	ManageEngine Desktop Central	05/15/2019	\$10,419	\$10,419	\$10,419	\$10,419
		Discretionary	Y	142142	Sitecore USA, Inc.	Sitecore License 2019-2020	07/03/2019	\$25,300	\$25,300	\$25,300	\$25,300
		Discretionary	Y	142227	Center for Internet Security Inc	CIS Albert SM Monitoring 1 yr.	07/08/2019	\$7,440	\$7,440	\$7,440	\$7,440
		Discretionary	Y	142229	AlienVault, Inc.	Alien Vault Licensing 1 year	07/08/2019	\$12,209	\$12,209	\$12,209	\$12,209
		Discretionary	Υ	144303	New York State Forum for IRM	NYS Forum Agency Membership	08/29/2019	\$5,500	\$5,500	\$5,500	\$5,500
		Discretionary	Υ	144754	ThunderCat Technology LLC	Atlassian Licenses - Jira	09/11/2019	\$77,142	\$77,142	\$77,142	\$77,142
		Discretionary	Y	147284	Netsparker Limited	NetSparker Software - 1 year	11/07/2019	\$6,000	\$6,000	\$6,000	\$6,000
		Discretionary	Y	148094	OwnBackup Inc.	OwnBackup - Salesforce Backup	11/25/2019	\$15,608	\$15,608	\$15,608	\$15,608

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PCMT	NYSERDA ADMINISTRATION	Discretionary	Υ	150956	ThunderCat Technology LLC	Rightstar Scanstar System	02/04/2020	\$5,390	\$5,390	\$5,390	\$5,390
		Discretionary	Υ	151228	ThunderCat Technology LLC	DocuSign Subscription 20 - 21	02/11/2020	\$87,270	\$87,270	\$87,270	\$87,270
		Discretionary	Υ	152271	Bizodo Inc	Seamlessdocs Licensing 20-21	03/09/2020	\$42,740	\$42,740	\$42,740	\$42,740
		Non-Competitive	N	40374	Tech Valley Talent, LLC	Business Analyst / Project Man	03/19/2014		\$200,000		\$181,400
		Non-Competitive	N	42005	Access Systems, Inc.	Enterprise Content Management	05/23/2014		\$133,500		\$117,838
		Non-Competitive	N	46873	Tobi Jo Creative, LLC	NYSERDA Website Redesign	09/04/2014		\$109,885		\$107,638
		Non-Competitive	N	68802	First Quality Maintenance II, LLC	NYC Office Cleaning	07/10/2015		\$88,842		\$82,549
		Non-Competitive	N	116344	Kelliher Samets Volk	Digital Transformation	07/26/2017		\$88,800		\$75,735
		Non-Competitive	N	118453	inMotion, Inc.	inMotion Project Management	09/25/2017		\$74,500	\$24,000	\$74,500
		Non-Competitive	N	119824	First Quality Maintenance II, LLC	NYSERDA ADMINISTRATION	10/26/2017	\$31,250	\$129,198	\$31,250	\$123,893
		Non-Competitive	N	136610	Metropolitan Life Insurance Company	NYSERDA ADMINISTRATION	01/29/2019		\$300,000	\$206,623	\$275,843
		Non-Competitive	Υ	41690A	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	03/02/2016		\$279,735		\$278,520
		Non-Competitive	Υ	46084	First Quality Maintenance II, LLC	NYSERDA ADMINISTRATION	08/22/2014		\$214,311		\$213,899
		Non-Competitive	Υ	62785	Siteimprove, Inc.	Siteimprove - Renewal	04/20/2015		\$5,972	\$5,972	\$5,972
		Non-Competitive	Υ	69931	Amphora Consulting	Strategic Program Dev Training	07/28/2015		\$108,400		\$86,000
		Non-Competitive	Υ	86074	Unique Comp Inc.	NEIS Functional Specification	12/31/2015		\$240,000		\$202,312
		Non-Competitive	Υ	114437	IESI NY Corporation	Trash Removal from NYC Office	06/05/2017	\$5,060	\$15,146	\$5,060	\$14,974
		Competitive		143459	Randstad North America, Inc.	Payroll Services	08/07/2019	\$21,600	\$21,600	\$14,867	\$14,867
		Competitive	N	85023	22nd Century Technologies, Inc.	Staff Augmentation	12/18/2015	\$191,100	\$585,000	\$203,742	\$486,573
		Competitive	N	85027	Unique Comp Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$1,034,410	\$6,537,235	\$1,465,885	\$5,190,815
		Competitive	N	85029	GCOM Software LLC	Staff Aug Umbrella Agreement	12/18/2015		\$1,645,800	\$104,595	\$1,221,540
		Competitive	N	98512	NYS Office of General Services	2016-2019 Microsoft ELA 3 year	05/16/2016		\$142,080	\$94,680	\$139,325
		Competitive	N	102977	Xerox Corp	Xerox Maintenance Agreement	08/30/2016		\$89,200	\$1,000	\$89,163
		Competitive	N	110542	Infosys International Inc	RFP3365 Private Cloud Hosting	02/21/2017		\$861,843	\$162,809	\$839,987
		Competitive	N	113877	Randstad North America, Inc.	Temporary Services	05/18/2017		\$110,500	\$0	\$78,538
		Competitive	N	114702	Randstad North America, Inc.	Temporary Services	06/09/2017		\$150,000		\$107,517
		Competitive	N	135250	Tech Valley Talent, LLC	TWO26 Server Ops	12/17/2018	\$267,188	\$452,438	\$183,540	\$204,583
		Competitive	N	136123	TEKsystems Inc	TWO EVConsultant	01/15/2019		\$6,800		\$1,445
		Competitive	N	138374	Systems Management Planning, Inc.	NET App Flash Storage 3 years	03/26/2019	\$24,205	\$24,205	\$20,602	\$20,602
		Competitive	N	139253	TVC Albany Inc.	FirstLight - Redundant for Alb	04/17/2019	\$57,600	\$57,600	\$10,455	\$10,455
		Competitive	N	139255	Crown Castle Fiber LLC	Primary Internet - ALB,NYC,BUF	04/17/2019	\$146,952	\$146,952	\$46,667	\$46,667
		Competitive	N	142986	Sive Paget & Riesel PC	FOIL related Services	07/26/2019	\$15,863	\$15,863	\$14,360	\$14,360
		Competitive	N	143062	HyperGen Inc	PeopleSoft Support Services	07/30/2019	\$2,000,000	\$2,000,000	\$202,289	\$202,289
		Competitive	N	143614	Sive Paget & Riesel PC	NYSERDA ADMINISTRATION	08/12/2019	\$5,000	\$5,000	\$4,049	\$4,049
		Competitive	N	144160	NYS Office for Technology	O365 Data Circuit 9/19 - 7/22	08/26/2019	\$11,232	\$11,232	\$1,248	\$1,248
		Competitive	N	144203	Kelliher Samets Volk	TWO 29 Global Paid Search	08/27/2019	\$12,000	\$12,000	\$8,500	\$8,500
		Competitive	N	144623	Tech Valley Talent, LLC	TWO Salesforce BA - Himmelfarb	09/09/2019	\$474,640	\$474,640	\$81,491	\$81,491

	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Competitive	N	144820	Harris Wiltshire & Grannis LLP	Green Economy Research	09/12/2019	\$75,000	\$75,000	\$70,490	\$70,490
		Competitive	N	145372	Randstad North America, Inc.	TS.010 - Payroll Services	09/26/2019	\$26,325	\$26,325	\$16,794	\$16,794
		Competitive	N	148732	Spectrotel Holding Company LLC	Spectrotel Telecommunication	12/10/2019	\$37,980	\$37,980		
		Competitive	N	149286	Randstad North America, Inc.	Payroll Services	12/19/2019	\$14,476	\$14,476	\$3,580	\$3,580
		Competitive	N	149846	Crown Castle Fiber LLC	Primary WAN Circuit NYGB	01/07/2020	\$64,512	\$64,512		
		Competitive	N	150238	Harris Wiltshire & Grannis LLP	Outside Counsel for Resource A	01/15/2020	\$75,000	\$75,000	\$10,993	\$10,993
		Competitive	N	152236	Provantage, LLC	Monitors - 26 Provantage	03/06/2020	\$5,064	\$5,064		
		Competitive	N	152642	Sive Paget & Riesel PC	Internal SEQRA Practice Review	03/17/2020	\$5,000	\$5,000		
		Competitive	Y	21239	Bond, Schoeneck & King, PLLC	Outside Legal Services	12/02/2010		\$50,000	\$7,972	\$48,916
		Competitive	Υ	32004	First Columbia Property Services, LLC	Property Management Services	03/24/2016		\$1,339,311		\$1,287,451
		Competitive	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$1,325,899		\$1,107,856
		Competitive	Υ	38396	Northco Products, Inc.	Konica Minolta Copier	12/19/2013		\$20,000	\$776	\$19,785
		Competitive	Υ	62858	Marshall & Sterling, Inc.	Property Liability and Other	04/20/2015	\$275,000	\$1,114,702	\$259,699	\$1,099,401
		Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$1,281,825	\$7,557,133	\$1,183,165	\$5,720,213
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016		\$2,633,826	\$69,537	\$2,244,408
		Competitive	Υ	98840	KPMG LLP	Audit Services	05/24/2016	\$14,960	\$547,960	\$115,750	\$312,750
		Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016	\$269,129	\$958,501	\$266,880	\$780,599
		Competitive	Υ	107299	CLEAResult Consulting, Inc.	Phone Email & Web Support	11/28/2016		\$438,004	\$132,093	\$413,663
		Competitive	Υ	110542A	Raj Technologies Inc.	Modification - Name Change	09/13/2019	\$553,195	\$553,195	\$178,605	\$178,605
		Competitive	Υ	114189	ADP, Inc.	ADP Payroll and HR Svcs 2017	05/26/2017		\$180,521	\$67,234	\$179,901
		Competitive	Y	119371	International Business Machines	Replacement for PPSI Site	10/16/2017		\$34,129		
		Competitive	Υ	120292	GCOM Software LLC	Salesforce	11/07/2017	\$1,200,000	\$4,051,135	\$1,456,068	\$3,704,198
		Competitive	Υ	124908	First Columbia Property Services, LLC	Property Management	03/27/2018	\$290,372	\$519,046	\$257,252	\$454,346
		Competitive	Υ	127360	Xerox Corp	NYSERDA ADMINISTRATION	05/30/2018		\$269,102	\$125,361	\$150,045
		Competitive	Y	130233	ITS-NY	Office 365 2018-2019	08/16/2018		\$96,970		
		Competitive	Υ	130233-1	NYS Office for Technology	Office 365 2018-2019	12/12/2018		\$96,697		\$89,581
		Competitive	Υ	133389	mindSHIFT Technologies, Inc.	RFP 3919-Sitecore CMS Admin	11/01/2018		\$800,000	\$419,750	\$436,433
		Competitive	Υ	136369	Unique Comp Inc.	TWO SQL ETL Dev.	01/23/2019	\$176,800	\$353,600	\$155,468	\$168,218
		Competitive	Υ	136980	Unique Comp Inc.	TWO Sr. Systems Admin Bhanu	02/08/2019	\$176,800	\$353,600	\$167,960	\$172,040
		Competitive	Y	137985	Unique Comp Inc.	TWO 1 Server Op's Support	03/12/2019		\$203,775	\$139,403	\$139,403
		Competitive	Y	138056	Gartner Inc.	Gartner Services 2019-2020	03/13/2019		\$55,356	\$55,336	\$55,336
		Competitive	Y	138080	SHI, Inc.	Adobe Acrobat Pro DC - 1 yr.	03/14/2019		\$48,064		
		Competitive	Y	140703	Randstad North America, Inc.	Payroll Services	05/24/2019	\$54,023	\$54,023	\$36,865	\$36,865
		Competitive	Υ	140704	Randstad North America, Inc.	Payroll Services	05/24/2019	\$56,142	\$56,142	\$36,048	\$36,048
		Competitive	Υ	141364	Unique Comp Inc.	TWO Salesforce Admin. Senecal	06/13/2019	\$139,913	\$139,913	\$89,705	\$89,705
		Competitive	Υ	141803	Fusco Personnel, Inc.	TS.002_Multifamily Coordinator	06/25/2019	\$31,325	\$31,325	\$27,497	\$27,497
		Competitive	Y	145315	Bond, Schoeneck & King, PLLC	HR Outside Counsel Assistance	09/25/2019	\$25,000	\$25,000	\$10,494	\$10,494

Category	Initiative	Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Competitive	Y	147145	NYS Office of Information Technology Ser	Office 365: 4/2019 - 3/2020	11/05/2019	\$140,112	\$140,112	\$97,265	\$97,265
		Competitive	Υ	147286	Randstad North America, Inc.	Temporary Services	11/07/2019	\$106,880	\$106,880	\$5,306	\$5,306
		Competitive	Y	148735	Delta Dental of New York	Delta Dental Premiums 2020-202	12/10/2019	\$675,000	\$675,000	\$105,445	\$105,445
		Competitive	Y	149636	Randstad North America, Inc.	Payroll Services	12/30/2019	\$21,600	\$21,600	\$6,577	\$6,577
		Competitive	Y	149845	Oracle America, Inc.	Peoplesoft - Oracle 2020 /2021	01/07/2020	\$54,227	\$54,227		
		Competitive	Υ	150242	Randstad North America, Inc.	Temporary Services	01/15/2020	\$96,194	\$96,194	\$4,909	\$4,909
		Competitive	Υ	150711	TRC Energy Services	Staff Augmentation Services	01/29/2020	\$336,473	\$336,473		
		Competitive	Υ	150772	Randstad North America, Inc.	Temporary Services	01/30/2020	\$101,537	\$101,537	\$4,040	\$4,040
		Competitive	Υ	152081	ADP, Inc.	ADP Payroll and HR Services	03/03/2020	\$205,154	\$205,154		
		Competitive	Υ	152608	Marshall & Sterling, Inc.	RFP 4301 Insurance	03/16/2020	\$246,745	\$246,745		
		Discretionary	N	43614	Computer SOS Inc.	Miscellaneous Buffalo/West Val	07/01/2014		\$7,980	\$443	\$5,934
		Discretionary	N	104775	Employee Leasing of Greater NY	Temp Employee Services	10/11/2016	\$54,600	\$370,622	\$61,255	\$333,925
		Discretionary	N	114801	Xerox Corp	Xerox Mobile Print - 3 years	06/13/2017		\$20,985	\$12,575	\$12,712
		Discretionary	N	115913	Harris Wiltshire & Grannis LLP	NYSERDA ADMINISTRATION	07/17/2017		\$24,999		\$24,255
		Discretionary	N	119704	Arctic Air Mechanical Corp	HVAC for NY Office	10/24/2017	\$7,000	\$23,800	\$12,600	\$21,000
		Discretionary	N	121166	NGenious Solutions Inc.	SharePoint Online Consulting	11/30/2017		\$35,000		\$23,363
		Discretionary	N	124427	Independent Security Services, Inc.	Security Servies	03/19/2018		\$5,000		\$813
		Discretionary	N	129114	Rochester Computer Recycling & Recovery,	Data Destruction Services 2 yr	07/18/2018		\$25,000		
		Discretionary	N	136124	Adirondack Area Network	2019 AA NET Recording Services	01/15/2019	\$15,000	\$15,000	\$14,466	\$14,466
		Discretionary	N	141324	Towerstream 1 Incorporated	Circuit for NYC - Towerstream	06/12/2019	\$37,500	\$37,500	\$12,339	\$12,339
		Discretionary	N	141800	Employee Leasing of Greater NY	Temp TWO	06/25/2019	\$66,000	\$66,000	\$43,092	\$43,092
		Discretionary	N	143221	Crown Castle Fiber LLC	Dark Fiber 15 CC 17CC -2022	08/05/2019	\$35,280	\$35,280	\$7,960	\$7,960
		Discretionary	N	145269	Indeed Inc.	Job Postings	09/24/2019	\$19,500	\$19,500	\$11,023	\$11,023
		Discretionary	N	145444	IESI NY Corporation	Trash Removal for the 19th FI	09/27/2019	\$7,830	\$7,830	\$5,876	\$5,876
		Discretionary	N	146716	W & E Phillips Locksmith, Inc	NYSERDA ADMINISTRATION	10/28/2019	\$10,000	\$10,000	\$7,134	\$7,134
		Discretionary	N	146967	Towerstream 1 Incorporated	Secondary WAN Circuit - NYGB	10/31/2019	\$37,500	\$37,500	\$5,081	\$5,081
		Discretionary	N	149542	SHI, Inc.	NYSERDA ADMINISTRATION	12/27/2019	\$5,498	\$5,498	\$4,771	\$4,771
		Discretionary	N	152140	Technology Professionals Group Inc.	Salesforce CRM Advisory	03/04/2020	\$84,000	\$84,000		
		Discretionary	Y	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$24,100		\$23,767
		Discretionary	Y	68677	Commercial Investigations LLC	Background Checks	07/09/2015	\$10,000	\$40,000	\$6,741	\$30,775
		Discretionary	Y	108816	Capital District Records Management, Inc	Media Storage & Destruction	01/09/2017		\$6,768	\$1,018	\$6,567
		Discretionary	Y	110904	NYS Office for Technology	O365 Point to Point Circuit	03/01/2017		\$22,464	\$4,858	\$22,330
		Discretionary	Y	115432	Troy Web Consulting, LLC	SEP Comment Sysytem	07/03/2017		\$14,985		\$10,598
		Discretionary	Y	124007	Concur Technologies, Inc.	2018-2020 Concur annual cost	03/01/2018	\$6,700	\$39,700	\$18,246	\$35,117
		Discretionary	Y	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	04/17/2018		\$49,999	\$1,669	\$49,999
		Discretionary	Y	126194	LexisNexis	Online Legal Research Access	04/26/2018		\$49,968	\$16,908	\$28,180
		Discretionary	Y	128475	Diana L. McWilliams Interior Design, PLL	Capital Plan Renov Study	06/28/2018		\$75,000	\$3,825	\$51,307

NYSERDA ANNUAL CONTRACTS REPORT - Section 1: All Contracts Open During the Period 4/1/2019 to 3/31/2020

Category II	nitiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT N	NYSERDA ADMINISTRATION	Discretionary	Υ	137525	AmTrust North America Inc.	NYSERDA ADMINISTRATION	02/26/2019		\$42,000	\$31,008	\$31,008
		Discretionary	Υ	145820	Network Experts of New York, Inc.	Helpdesk Tech John Campagna	10/07/2019	\$150,000	\$150,000	\$20,513	\$20,513
		Discretionary	Υ	146144	Troy Web Consulting, LLC	Troy Web Hosting - 1yr Cloud	10/15/2019	\$7,380	\$7,380	\$1,845	\$1,845
		Discretionary	Υ	152278	Atlantic Data Security, LLC	Check Point Training	03/09/2020	\$15,000	\$15,000		
		Discretionary	Υ	152822	Randstad North America, Inc.	Temp Services	03/23/2020	\$112,223	\$112,223		
		Non-Competitive		141162	Control Solutions Group, Inc.	HVAC Maintenance NYC Office	06/07/2019	\$10,900	\$10,900	\$8,175	\$8,175
		Non-Competitive	N	113027	NYS Office for Technology	Office 365 - 2016 - 2017	04/24/2017		\$67,766		\$65,996
		Non-Competitive	N	141158	First Quality Maintenance II, LLC	NYC Office Cleaning	06/07/2019	\$122,137	\$122,137	\$120,843	\$120,843
		Non-Competitive	N	151000	First Quality Maintenance II, LLC	Janitorial Services - NYC 19th	02/05/2020	\$107,988	\$107,988		
_		Non-Competitive	Υ	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	04/17/2018	\$215,001	\$215,001	\$214,503	\$214,503
N	NYSERDA Fixed Asset	Competitive	N	26140	Albany Dodge	New Fleet Car	01/05/2012		\$21,121		\$21,121
		Competitive	N	29983-1	Ally Financial Inc.	2012 Chevy Volt	12/21/2012		\$36,272		\$36,272
		Competitive	N	107793	Carbone Auto Group, LLC	Replacement vehicle for Admini	12/09/2016		\$45,630		\$45,630
		Competitive	N	110813	Netanium Inc	Checkpoint Firewall Upgrade	02/28/2017		\$27,627		\$27,627
		Competitive	N	111002	Netanium Inc	Check Point Webair for NEIS	03/03/2017		\$73,524		\$73,524
		Competitive	N	113356	FM Office Express	8 NYC Work Stations	05/02/2017		\$15,345		\$15,345
		Competitive	N	123751	Nye Automotive Group, Inc	Ford Fusion fleet	02/26/2018		\$24,788		\$24,788
	_	Competitive	N	129626	FM Office Express	Furniture 1359 Broadway 15th	08/01/2018		\$84,185		\$84,185
		Competitive	N	130454	Offshore Electric Corp.	NYC Suite 1540 Electrical Work	08/24/2018		\$17,496		\$17,496
		Discretionary	N	27624	Carrow Real Estate Services, LLC	Office Buildout at 15	05/01/2012		\$10,962		\$10,962
		Discretionary	N	30648	Tech Home Electric, LLC	ev plug in charger	12/18/2012		\$5,465		\$5,465
		Discretionary	N	114799	DFB Sales Inc.	Black-out shades for NYC	06/13/2017		\$6,325		\$6,325
		Discretionary	N	135863	W & E Phillips Locksmith, Inc	17CC Card Readers Reception	01/07/2019		\$13,820	\$13,820	\$13,820
		Discretionary	N	141740	Arcadia Chair Company	Office Furniture	06/24/2019	\$5,281	\$5,281	\$5,281	\$5,281
		Discretionary	Υ	117765	AlienVault, Inc.	Security Internet Events Mgt.	08/31/2017		\$48,356		\$48,356
		Discretionary	Υ	130452	W & E Phillips Locksmith, Inc	Card Reader/Security System	08/23/2018		\$6,859		\$6,859
		Discretionary	Υ	143162	Network Craze Technologies	Redundant Network Gear - NYC	08/01/2019	\$19,740	\$19,740	\$19,740	\$19,740
		Competitive	N	28043	Verizon Network Integration Corp.	Auto Attendant	06/12/2012		\$6,274		\$6,274
		Competitive	N	64491	Xerox Corp	Copier Purchase	05/12/2015		\$15,674		\$15,674
		Competitive	N	97272	Systems Management Planning, Inc.	NetApp Flash Strorage for VDI	04/29/2016		\$95,359		\$95,359
		Competitive	N	104430	nfrastructure	Network Upgrade - Cisco	09/29/2016		\$253,987		\$253,987
		Competitive	N	108822	Business Environments	workstations	01/09/2017		\$19,600		\$19,600
		Competitive	N	110325	nfrastructure	Equipment to Support Network	02/15/2017		\$8,280		\$8,280
		Competitive	N	114058	Business Environments	sit/stand stations	05/23/2017		\$29,952		\$29,952
		Competitive	N	116664	nfrastructure	2 HP VDI Servers	08/03/2017		\$37,136		\$37,136
		Competitive	N	119645	Systems Management Planning, Inc.	NetApp 2620 Storage Array	10/23/2017		\$27,278		\$27,278
		Competitive	N	124906	Zones LLC	RFP 3670 VOIP	03/27/2018		\$319,735	\$164,940	\$164,940

Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
NYSERDA Fixed Asset	Competitive	N	139099	Maguire Cars LLC		04/12/2019	\$28,887	\$28,887		
	Competitive	Υ	60292	ESRI, Incorporated	ESRI Arc Server - 1 year	03/06/2015		\$32,643		\$32,64
	Competitive	Υ	104106	nfrastructure	Tintri Flash Storage - Renewal	09/22/2016		\$7,548		\$7,54
	Competitive	Υ	150241	SHI, Inc.	Pure Storage	01/15/2020	\$46,211	\$46,211	\$46,211	\$46,21
	Discretionary		141931	ABH Capital Management, LLC	VDI Server	06/28/2019	\$7,607	\$7,607	\$7,607	\$7,60
	Discretionary		146023	Applied Design Initiative LLC		10/11/2019	\$16,320	\$16,320	\$12,266	\$12,26
	Discretionary	N	24708	ASKCO Electric Supply Co Inc	Upgrade NYSERDA meters	10/13/2011		\$16,554		\$16,5
	Discretionary	N	27625	LCO Buildings LLC	Office Buildout at Buffalo Reg	05/01/2012		\$6,853		\$6,8
	Discretionary	N	34467	Gard Tec Security Svcs., Inc.	Security System for 15 Columbi	08/13/2013		\$14,220		\$14,2
	Discretionary	N	34468	Gard Tec Security Svcs., Inc.	15 Columbia Circle Office Secu	08/13/2013		\$14,055		\$14,0
	Discretionary	N	43567	Phire, Inc	Phire - PeopleSoft Renewal - 3	06/30/2014		\$41,715		\$41,7
	Discretionary	N	45875	Network Experts of New York, Inc.	Albany: Redundant Checkpoint H	08/19/2014		\$29,872		\$29,8
	Discretionary	N	101670	Gard Tec Security Svcs., Inc.	Security for West Valley offic	07/28/2016		\$9,657		\$9,6
	Discretionary	N	119825	ClipperCreek, Inc.	EV Charging Stations	10/26/2017		\$6,873		\$6,8
	Discretionary	N	126539	FM Office Express	Sit Stand Desks	05/07/2018		\$19,368		\$19,3
	Discretionary	N	143209	ABH Capital Management, LLC	Virtual Server 2	08/01/2019	\$7,327	\$7,327	\$7,327	\$7,3
	Discretionary	N	151010	Davies Office Refurbishing, Inc.	Furniture	02/06/2020	\$5,323	\$5,323	\$5,323	\$5,3
	Discretionary	N	151867	ABH Capital Management, LLC	VDI Server for Interns	02/26/2020	\$9,999	\$9,999	\$9,999	\$9,9
	Discretionary	Υ	150655	Tech Valley Talent, LLC	SecureAuth Appliance upgrade	01/28/2020	\$5,420	\$5,420	\$5,420	\$5,4
	Non-Competitive	N	57885	Performance Systems Development	TREAT Site License for VMWARE	01/28/2015		\$8,000		\$8,0
	Non-Competitive	N	151637	The Walters Company Air Conditioning, In	HVAC Replacement	02/20/2020	\$99,156	\$99,156		
	Non-Competitive	Υ	78360	Performance Systems Development	Treat Site Licenses - 16	10/20/2015		\$6,400		\$6,4
Off-Shore Wind Master Plan	Discretionary	N	132086	RHC Operating LLC	2018 OSW Supplier Forum	10/04/2018		\$107,034		\$97,C
	Discretionary	N	137984	Hyatt Corporation as agent for Hyatt Equ	Reception at IPF Conference	03/12/2019	\$14,430	\$33,030	\$28,030	\$33,0
	Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$299,271	\$1,213,490	\$282,664	\$973,0
	Competitive	Υ	111606	Ecology and Environment Engineering	RFP3462 Umbrella Agreement	03/16/2017		\$2,665,560	\$212,568	\$2,410,7
Off-Shore Wind Pre-Dev Act	Competitive	N	135752A	Fugro USA Marine, Inc.	TWO 1 Agreement 111941	03/05/2019		\$27,860	\$27,860	\$27,8
7.00	Discretionary	N	138378	Hilton Albany	2019 Offshore Wind Sup Forum	03/27/2019	\$16,540	\$16,540	\$16,540	\$16,5
	Discretionary	N	139764	New York Marriott Marquis	2019 OSW Supplier Forum	04/30/2019	\$89,766	\$89,766	\$86,467	\$86,4
	Competitive	N	118972	BioDiversity Research Institute	BRI: TWO umbrella agreement	10/02/2017		\$602,026	\$280,959	\$593,2
	Competitive	N	136703	Ecology and Environment Engineering	TWO#17 Fishing Lanes	01/31/2019		\$97,600	\$85,354	\$85,3
	Competitive	N	136704	Ecology and Environment Engineering	TWO#18 G&G surveys	01/31/2019		\$84,700		
	Competitive	Υ	111611	Quanta Technology LLC	RFP3462 Umbrella Agreement	03/16/2017		\$255,000	\$1,050	\$227,0
On-Site Energy Manager	Competitive	N	134956	The Cadmus Group, LLC	Task Order #3 from 104542	12/10/2018		\$139,971	\$78,496	\$134,3
	Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016		\$324,628	\$117,913	\$158,8
	Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018		\$600,000	\$228,485	\$264,9
OREC: Technical Support	Competitive	Υ	123374	ABB, Incorporated	RFQL3685 Round 1	02/13/2018		\$236,500	\$126,543	\$126,54

NYSERDA ANNUAL CONTRACTS REPORT - Section 1: All Contracts Open During the Period 4/1/2019 to 3/31/2020

Category		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	OREC: Technical Support	Competitive	Υ	134231	Merrimack Energy Group, Inc.	RFQL3926 Umbrella Contract	11/20/2018		\$65,000	\$65,000	\$65,000
		Competitive	Υ	134235	Power Advisory LLC	RFQL3926 Umbrella Contract	11/20/2018		\$65,000	\$65,000	\$65,000
		Competitive	Υ	134428	M.J. Beck Consulting LLC	RFQL3926 Umbrella Contract	11/27/2018		\$65,000	\$65,000	\$65,000
		Discretionary	N	130450	Lumsden & McCormick, LLP	OREC: Technical Support	08/23/2018		\$7,000		\$4,000
		Discretionary	N	136754	Kearns & West, Inc.	OSW RFP Facilitation Support	02/01/2019		\$36,433	\$34,219	\$34,219
		Discretionary	N	147154	PC Learning Centers, Inc.	E- and F-TWG meetings OSW	11/05/2019	\$5,000	\$5,000	\$3,861	\$3,861
		Discretionary	N	148158	Aramark Services Inc.	OSW Tech and Training Forum	11/26/2019	\$6,385	\$6,385	\$6,385	\$6,385
		Discretionary	N	152076	Federated Conservationists of Westcheste	West. Youth Climate Summit	03/03/2020	\$5,000	\$5,000	\$5,000	\$5,000
		Competitive	N	145204	The Cadmus Group, LLC	TWO 4 - RegionalFundingEntity	09/23/2019	\$68,360	\$68,360	\$16,554	\$16,554
		Competitive	N	147290A	DNV GL Energy Insights USA Inc.	TWO#1 OSW Resource Planning	02/27/2020	\$800,000	\$800,000	\$129,546	\$129,546
		Competitive	N	150572	Tetra Tech MA, Inc.	TWO#1 OSW Fisheries WG	01/24/2020	\$330,000	\$330,000	\$5,136	\$5,136
		Competitive	N	151865	BioDiversity Research Institute	BRI TWO1 ETWG Support	02/26/2020	\$338,483	\$338,483	\$23,102	\$23,102
		Competitive	Υ	111614	Levitan & Associates, Inc.	RFP3462 Umbrella Agreement	03/16/2017		\$1,445,000	\$339,556	\$1,377,267
		Competitive	Υ	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$305,000	\$334,550	\$36,133	\$56,531
		Competitive	Υ	147772	Ecology and Environment Engineering	TWO#19 SEIS for CLCPA	11/19/2019	\$246,058	\$246,058	\$89,909	\$89,909
	OTHER PROGRAM AREA	Competitive	N	30726	Village of Tupper Lake	Tupper Lake District Heat	12/21/2012		\$300,000	\$15,000	\$300,000
		Competitive	N	137165	Holland & Knight LLP	Nuclear Facility Bankruptcy	02/14/2019	\$272	\$35,272	\$35,272	\$35,272
		Competitive	N	139347	Cornell University	76West TWO 27	04/21/2019	\$199,573	\$199,573	\$164,050	\$164,050
		Competitive	Υ	30718	Cornell University	CornellNYC Tech Energy Program	12/21/2012		\$870,030		\$870,030
		Competitive	Υ	70333	Cornell University	76West Building a Clean Energy	08/03/2015		\$4,632,912	\$638,912	\$3,806,078
		Competitive	Υ	138830	Cornell University	76West TWO 29	04/03/2019	\$182,690	\$182,690	\$137,505	\$137,505
		Competitive	Υ	140909	Cornell University	76West TWO 28	05/31/2019	\$116,440	\$116,440	\$82,661	\$82,661
		Competitive	Υ	STD09118	Saratoga Media Group, Inc.	OTHER PROGRAM AREA	06/12/2009		\$59,378		\$58,598
		Discretionary	N	70365A	Essense Partners Inc.	76West Marketing Consultant	12/08/2016		\$40,026	\$602	\$40,022
		Discretionary	N	100693	Essense Partners Inc.	ZEV Marketing Support	07/08/2016		\$197,900		\$195,721
		Discretionary	N	129416	Ruskin Moscou Faltischek, P.C.'s	OSW legal incorporation filing	07/26/2018	\$1,226	\$7,904	\$1,226	\$7,904
		Discretionary	N	130510	GreenBiz Group, Inc.	2018 Verge Sponsorship	08/24/2018		\$7,500	\$7,500	\$7,500
		Discretionary	N	137763	NYS Department of Agriculture and Marke	EVSE Test System	03/06/2019	\$11,850	\$11,850	\$11,850	\$11,850
		Discretionary	N	141574	Cornell University	Entr @ Cornell Sponsorship	06/19/2019	\$30,000	\$30,000	\$30,000	\$30,000
		Discretionary	N	142462	B & W Sound Services, Inc.	76West Awards Audio Visual	07/12/2019	\$12,950	\$12,950	\$12,950	\$12,950
		Discretionary	N	142613	DWM International Inc.	2019 76West Trophy Procurement	07/17/2019	\$8,645	\$8,645	\$8,645	\$8,645
		Discretionary	N	144561	Luminosity Events, Inc	2019 Climate Leadership Forum	09/06/2019	\$16,068	\$16,068	\$16,068	\$16,068
		Discretionary	N	145501	PitchBook Data, Inc.	Online Subscription	09/30/2019	\$24,000	\$24,000	\$24,000	\$24,000
		Discretionary	N	145520	GreenBiz Group, Inc.	Verge 2019	09/30/2019	\$7,500	\$7,500	\$7,500	\$7,500
		Discretionary	N	146510	Cornell University	2019 Cornell Sponsorship	10/23/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	146514	DIBD NYC Inc.	2019 Climate Leadership Forum	10/23/2019	\$6,346	\$6,346	\$6,346	\$6,346
		Discretionary	N	146883	Katherine MacDonald	Tech to Market Assessment	10/30/2019	\$11,150	\$11,150	\$11,150	\$11,150

gory Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
T OTHER PROGRAM AREA	Discretionary	N	147497	Rensselaer Polytechnic Institute-LRC	Lighting Research Center	11/13/2019	\$25,000	\$25,000	\$25,000	\$25,000
	Discretionary	N	148092	Black Women Talk Tech Inc	Black Women Talk Tech Sponsor	11/25/2019	\$25,000	\$25,000	\$25,000	\$25,000
	Discretionary	N	150494	Research Foundation of SUNY	2020 Advanced Energy Conferenc	01/22/2020	\$70,000	\$70,000	\$70,000	\$70,000
	Discretionary	N	150608	Upstate Capital Association of New York	NY Business Plan Competition	01/27/2020	\$40,000	\$40,000	\$40,000	\$40,000
	Discretionary	Υ	100675	Vatsal Bhatt	Review of EEA Project Program	07/05/2016		\$25,000		\$10,468
	Discretionary	Υ	138375	Corey Harrington	National offshore Website	03/27/2019	\$5,988	\$5,988	\$5,987	\$5,987
	Non-Competitive	N	152021	Yue Chen	Consulting contract	03/02/2020	\$48,000	\$48,000		
	Non-Competitive	Υ	117416	Upstate Venture Connect	OTHER PROGRAM AREA	08/22/2017		\$49,000	\$11,400	\$49,000
	Competitive	N	140006	Randstad North America, Inc.	Payroll Services	05/07/2019	\$69,765	\$69,765	\$30,418	\$30,418
	Competitive	N	147285	Cornell University	76West TWO 31	11/07/2019	\$85,637	\$85,637		
	Competitive	Υ	30712	The Research Foundation for the State	CNSE Net Zero Project	12/21/2012		\$1,000,000		\$670,000
	Competitive	Υ	30717	Village of Skaneateles	Skaneateles Village Hall NZEB	12/21/2012		\$546,493		\$540,980
	Competitive	Υ	30728	Watertown, City of	Sludge permitting and design	12/21/2012		\$585,646	\$25,333	\$485,827
	Competitive	Υ	99297	Center for Sustainable Energy	ChargeNY ZEV Rebate Imp Contra	06/02/2016		\$956,971		\$817,608
	Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$38,203	\$298,556	\$53,507	\$281,079
	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$937,500	\$2,863,570	\$552,918	\$2,013,335
	Competitive	Υ	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016	\$121,686	\$459,962	\$127,008	\$396,642
	Competitive	Υ	116896	United Way of Long Island	CEEP Long Island (UWLI)	08/10/2017		\$420,000	\$117,153	\$227,376
	Competitive	Υ	118163	D.L. English Consulting, Inc.	Indian Point Consultant	09/13/2017		\$356,475		\$355,904
	Competitive	Υ	129761	Four Points Group, Inc.	RFQL 3685 R2	08/06/2018	\$198,888	\$284,927	\$37,814	\$79,192
	Competitive	Υ	140746	Akimeka, LLC	TWO#2 Resilience Assistance	05/28/2019	\$200,000	\$200,000	\$149,911	\$149,911
	Competitive	Υ	145982	NESCAUM	TWO #6 VOCs on Staten Island	10/10/2019	\$397,500	\$397,500	\$86,535	\$86,535
	Competitive	Υ	150033	Cornell University	70333 TWO 32	01/09/2020	\$905,999	\$905,999		
	Discretionary	N	107800	Amerex Brokers LLC	OTHER PROGRAM AREA	12/13/2016		\$49,999	\$5,000	\$21,610
	Discretionary	N	109345	Electric Energy Services & Advisors, LLC	OTHER PROGRAM AREA	01/24/2017		\$35,000		\$25,460
	Discretionary	Υ	112570	Benchemark Printing, Inc.	Printing Services - EV Rebate	04/07/2017	\$15,000	\$44,500	\$5,905	\$33,417
Pay for Performance	Competitive		144049	Allegis Group Holdings Inc	SA.055_TWO #10 - P4P PM	08/22/2019	\$352,972	\$352,972	\$67,348	\$67,348
	Competitive	Υ	144450	Energy & Resource Solutions, Inc.	TWO 4 - P4P Event Evaluation	09/04/2019	\$160,000	\$160,000		
POLICY DEVELOPMENT	Competitive	N	126609	NYS Office of General Services	2018 NYS DPS Printing Services	05/08/2018		\$50,000	\$8,537	\$49,044
	Discretionary	N	138629	New York State Ag & Markets	2019 DPS NYS Fair Exhibit	03/28/2019	\$11,933	\$11,933	\$11,933	\$11,933
	Discretionary	N	141635	Paul A Bradbury	DPS NYS Fair giveaways	06/20/2019	\$5,125	\$5,125	\$5,125	\$5,125
	Discretionary	N	144669	Paul A Bradbury	DPS NYS Fair giveaways	09/10/2019	\$6,429	\$6,429	\$6,429	\$6,429
	Competitive	N	36995	NYS Office of General Services	POLICY DEVELOPMENT	11/08/2013		\$150,000		\$140,116
	Competitive	N	141637	NYS Office of General Services	2019 NYS DPS Printing Services	06/20/2019	\$25,000	\$25,000	\$20,346	\$20,346
Prof & Expert Engagemen	t Discretionary	N	135859	Alliance to Save Energy	2019 ASE Membership	01/07/2019		\$25,000	\$25,000	\$25,000
	Discretionary	N	137562	ACEEE	2019 ACEEE Membership	02/27/2019		\$10,000	\$10,000	\$10,000
	Discretionary	N	137767	Upstate Venture Connect	UVC 2019 Sponsorship	03/06/2019		\$25,000	\$25,000	\$25,000

gory Initiativ		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
T Prof & E	Expert Engagement	Discretionary	N	138293	Consortium for Energy Efficiency, Inc.	Industrial Process Efficiency	03/20/2019		\$48,000	\$48,000	\$48,000
		Discretionary	N	138632	NESCAUM	2019 ZEV MOU Task Force dues	03/28/2019	\$50,000	\$50,000	\$50,000	\$50,000
		Discretionary	N	140055	Green Light New York, Inc.	2019 BEEx Watt Membership	05/08/2019	\$50,000	\$50,000	\$50,000	\$50,000
		Discretionary	N	141576	Clean Energy States Alliance	FY 2020 CESA Membership	06/19/2019	\$68,500	\$68,500	\$68,500	\$68,500
		Discretionary	N	142873	The Business Council of NYS, Inc.	Membership Business Council	07/24/2019	\$6,385	\$6,385	\$6,385	\$6,385
		Discretionary	N	147072	ACEEE	2020 ACEEE Membership	11/04/2019	\$10,000	\$10,000	\$10,000	\$10,000
		Discretionary	N	147439	Rensselaer Polytechnic Institute-LRC	LRC partners Program	11/12/2019	\$60,000	\$60,000	\$60,000	\$60,000
Pub Tra	ransit & Elect Rail	Competitive	Υ	140315	Randstad North America Inc	TS.003_TBI Coordinator	05/15/2019	\$111,440	\$111,440	\$42,482	\$42,48
		Competitive	Υ	150368	Randstad North America, Inc.	Temporary Services	01/17/2020	\$120,823	\$120,823	\$8,095	\$8,09
Real Tii Manage		Discretionary	N	139257	Green Light New York, Inc.	Green Seeds sponsorship	04/17/2019	\$15,000	\$15,000	\$15,000	\$15,00
		Discretionary	N	139714	Westchester Chamber Educational	Sponsor West. Business Council	04/29/2019	\$15,000	\$15,000	\$15,000	\$15,00
		Competitive		139261	Allegis Group Holdings Inc	SA.043a - RTEM_PM	04/17/2019	\$256,080	\$256,080	\$111,770	\$111,77
	•	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$682,328	\$1,674,733	\$509,805	\$912,43
	-	Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017		\$646,795	\$251,651	\$305,51
	-	Competitive	Υ	143835	EME Consulting Engineering Group, LLC	SA.056_TWO #10_RTEM MF PM	08/16/2019	\$188,667	\$188,667	\$78,062	\$78,06
REC:CI Dev Co		Competitive	N	143049	BVG Associates LLC	TWO-1-IE-2019	07/30/2019	\$38,500	\$38,500	\$38,500	\$38,50
201 00		Competitive	N	143055	M.J. Beck Consulting LLC	TWO-2-IE_2019	07/30/2019	\$35,000	\$35,000	\$35,000	\$35,00
		Discretionary	N	141443	Levitan & Associates, Inc.	Support for Index REC Petition	06/17/2019	\$50,000	\$50,000	\$50,000	\$50,00
	•	Competitive	N	146819	Brattle Group Inc.	TWO #4 Large Scale Hydropower	10/29/2019	\$589,000	\$589,000	\$424,316	\$424,31
		Competitive	N	150771	Brattle Group Inc.	TWO 5 LSR siting analysis	01/30/2020	\$350,000	\$350,000		
	-	Competitive	Υ	143059	Fusco Personnel, Inc.	TS.007/TS.016 - Office Adm LSR	07/30/2019	\$107,671	\$107,671	\$28,838	\$28,83
	-	Competitive	Υ	144446	Siemens Industry, Inc.	TWO #1: 100x40 Study	09/04/2019	\$800,000	\$800,000	\$145,000	\$145,00
		Discretionary	N	142287	Levitan & Associates, Inc.	RESRFP19-1 TEP Support	07/09/2019	\$48,960	\$48,960	\$48,811	\$48,81
Remote Manage	te Energy gement	Competitive	Υ	147433	Rocky Mountain Institute	Technical support for NYSERDA	11/12/2019	\$250,000	\$250,000		
RENEV	WABLE HEAT NY	Competitive	Υ	18599A	FARM, LLC	RENEWABLE HEAT NY	09/05/2012		\$853,626		\$729,74
	•	Competitive	Υ	101132	NESCAUM	Tech Assist, REV Pool	07/15/2016		\$246,284	\$7,899	\$213,55
RENEV	WABLE THERMAL	Competitive	N	81695	Rafferty Enterprises, Inc.	Temp Employee Services	11/19/2015		\$13,650		\$2,23
	-	Non-Competitive	N	66654	Energy and Environmental Economics Inc.	. Solar Adoption Forecast	06/11/2015		\$49,000		\$47,68
	- -	Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$1,878,603	\$0	\$1,734,61
Retrofit	fit NY	Discretionary	N	139897	New York Passive House Inc.	2019 NAPHN Annual Forum	05/03/2019	\$15,000	\$15,000		
	-	Discretionary	N	139897-1	North American Passive House Network, In	2019 NAPHN Annual Forum	07/24/2019	\$15,000	\$15,000	\$15,000	\$15,00
	-	Competitive	Υ	144670	EME Consulting Engineering Group, LLC	SA.057_TWO #11 - Multifam APM	09/10/2019	\$297,788	\$297,788	\$56,230	\$56,23
	-	Discretionary		143625	Energy Infrastructure Partners LLC	Demand Pipeline Consultant	08/12/2019	\$200,000	\$200,000	\$57,019	\$57,01
	-	Discretionary	N	111167	Jasper Van den Munckhof	RetrofitNY advisement	03/07/2017		\$50,000		\$24,01
	-	Discretionary	N	128063	Integrative Design Collaborative, INC	Retrofit NY	06/19/2018		\$50,000		\$34,09
	-	Discretionary	N	128084	7group, LLC	Retrofit NY	06/20/2018		\$50,000		\$47,68
	-	Discretionary	N	130604	Thornton Tomasetti, Inc.	Retrofit NY	08/30/2018		\$18,000	\$6,000	\$12,000

ry I	nitiative	Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
F	Retrofit NY	Discretionary	N	137953	CEC Stuyvesant Cove, Inc.	RetrofitNY Solar Business Case	03/11/2019	\$35,000	\$35,000	\$25,209	\$25,20
		Discretionary	Υ	126881	Forsyth Street Advisors, LLC	Retrofit NY	05/15/2018		\$50,000		\$44,50
		Discretionary	Υ	139894	Steven Winter Associates, Inc.	Solution Optimization Consulta	05/03/2019	\$50,000	\$50,000	\$22,583	\$22,58
		Non-Competitive	Υ	132545	Stichting Energiesprong	Retrofit NY	10/15/2018		\$200,000	\$2,268	\$37,9
F	REV Campus Challenge	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019		\$252,552	\$95,190	\$95,1
		Competitive	Υ	121106	Meister Consultants Group, Inc.	REV Campus Challenge	11/29/2017		\$586,265	\$151,597	\$322,2
		Competitive	Υ	135754	Ecology and Environment Engineering	Commercial Market Engagement	01/03/2019		\$266,950	\$142,170	\$142,1
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019		\$269,178	\$128,068	\$128,0
		Competitive	Υ	137653	Rochester Institute of Technology	REV CC ETL_Rd. 2	03/04/2019	\$999,664	\$999,664		
		Competitive	Υ	138946	EME Consulting Engineering Group, LLC	SA.036c_TWO#8_EP&E PM	04/08/2019	\$396,850	\$396,850	\$150,131	\$150,1
		Competitive	Υ	138947	SUNY - ESF	SUNY ESF - Energy Master Plan	04/08/2019	\$18,112	\$18,112		
		Competitive	Υ	144828	DNV GL Energy Insights USA Inc.	TWO 8 CEF Comm Impact_DNV	09/12/2019	\$373,000	\$373,000	\$28,073	\$28,07
	Rmve Barriers Dist Enrgy Storg	Discretionary	N	134228	Associated Power Analysts Inc.	Rmve Barriers Dist Enrgy Storg	11/20/2018		\$48,000	\$16,000	\$48,00
•	Storg	Discretionary	Y	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017	\$5,000	\$15,000	\$5,000	\$5,54
		Competitive	N	138727	Energy and Environmental Economics Inc.	TWO #16 Clean Peaks Study	04/01/2019	\$225,000	\$225,000	\$184,056	\$184,05
		Competitive	N	145717	Harris Wiltshire & Grannis LLP	Cluster Study Tariff Research	10/04/2019	\$6,000	\$6,000	\$3,413	\$3,4
		Competitive	Y	142081	Wadsworth Energy LLC	TWO #1 MDIWG Support	07/02/2019	\$50,000	\$50,000	\$34,017	\$34,0
		Discretionary	N	123419	Climate Policy Initiative	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$48,900		\$28,09
		Discretionary	N	123420	Center for Renewables Integration	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$37,900		\$37,26
		Discretionary	N	127932	Wadsworth Energy LLC	Rmve Barriers Dist Enrgy Storg	06/15/2018		\$49,900		\$49,68
		Discretionary	Υ	140810	PGR Group LLC	BESS Tech Support for NYSERDA	05/29/2019	\$200,000	\$200,000	\$20,437	\$20,43
5	SARATOGA TECHNOLOGY &	Competitive		143734	Rosenblum Property Services, LLC	Boiler Replacement at STEP	08/14/2019	\$13,852	\$13,852	\$13,316	\$13,31
Ė	ENERGY PARK	Competitive	N	39723	NYS Office of General Services	OGS Services	02/25/2014		\$20,449		\$11,33
		Competitive	N	53104	OGS State Office Building Campus	OGS Services	11/24/2014		\$5,714		\$1,12
		Competitive	N	53114	OGS State Office Building Campus	SARATOGA TECHNOLOGY & ENERGY PARK	11/24/2014		\$6,650		\$57
		Competitive	N	58912	NYS Office of General Services	Permitting Services, GE, 107 H	02/17/2015		\$11,500		\$2,61
		Competitive	N	79574	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	10/29/2015		\$9,640	\$177	\$8,91
		Competitive	Υ	20896	Bergmann Associates	STEP Engineering, Design and C	10/19/2010		\$173,350		\$158,43
		Competitive	Υ	STD11181	Rosenblum Property Services, LLC	STEP Property Management Servi	06/09/2009		\$2,292,665		\$1,530,74
		Discretionary	N	28950	NYS Office of General Services	OGS permiting services- 20 TT	08/13/2012		\$45,000		\$40,27
		Discretionary	N	101037	William Morlok	STEP options paper	07/14/2016		\$25,000		\$24,0
		Non-Competitive	N	69174	NYS Office of General Services	OGS Services- GE Exp, 107 Herm	07/16/2015		\$10,032	\$8,539	\$8,53
		Competitive	Y	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$30,000	\$154,606	\$20,718	\$117,9
		Competitive	Υ	107762	Rosenblum Property Services, LLC	STEP Property Mgmt Services	12/07/2016	\$406,890	\$889,575	\$159,588	\$443,68
		Competitive	Y	142233	Rosenblum Property Services, LLC	SARATOGA TECHNOLOGY & ENERGY PARK	07/08/2019	\$57,460	\$57,460	\$57,031	\$57,03
5	Single Family Mt Rt Trans/2515	Competitive	Υ	139626	Opinion Dynamics Corporation	TWO 11 BPI Survey	04/25/2019	\$28,456	\$28,456	\$28,456	\$28,45
5	Small Wind	Competitive	Υ	135480	Buffalo Renewables, Inc.	Wind Turbine Incentive	12/24/2018	\$47,700	\$47,700		

Category		Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	Small Wind	Competitive	Υ	141317	Buffalo Renewables, Inc.	WWind Turbine Incentive	06/12/2019	\$87,150	\$87,150		
	Smart Buildings	Competitive	Υ	138284	Rocky Mountain Institute	Smart Buildings	03/20/2019	\$44,000	\$44,000	\$44,000	\$44,000
	SMART GRID SYSTEMS	Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$1,603,930	\$20,707	\$1,526,655
		Competitive	Υ	59850	Cornell University-Office of Sponsored P	Anaerobic Digestion Assistance	03/02/2015		\$750,000	\$211,219	\$498,861
	Strategic Energy Manager	Discretionary	N	143045	First Colonie Company	2019 SEM Workshops	07/29/2019	\$6,500	\$6,500	\$5,982	\$5,982
		Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016		\$324,628	\$117,913	\$158,889
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017		\$2,905,878	\$829,523	\$1,196,476
	Subscription/Data Access	Discretionary	N	109600	CoStar Realty Information, Inc.	Database/subscription services	01/31/2017		\$21,250		\$16,743
		Discretionary	N	115113	American Council for an Energy Efficient	Subscription/Data Access	06/22/2017		\$12,500	\$12,500	\$12,500
		Discretionary	N	122877	ACEEE	Subscription/Data Access	01/25/2018		\$50,000	\$18,750	\$50,000
		Discretionary	N	124011	CoStar Realty Information, Inc.	CoStar Subscription	03/01/2018		\$18,887		\$18,886
		Discretionary	N	137643	Continental Automated Buildings	market research for NYSERDA	03/04/2019		\$6,900	\$6,900	\$6,900
		Discretionary	N	142864	Continental Automated Buildings	Subscription/Data Access	07/24/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	Υ	139095	CoStar Realty Information, Inc.	Subscription/Data Access	04/11/2019	\$19,848	\$19,848	\$19,848	\$19,848
		Non-Competitive	N	146367	Wood Mackenzie Power & Renewables, Inc.	Grid Edge, Storage and Squared	10/21/2019	\$60,500	\$60,500	\$60,500	\$60,500
		Non-Competitive	N	150959	E Source Companies LLC	Subscription/Data Access	02/04/2020	\$63,000	\$63,000	\$63,000	\$63,000
		Discretionary	N	132476-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$23,640	\$46,140	\$13,396	\$35,896
		Discretionary	Υ	135794	American Council for an Energy Efficient	Research Support for NYSERDA	01/04/2019		\$50,000	\$25,000	\$25,000
		Non-Competitive	Υ	148096	American Council for an Energy Efficient	Subscription/Data Access	11/25/2019	\$70,000	\$70,000		
	Talent Pipeline:CE and OJT	Competitive	Υ	130548	Kelliher Samets Volk	TWO 21 WFD Talent Pipeline Mkt	08/27/2018		\$600,000		
	Technical Services	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019		\$252,552	\$95,190	\$95,190
		Competitive	Υ	136881	L&S Energy Services, Inc.	Tech Review - OsEM	02/06/2019		\$100,522	\$20,346	\$20,346
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019		\$269,178	\$128,068	\$128,068
		Competitive	Υ	138946	EME Consulting Engineering Group, LLC	SA.036c_TWO#8_EP&E PM	04/08/2019	\$396,850	\$396,850	\$150,131	\$150,131
		Competitive	Υ	139043	R.W. Beck Group, Inc.	StakeholderEngagement_Outreach	04/10/2019	\$242,915	\$242,915	\$86,667	\$86,667
	WEST VALLEY DEVELOPMENT	Competitive	N	28636	The Logue Group	Facilitation Services	07/26/2012		\$410,349		\$182,136
	PROGRAM	Competitive	Υ	34224	McMahon and Mann Consulting Engineers	s Engineering/Surveying Cont	07/30/2013		\$432,500		\$423,247
		Discretionary	N	31496	Brenda Sayers	Janitorial Services Contract	03/11/2013		\$33,480		\$32,670
		Non-Competitive	N	20948	U.S. Nuclear Regulatory Commission	WEST VALLEY DEVELOPMENT PROGRAM	10/26/2010		\$500,000		\$19,307
		Non-Competitive	Υ	PO9465	Dr. Michael P. Wilson	WEST VALLEY DEVELOPMENT PROGRAM	08/29/2011		\$8,000		\$3,600
		Competitive	N	143573	McMahon and Mann Consulting Engineers	TWO 2 - Evaluation of Mitigati	08/09/2019	\$115,000	\$115,000	\$92,460	\$92,460
		Competitive	N	143574	McMahon and Mann Consulting Engineers	TWO 3 - Trench Cap Drainage Ma	08/09/2019	\$55,000	\$55,000	\$9,528	\$9,528
		Competitive	N	143738	Enercon Services Inc	TWO 1 - Review of Draft Regula	08/14/2019	\$49,985	\$49,985	\$30,593	\$30,593
		Competitive	N	145115	McMahon and Mann Consulting Engineers	TWO #5 - Catch Basin	09/19/2019	\$20,000	\$20,000	\$18,934	\$18,934
		Competitive	N	PO9602	The Garrick Co., LLC	Probabilistic Evaluation	06/17/2009	\$25,000	\$599,231	\$36,545	\$559,790
		Competitive	Υ	61280	MJW Technical Services, Inc.	Radiation Protection Support	03/24/2015	\$440,758	\$3,314,798	\$97,922	\$2,309,766
		Competitive	Υ	69474	Seven Springs West LLC	Operations and Maintenance Sup	07/22/2015		\$3,110,000	\$250,373	\$2,519,533

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	WEST VALLEY DEVELOPMENT PROGRAM	Competitive	Υ	69939	AECOM Technical Services Inc.	Environmental Monitoring Suppo	07/28/2015	\$403,494	\$2,574,427	\$490,452	\$1,983,971
		Competitive	Υ	104075	Enercon Services Inc	RFP 3305 Licence Consultation	09/21/2016	\$30,000	\$402,676	\$40,941	\$366,518
		Competitive	Υ	104264	Arnold & Porter Kaye Scholer LLP	RFP 3300 Outside Counsel Servi	09/27/2016		\$50,000	\$3,339	\$30,757
		Competitive	Υ	105183	McMahon and Mann Consulting Engineers	Engineering Services WV	10/20/2016		\$750,000	\$70,600	\$318,052
		Competitive	Υ	113450	Chenango Contracting, Inc.	RFP 3456	05/04/2017		\$1,238,102		\$1,121,488
		Competitive	Υ	118436	The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM	09/22/2017		\$413,446	\$31,672	\$87,217
		Discretionary		143065	McMahon and Mann Consulting Engineers	2019-2020 Annual Surveys	07/31/2019	\$10,000	\$10,000	\$4,218	\$4,218
		Discretionary	Υ	123699	Brenda Sayers	Janitorial contract	02/21/2018		\$48,720	\$12,110	\$24,100
		Discretionary	Υ	150902	InStream, LLC	microfilm reader/scanner	02/03/2020	\$9,945	\$9,945	\$9,645	\$9,645
		Non-Competitive	Υ	53151	GZA GeoEnvironmental of New York	Trench 14 Investigation	11/24/2014	\$116,902	\$692,777	\$74,778	\$625,532
		Non-Competitive	Υ	93559	Peter L. Krog	Ashford Office Complex Lease	03/21/2016		\$458,280	\$91,656	\$358,986
		Non-Competitive	Υ	107662	U.S. Nuclear Regulatory Commission	PO Payment of NRC License Fees	12/06/2016		\$250,000	\$6,875	\$194,893
	WORKFORCE DEVELOPMENT	Non-Competitive	Υ	92212	Green City Force	Career pathways training	03/03/2016		\$367,000	\$12,800	\$366,970
	Workforce Industry Partnership	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016		\$646,859		\$400,728
		Discretionary	Υ	121174	Steven Winter Associates, Inc.	NYC Retrofit Demo	11/30/2017		\$49,830	\$3,669	\$37,955
Grand To	tal							\$78,039,563	\$398,116,876	\$64,499,595	\$242,947,809

Addendum to Section 1: Contracts Open 4/1/2019 to 3/31/2020 with Open PO from Old Database not transferred to NEIS

			Term >					Committ	ted to	Original PO	Total Committed to
Category	Initiative	Type	1 Year	Contract ID	Contractor	Project Description	Date	Date		Amount	Date
PCMT	WEST VALLEY DEVELOPMENT PROGRAM	Non-Competitive	Υ	PO9465	Dr. Michael P. Wilson	West Valley Erosion Prediction Assessment Group	8/29/2011	-	\$8,000	\$54,700	\$62,700
PCMT	Saratoga Technology Energy Park (STEP)	Non-Competitive	Υ	PO10567-1	Idea Partnerships	STEP Consulting Services	3/10/2009)		\$25,000	\$25,000
PCMT	New Construction Program	Competitive	Υ	ST10130-42	EME Consulting Engineering	G Technical Assistance: NCP 7906 Houston Avenue D Project	9/25/2008	3		\$75,900	\$75,900
PCMT	New Construction Program	Competitive	Υ	ST10130-7	EME Consulting Engineering	G Technical Assistance: NCP 7514 Grandland	4/1/2016	<u>;</u>		\$45,000	\$45,000
							Grand Total		\$8,000	\$200,600	\$208,600

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
7group, LLC	600 Grings Hill Road	Sinking Spring	PA	19608	FSBE				
22nd Century Technologies, Inc.	220 Davidson Ave., Ste 118	Somerset	NJ	08873	FSBE				
205 Wolf Holdings, LLC	Red Lion Hotel	ALBANY	NY	12205	NYSBE				
455 Hospitality LLC	d/b/a Doubletree Hotel Tarrytown	Tarrytown	NY	10591	NYSBE				
AAF Rye Hotel LLC	d/b/a Hilton Westchester	Rye Brook	NY	10573	NYSBE				
ABB, Incorporated	901 Main Campus Drive, Ste300	Raleigh	NC	27606	FSBE				
ABH Capital Management, LLC	ServerMonkey.com	Houston	TX	77040	FSBE				
Abt Associates Inc.	6130 Executive Boulevard	Rockville	MD	20852	FSBE				
Access Systems, Inc.	4260 Henneberry Rd	Manlius	NY	13104	NYSBE				
ACEEE	529 14th St. NW, Suite 600	Washington	DC	20045	FSBE				
Action Research Inc.	3630 Ocean Ranch Blvd.	Oceanside	CA	92056	FSBE				
Adam Hinge	d/b/a Sustainable Energy Partnerships	Tarrytown	NY	10591	NYSBE				
Adirondack Area Network	10 Empire State Blvd	Castleton	NY	12033-9751	NYSBE				
Adirondack North Country Association	67 Main Street, Suite 201	Saranac Lake	NY	12983	NYSBE				
ADM Associates, Inc.,	3239 Ramos Circle	Sacramento	CA	95827	FSBE				
ADP, Inc.	PO Box 842875	Boston	MA	02284-2875	FSBE				
AECOM Technical Services Inc.	515 South Flower Street, 3rd Floor	Los Angeles	CA	90071	FSBE				
AFP 108 Corp	1111 Jefferson Road	Rochester	NY	14623	NYSBE				
Akimeka, LLC	901 No. Lake Destiny Drive	Maitland	FL	32751	FSBE				
Albany Dodge	770 Central Avenue	Albany	NY	12206	NYSBE				
Alberto Aceves Cornejo	19043 Fieldstone Ct	Salinas	CA	93908	FSBE				
Albright Solutions LLC	231 East 76th Street, Apt. 2C	New York	NY	10021	NYSBE				
AlienVault, Inc.	1875 S. Grant Street, Suite #200	San Mateo	CA	94402	FSBE				
Allegis Group Holdings Inc	7301 Parkway Drive	Hanover	MD	21076	FSBE				
Alliance for Sustainable Energy, LLC	15013 Denver West Parkway	Golden	со	80401	FSBE				
Alliance to Save Energy	3570 Guilderland Avenue	Rotterdam	NY	12306	NYSBE				
Ally Financial Inc.	200 Renaissance Ctr	Detroit	MI	48265-2000	FSBE				
Amazon Capital Servies, Inc.	410 Terry Avenue North	Seattle	WA	98109	FSBE				
Amerex Brokers LLC	One Sugar Creek Center Blvd. #700	Sugar Land	TX	77478	FSBE				
American Council for an Energy Efficient	529 14th Street, NW Suite 600	Washington	DC	20045	FSBE				
Amphora Consulting	57 Outpost Lane	Hilton Head	sc	29928	FSBE				

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
AmTrust North America Inc.	PO Box 94557	Cleveland	ОН	44101-4557	FSBE					
APPEXTREMES, LLC	PO BOX 7839	Broomfield	СО	80021	FSBE					
Applied Design Initiative LLC	247 Wsr 35th Street	New York	NY	10001	NYSBE					
Apprise, Incorporated	32 Nassau Street, Suite 200	Princeton	NJ	08542	FSBE					
Aramark Services Inc.	PO Box 7548	Philadelphia	PA	19101	FSBE					
Arcadia Chair Company	5695 Fresca Drive	LaPalma	CA	90623	FSBE					
Arcadis of New York, Inc.	6723 Towpath Rd	Syracuse	NY	13214	NYSBE					
Arcadis U.S., Inc.	PO Box 66	Syracuse	NY	13214-0066	NYSBE					
Arch Street Communications, Inc.	31 Mamaroneck Ave., Ste 400	White Plains	NY	10601	NYSBE	х				
Arctic Air Mechanical Corp	13-47 209th St	Bayside	NY	11360	NYSBE					
Argus Media Inc.	500 Fifth Ave., Ste 2410	New York	NY	10110	NYSBE					
Arnold & Porter Kaye Scholer LLP	P.O. Box 759451	Baltimore	MD	21275-9451	FSBE					
ASKCO Electric Supply Co Inc	14 Cooper Street	Glens Falls	NY	12801	NYSBE					
Associated Power Analysts Inc.	PO Box 11136	College Station	TX	77842	FSBE					
Association of Energy Engineers	3168 Mercer University Dr	Atlanta	GA	30341	FSBE					
Atelier Ten	45 East 20th Street 4th Floor	New York	NY	10003	NYSBE					
Atlantic Data Security, LLC	23 Shoddy Mill Road	Bolton	СТ	06043	FSBE					
AVSC Holdings Corporation	d.b.a PSAV Presentation Services	Schiller Park	IL	60176	FSBE					
Awards By Walsh's & Creative Marketing	233 Ontario Street	Cohoes	NY	12047	NYSBE					
B & W Sound Services, Inc.	12994 State Route 34	Martville	NY	13111	NYSBE					
Bank of New York	101 Barclay St	New York	NY	10286	NYSBE					
Battelle Memorial Institute	902 Battelle Blvd	Richland	WA	99352	FSBE					
BDO USA LLP	PO Box 642743	Pittsburgh	PA	15264-2743	FSBE					
Benchemark Printing, Inc.	1890 Maxon Rd Ext	Schenectady	NY	12308-1140	NYSBE					
Bergmann Associates	280 East Broad Street	Rochester	NY	14604	NYSBE					
BioDiversity Research Institute	276 Canco Rd Lowr	Portland	ME	04103-4347	FSBE					
Bishop House Consulting, Inc.	PO Box 489	Burnt Hills	NY	12027	NYSBE					
Bizodo Inc	30 Vandam St. Fl2	New York	NY	10013	NYSBE					
Black Women Talk Tech Inc	447 Broadway, 2nd Floor	New York	NY	10013	NYSBE					
BLIX Consultancy BV		Utrecht	0344	3551 EJ	FSBE					
Bloomberg Finance LP	731 Lexington Avenue	New York	NY	10022	NYSBE					

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
Boecker Consulting Services	2455 Rosstown Road	Wellsville	PA	17365	FSBE				
Bond, Schoeneck & King, PLLC	22 Corporate Woods Blvd., Ste 501	Albany	NY	12211-2503	NYSBE				
BPCA NYS Inc.	15516 99th St	Howard Beach	NY	11414	NYSBE				
Brattle Group Inc.	One Beacon St., Ste 2600	Boston	MA	02108	FSBE				
Brenda Sayers	8870 Route 240	West Valley	NY	14171-0111	NYSBE				
Buckeye Terminals, LLC	One Greenway Plaza	Houston	TX	77046	FSBE				
Buffalo Renewables, Inc.	3840 E Robinson Road	Amherst	NY	14228	NYSBE				
Building Media, Inc.	12932 SE Kent Kangley Rd, Ste 529	Kent	WA	98030	FSBE				
Business Environments	106 Despatch Dr., Ste #2	East Rochester	NY	14445	NYSBE				
BVG Associates LLC	28411 Northwestern HWY Suite 800	Southfield	МІ	48034	FSBE				
BW Research Partnership	6120 Paseo Del Norte, Suite D2	Carlsbad	CA	92011	FSBE				
Bynder LLC	24 Farnsworth St., Ste 400	Boston	MA	02210	FSBE				
C.J. Brown Energy, P.C.	4245 Union Rd., Ste 204	Cheektowaga	NY	14225	NYSBE				
C.T. Male Associates Engineering,	50 Century Hill Drive	Latham	NY	12110-2116	NYSBE				
Calstart	48 S Chester Avenue	Pasadena	CA	91106	FSBE				
Capital District Records Management, Inc	PO Box 4044	Clifton Park	NY	12065	NYSBE				
Capital for Communities, LLC	524 St. John's Place	Brooklyn	NY	11238	NYSBE				
Carahsoft Technology Corporation	11493 Sunset Hills Road	Reston	VA	20190	FSBE				
Carbon Trust Advisory Limited	4th Floor Dorset House, 27-45 Stamford St.	London		SE1 9NT	FSBE				
Carbone Auto Group, LLC	5194 Commercial Drive	Yorkville	NY	13495	NYSBE				
Caroline Hazard	5924 Northern Court	Elkridge	MD	21075	FSBE				
Caroprese & Company	261 Park Avenue	Rutherford	NJ	07070	FSBE				
Carrow Real Estate Services, LLC	Columbia Circle Assoc., LLC	Chicago	IL	60674	FSBE				
Carter Ledyard & Milburn LLP	2 Wall Street	New York	NY	10005	NYSBE				
CEC Stuyvesant Cove, Inc.	37 W 26TH ST RM 209	NEW YORK	NY	10010	NYSBE				
Center for Internet Security Inc	31 TECH VALLEY DR	EAST GREENBUSH	NY	12061	NYSBE				
Center for Renewables Integration	PO Box 523593	Springfield	VA	22152	FSBE				
Center for Sustainable Energy	3980 Sherman St., Ste 170	San Diego	CA	92110	FSBE				
CHA Consulting Inc.	3 Winners Circle	Albany	NY	12205	NYSBE				
Chadbourne & Parke LLP	1300 Avenue of the Americas	New York	NY	10019	NYSBE				
Chenango Contracting, Inc.	29 Arbutus Road	Johnson City	NY	13790	NYSBE		х		

Citadel SPV LLC 85 Broad Street, 18th FI New York NY 10004 NYSBE Citadel SPV LLC 85 Broad Street, 18th FI New York NY 10004 NYSBE Citistaffing, LLC 122 E 42nd St., Ste 2815 New York NY 10168 NYSBE X Clarkson Univ., Research Div. 8 Clarkson Avenue Potsdam NY 13699 NYSBE Clean Energy States Alliance 50 State Street, Suite 1 Montpeller VT 05602 FSBE Clean Power Research 1541 Third Street Napa CA 94559 FSBE	
Citistaffing, LLC 122 E 42nd St., Ste 2815 New York NY 10168 NYSBE X Clarkson Univ., Research Div. 8 Clarkson Avenue Potsdam NY 13699 NYSBE Clean Energy States Alliance 50 State Street, Suite 1 Montpelier VT 05602 FSBE	
Clarkson Univ., Research Div. 8 Clarkson Avenue Potsdam NY 13699 NYSBE Clean Energy States Alliance 50 State Street, Suite 1 Montpelier VT 05602 FSBE	
Clean Energy States Alliance 50 State Street, Suite 1 Montpelier VT 05602 FSBE	
Clean Power Research 1541 Third Street Napa CA 94559 FSBE	
CLEAResult Consulting, Inc. 4301 Westbank Dr., A-150 Austin TX 78746 FSBE	
Clifford Chance US LLP 31 West 52nd Street New York NY 10019 NYSBE	
Climate Policy Initiative 235 Montgomery Street #13 San Francisco CA 94104 FSBE	
ClipperCreek, Inc. 11850 Kemper Rd., Ste E Auburn CA 95603 FSBE	
CMC Energy Services, Inc 550 Pinetown Road Fort Washington PA 19034 FSBE	
Coletree Security Corporation 3512 Rosendale Rd Niskayuna NY 12309 NYSBE X	
Columbia University 500 W 120th St New York NY 10027-6623 NYSBE	
Commercial Investigations LLC 622 Loudon Rd., Ste 201 Latham NY 12110 NYSBE X	
Community Preservation Corp. 28 E 28th St Fl 9th New York NY 10016-7930 NYSBE	
Computer Aid, Inc. 1390 Ridgeview Dr Allentown PA 18104 FSBE	
Computer SOS Inc. 1505 Cleveland Drive Cheektowaga NY 14225 NYSBE	
Concord Servicing Corporation 4150 N Drinkwater Blvd., Ste #200 Scottsdale AZ 85251-3643 FSBE	
Concur Technologies, Inc. 601 108th Ave., NE, Ste 1000 Bellevue WA 98004-4750 FSBE	
CONEG Policy Research Center, Inc. 400 North Capitol Street, NW, Suite Washington DC 20001 FSBE	
Consortium for Energy Efficiency, 98 North Washington Street Boston MA 02114-1918 FSBE	
Consumerbase LLC 33 N. Dearborn Street Chicago IL 60602 FSBE	
Continental Automated Buildings 1173 Cryville Road Ottawa ON K1J756 FSBE	
Control Solutions Group, Inc. 122 West 27th St., 5th Floor New York NY 10001 NYSBE	
Conventures, Inc. 88 Black Falcon Avenue Boston MA 02210 FSBE	
Converge Strategies, LLC 50 Holbrook Street Boston MA 02130 FSBE	
Corelogic, Inc. Corelogic Solutions, LLC Irvine CA 92618 FSBE	
Corey Harrington 832 Durant Court West Chester PA 19380 FSBE	
341 Pine Tree Road Ithaca NY 14850 NYSBE	
Cornell University East Hill Plaza Ithaca NY 14850 NYSBE	
PO Box 22 Ithaca NY 14851-0022 NYSBE	

Contractor	SupplierAddress	SupplierCity		SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
Cornell University-Office of						****	MDE	05406	GDL .
Sponsored P	216 Riley-Robb Hall	Ithaca	NY	14853	NYSBE				
CoStar Realty Information, Inc.	PO Box 791123	Baltimore	MD	21279-1123	FSBE				
Couch White, LLP	540 Broadway, PO Box 22222	Albany	NY	12201	NYSBE				
Crown Castle Fiber LLC	PO Box 32102	New York	NY	10087-2102	NYSBE				
Currier McCabe Associates	700 Troy Schenectady Rd	Latham	NY	12110-2460	NYSBE	X			
D & R International Ltd	1300 Spring St, Ste 500	Silver Spring	MD	20910	FSBE				
D C Hotels Two, LLC	300 Broadway	Albany	NY	12207	NYSBE				
D.K. & S Enterprises Inc	871 Main St	Clifton Park	NY	12065-1097	NYSBE				
D.L. English Consulting, Inc.	616 Elm Street	S Dartmouth	MA	02748	FSBE				
Darling Advertising Agency Inc.	181 Christopher Street	New York	NY	10014	NYSBE				
Davies Office Refurbishing, Inc.	40 Loudonville Rd	Albany	NY	12204	NYSBE	х			
Davis Polk & Wardwell LLP	450 Lexington Avenue	New York	NY	10017	NYSBE				
DealCloud Inc.	129 West Trade St., Ste 1025	Charlotte	NC	28202	FSBE				
Dell, Inc.	1 Dell Way, RR8, Box 8716	Round Rock	TX	78682	FSBE				
Delta Dental of New York	One Delta Drive	Mechanicsburg	PA	17055-6999	FSBE				
Dentons US LLP	1221 Avenue of the Americas	New York	NY	10020	NYSBE				
DFB Sales Inc.	21-07 Borden Ave	Long Island City	NY	11101	NYSBE				
Diana L. McWilliams Interior Design, PLL	875 Spring Avenue	Troy	NY	12180	NYSBE	х			
DIBD NYC Inc.	370 Jay Street	Brooklyn	NY	11201	NYSBE				
Dick Kornbluth	661 Fellows Ave.	Syracuse	NY	13210	NYSBE				
Direct Packet Inc.	909 Lake Carolyn Parkway, Suite 1800	Irving	TX	75039	FSBE				
DNC Parks & Resorts at Gideon Putnam LLC	24 Gideon Putnam Rd	Saratoga Springs	NY	12866-6294	NYSBE				
DNV GL Energy Insights USA Inc.	1400 Ravello Drive	Katy	TX	77449	FSBE				
DNV GL Energy Services USA Inc.	. 67 South Bedford St., Ste 201E	Burlington	MA	01803	FSBE				
Documentation Strategies, Inc.	15 2nd Ave	Rensselaer	NY	12144-2826	NYSBE	Х			
Dodge Data & Analytics	7625 Collection Center Drive	Chicago	IL	60693-0076	FSBE				
Dowd-Witbeck Printing Corp.	599 Pawling Ave.	Troy	NY	12180-5899	NYSBE	х			
Dr. Michael P. Wilson	3380 E Main Rd	Dunkirk	NY	14048-9774	NYSBE				
DWM International Inc.	d/b/a Society Awards	New York	NY	10001-2813	NYSBE				
Dynamo Energy Hub	1718 Capital Ave	Cheyenne	WY	82001	FSBE				
E Source Companies LLC	1745 38th Street	Boulder	со	80301	FSBE				

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
Eastern Research Group, Inc.	110 Hartwell Ave	Lexington	MA	02421	FSBE					
EC Infosystems, Inc.	333 Earle Ovington Boulevard	Uniondale	NY	11553	NYSBE					
Ecology and Environment Engineering	368 Pleasant View Drive	Lancaster	NY	14086	NYSBE					
Einhorn Yaffee Prescott Architecture & E	412 Broadway	Albany	NY	12207	NYSBE					
Electric Energy Services & Advisors, LLC	2 Stonebriar Dr.	Slingerlands	NY	12159	NYSBE					
Electric Power Research Institute	1325 G Street, NW, Ste 1080	Washington	DC	20005	FSBE					
Electrification Coalition Foundation	1111 19th Street NW	Washington	DC	20036	FSBE					
Emacx Systems, Inc.	100 Executive Drive, Suite 390	West Orange	NJ	07052	FSBE					
Embertec USA, LLC	176 Seacliff Drive	APTOS	CA	95003	FSBE					
EME Consulting Engineering Group, LLC	129 West 27th Street	New York	NY	10001	NYSBE					
Emerald Alternative Energy Solutions, In	273 Walt Whitman Rd. #224	Huntington Station	NY	11746	NYSBE					
Employee Leasing of Greater NY	2137 Router 35 Suite 160	Holmdel	NJ	07733	FSBE					
Enercon Services Inc	500 Town Park Lane	Kennesaw	GA	30144	FSBE					
Energetics, Incorporated	7075 Samuel Morse Drive	Columbia	MD	21046	FSBE					
Energy & Environmental Research	2 Babcock Farms Lane	Pittsford	NY	14534-4713	NYSBE					
Energy & Resource Solutions, Inc.	120 Water Street, Suite 350	North Andover	MA	01845	FSBE					
Energy and Environmental Economics Inc.	2401 E Katella Ave.	Anaheim	CA	92806	FSBE					
Energy Infrastructure Partners LLC	194 32nd Street	Brooklyn	NY	11232	NYSBE		Х			
Energy Week Holdings, LLC	63 Flushing Avenue, Unit 282	Brooklyn	NY	11205	NYSBE					
EnergySavvy Inc	159 S. Jackson St., Ste 420	Seattle	WA	98104	FSBE					
Ensave, Inc.	65 Millett Street, Suite #105	Richmond	VT	05477	FSBE					
Environment & Energy Publishing, LLC	122 C Street NW	Washington	DC	20001	FSBE					
ePlus inc	13595 Dulles Technology Dr	Herndon	VA	20171-3413	FSBE					
Erdman Anthony & Associates, Inc.	145 Culver Road, Suite 200	Rochester	NY	14620	NYSBE					
ESRI, Incorporated	380 New York Street	Redlands	CA	92373	FSBE					
Essense Partners Inc.	216 East 45th St., 11th Floor	New York	NY	10017	NYSBE	Х	X			
EV Connect Inc.	615 N Nash Street	El Segundo	CA	90245	FSBE					
Evolved Energy Research	2443 Fillmore St #380-5304	San Francisco	CA	94115	FSBE					
Evoworld	2800 7th Avenue	Troy	NY	12180	NYSBE					
FARM, LLC	6350 Transit Rd	Depew	NY	14043	NYSBE					
Federated Conservationists of Westcheste	78 North Broadway	White Plains	NY	10603	NYSBE					

Contractor	SupplierAddress	SupplierCity		SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
Fiber Technologies Networks,	80 Central Street	Boxborough	MA	01719	FSBE				
LLC Fibertech Holdings Corp	d/b/a Fiber Technologies Networks,	ROCHESTER	NY	14618	NYSBE				
First Associates Loan Servicing,	LLC								
LLC	15373 Innovation Dr #300	San Diego	CA	92128	FSBE				
First Colonie Company	660 Albany Shaker Road	Albany	NY	12211	NYSBE				
First Columbia Property Services, LLC	22 Century Hill Dr Ste 301	Latham	NY	12110-2116	NYSBE				
First Quality Maintenance II, LLC	318 West 39th Street, 7th Floor	New York	NY	10018	NYSBE				
First Republic Corp of America	441 Electronics Pkwy	Liverpool	NY	13088-6001	NYSBE				
FM Office Express	106 Despatch Drive	Rochester	NY	14445	NYSBE		Х		
Forsyth Street Advisors, LLC	588 Broadway, Suite 1208	New York	NY	10012	NYSBE				
Fort Orange Press Incorporated	11 Sand Creek Rd # 828	Albany	NY	12205-1442	NYSBE				
Four Points Group, Inc.	4451 Brookfield Corp Dr.	Chantilly	VA	20151	FSBE				
Frank Communications	876 West Valley Rd	Argyle	NY	12809	NYSBE	Х			
Frontier Energy, Inc.	2695 Bingley Rd	Cazenovia	NY	13035	NYSBE				
FTI Consulting Technology LLC	909 Commerce Rd	Annapolis	MD	21401	FSBE				
Fugro USA Marine, Inc.	PO Box 301114	Dallas	TX	75303-1114	FSBE				
Fusco Personnel, Inc.	4 Executive Park Dr Ste B	Albany	NY	12203-3718	NYSBE	х			
Gard Tec Security Svcs., Inc.	24 Colvin Ave.	Albany	NY	12206-1203	NYSBE				
Gardiner & Theobald Inc	317 Madison Ave., 19th FI	New York	NY	10017	NYSBE				
Garner Environmental Services, Inc.	1717 W 13th St	Deer Park	TX	77536	FSBE				
Gartner Inc.	56 Top Gallant Rd	Stamford	СТ	06902	FSBE				
GCOM Software LLC	24 Madison Ave Ext	Albany	NY	12203	NYSBE				
General Electric International Inc	1 River Rd Bldg 2	Schenectady	NY	12345-6000	NYSBE				
General Electric International, Inc.	. One River Road	Schenectady	NY	12345	NYSBE				
Global Change Associates Inc.	265 Riverside Drive	New York	NY	10025	NYSBE				
Green City Force	630 Flushing Ave., 8th Fl	Brooklyn	NY	11206	NYSBE				
Green Light New York, Inc.	31 Chambers St., Ste 609	New York	NY	10007	NYSBE				
GreenBiz Group, Inc.	350 Frank H. Ogawa Plaza	Oakland	CA	94612	FSBE				
Greentech Media Inc.	2 Liberty Square	Boston	MA	02109	FSBE				
Grid Strategies, LLC	9207 Kirkdale Road	Bethesda	MD	20817	FSBE				
Guidehouse Inc.	150 N Riverside Plz Ste 2100	Chicago	IL	60606-1528	FSBE				
GZA GeoEnvironmental of New York	300 Pearl St.,Ste 700	Buffalo	NY	14202	NYSBE				

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Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
Harris Beach PLLC	99 Garnsey Road	Pittsford	NY	14534	NYSBE					
Harris Wiltshire & Grannis LLP	1919 M Street, NW, Eighth Floor	Washington	DC	20036	FSBE					
Hawkins Delafield & Wood LLC	7 World Trade Center	New York	NY	10007	NYSBE					
Hewlett-Packard Enterprise Company	3000 Hanover Street	Palo Alto	CA	94304	FSBE					
Hilton Albany	40 Lodge St	Albany	NY	12207	NYSBE					
Hodgson Russ LLP	140 Pearl Street, Suite 100	Buffalo	NY	14202	NYSBE					
Holland & Knight LLP	PO Box 864084	Orlando	FL	32886	FSBE					
Honeywell International Inc.	1 Dupont St., Suite 104	Plainview	NY	11803	NYSBE					
Houlihan Lokey Financial Advisors, Inc.	10250 Constellation Blvd.	Los Angeles	CA	90067	FSBE					
Hyatt Corporation as agent for Hyatt Equ	109 E 42nd St.	New York	NY	10017-8500	NYSBE					
HyperGen Inc	7810 Carvin Street	Roanoke	VA	24019	FSBE					
ICE Data, LP	5660 New Northside Dr.	Atlanta	GA	30328	FSBE					
ICF Incorporated LLC	9300 Lee Highway	Fairfax	VA	22031	FSBE					
ICF Resources, LLC	9300 Lee Highway	Fairfax	VA	22031	FSBE					
IESI NY Corporation	99 Wood Ave., South, Ste 1001	Iselin	NJ	08830	FSBE					
IHS Global Inc.	15 Inverness Way East	Englewood	СО	80112	FSBE					
Illume Advising LLC	440 Science Dr., Suite 202	Madison	WI	53711	FSBE					
Impact by Design Inc.	7304 Carroll Ave #196	Takoma Park	MD	20912	FSBE					
Indeed Inc.	177 Broad Street	Stamford	СТ	06901	FSBE					
Independent Security Services, Inc.	38 Sheridan Ave	Albany	NY	12210	NYSBE					
Industrial Economics, Incorporated	2067 Massachusetts Avenue	Cambridge	MA	02140	FSBE					
Infogroup Government Division	1020 East 1st St.	Papillion	NE	68046	FSBE					
Infosys International Inc	110 Terminal Drive	Plainview	NY	11803	NYSBE		X			
inLogic, Inc.	3162 Johnson Ferry Rd	Marietta	GA	30062	FSBE					
inMotion, Inc.	PO Box 744276	Atlanta	GA	30384-4276	FSBE					
Institute for Building Technology and Sa	45207 Research Place	Ashburn	VA	20147	FSBE					
InStream, LLC	Biel's Information Technology Systems	West Seneca	NY	14224	NYSBE					
Integrative Design Collaborative, INC	20 Woodland Street	Arlington	MA	02476	FSBE					
Intellidatum LLC	40 Worth Ave	Hudson	NY	12534	NYSBE					
Interaction Associates	70 Fargo Street, Suite 908	Boston	MA	02210	FSBE					
International Business Machines	299-300 Long Meadow Rd.	Sterling Forest	NY	10979-0700	NYSBE					

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International Code Council, Inc.	48 Dublin Drive	Niskayuna	NY	12309	NYSBE				
International Energy Program	Evaluation Conference Inc	Madison	WI	53705	FSBE		Х		
Intralinks, Inc.	PO Box 392134	Pittsburgh	PA	15251	FSBE				
Investors Circle	200 N Mangum St., Ste 203	Durham	NC	27701	FSBE				
iPROMOTEu.com Inc.	Souders Brand Marketing LLC	Pittsburgh	PA	15251-0896	FSBE				
ITS-NY	14 Loveland Court	Cranbury	NJ	08512	FSBE				
Jasper Van den Munckhof		Obbicht		6125 AT	FSBE				
JCRA Financial LLC	One Penn Plaza, Suite 1423	New York	NY	10119	NYSBE				
Jeffery B. Greenblatt	2726 Eighth Street	Berkeley	CA	94710	FSBE				
JFK Hotel Owner LLC	D/b/a Radisson Hotel JFK Airport	Jamaica	NY	11436	NYSBE				
John E. Batey	35 Fawn Rd.	Easton	СТ	06612	FSBE				
Johnson Associates, Inc	19 West 44th Street	New York	NY	10036	NYSBE				
Johnstone Group, LLC	37 Bell Hill Road	Grand Isle	VT	05458	FSBE				
Katherine MacDonald	39 Springfield Street	Somerville	MA	02143	FSBE				
Kearns & West, Inc.	1990 K Street Inc	Washington	DC	20006	FSBE				
Kelliher Samets Volk	212 Battery Street	Burlington	VT	05401	FSBE				
KPMG LLP	PO Box 120001	Dallas	TX	75312-0511	FSBE				
Kroll Bond Rating Agency, Inc.	805 Third Ave., 29th Floor	New York	NY	10022	NYSBE				
L&S Energy Services, Inc.	58 Clifton Country Road	Clifton Park	NY	12065	NYSBE				
LaBella Associates, P.C.	300 State Street	Rochester	NY	14614	NYSBE				
Lamont Financial Services Corporation	30 Two Bridges Rd., Suite 205	Fairfield	NJ	07004	FSBE				
Latham & Watkins LLP	555 West 5th St	Los Angeles	CA	90013	FSBE				
Laurie D Kerr	720 Greenwich St., Apt. 9F	New York	NY	10014	NYSBE				
LCO Buildings LLC	726 Exchange St ,Ste 825	Buffalo	NY	14210-1433	NYSBE				
Leidos Engineering of New York, P.C.	PO Box 223058	Pittsburg	PA	15251-2058	FSBE				
Level 3 Communications, LLC	1025 Eldorado Blvd	Broomfield	со	80021	FSBE				
Level Agency for Infrastructure, LLC	12 VESTRY ST	NEW YORK	NY	10013	NYSBE				
Levitan & Associates, Inc.	20 Custom House Street	Boston	MA	02110	FSBE				
LexisNexis	1275 Broadway	Albany	NY	12204	NYSBE				
Lincoln Life & Annuity Company of NY	P.O. Box 7247-0347	Philadelphia	PA	19170-0347	FSBE				
Lockheed Martin Corporation	1701 W Marshall Drive	Grand Prairie	TX	75051	FSBE				

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Loeb & Loeb LLP	10100 Santa Monica Blvd.	Los Angeles	CA	90067	FSBE				
Long Island Progressive Coalition	90 Pennsylvania Avenue	Massapequa	NY	11758	NYSBE				
Low-Level Radioactive Waste Forum, Inc.	1619 12th Street	Washington	DC	20009	FSBE				
Luminate, LLC	1801 Broadway, Ste 1620	Denver	со	80202	FSBE				
Luminosity Events, Inc	228 East Rte 59, Suite #454	Nanuet	NY	10954	NYSBE				
Lumsden & McCormick, LLP	369 Franklin St	Buffalo	NY	14202	NYSBE				
M.J. Beck Consulting LLC	111 Rockingham Rd	Cherry Hill	NJ	08034	FSBE				
Maguire Cars LLC	dba Maguire Kia	Ithaca	NY	14850	NYSBE				
Mamerck Solutions LLC	30 Chatham Road	Short Hills	NJ	07078	FSBE				
Margaret R Cayten	414 Clinton St	Brooklyn	NY	11231	NYSBE				
Marriott Hotel Services	333 Adams St	Brooklyn	NY	11201-3734	NYSBE				
Marshall & Sterling, Inc.	125 High Rock Ave., Ste 206	Saratoga Springs	NY	12866	NYSBE				
Max Wei	508 Ramona Avenue	Albany	CA	94706	FSBE				
Mayer Brown LLP	230 South Lasalle Street	Chicago	IL	60604	FSBE				
McMahon and Mann Consulting Engineers	2495 Main St, Ste 432	Buffalo	NY	14214-2103	NYSBE				
Meister Consultants Group, Inc.	One Center Plaza, Ste 320	Boston	MA	02108	FSBE				
Mendelsohn Consulting, Inc.	320 Central Park West, Ste 7K	New York	NY	10025	NYSBE				
Merrimack Energy Group, Inc.	26 Shipway Place	Charlestown	MA	02129	FSBE				
Metropolitan Life Insurance Company	200 Park Avenue	New York	NY	10166	NYSBE				
Michael Farrell	155 West 78th Street	New York	NY	10024	NYSBE				
Michaels Energy, Inc.	400 Main Street, Suite 200	La Crosse	WI	54601	FSBE				
Milliman, Inc.	250 Washington Ave. Ext.	Albany	NY	12203-5401	NYSBE				
mindSHIFT Technologies, Inc.	500 Commack Rd., Ste 140	Commack	NY	11725	NYSBE				
MJW Technical Services, Inc.	243 Root St.	Olean	NY	14760	NYSBE				
Moelis & Company Group LP	399 Park Avenue, 5th Floor	New York	NY	10022	NYSBE				
MVP Consulting Plus, Inc.	435 New Karner Road	Albany	NY	12205	NYSBE	X	X		
NASEO	1300 17th Street, North	Arlington	VA	22209	FSBE				
National Economic Research	Associates, Inc.	Washington	DC	20037	FSBE				
National Home Performance Council	717 Kennebec Ave	Takoma Park	MD	20912	FSBE				
National Renewable Energy Laboratory	15013 Denver West Parkway	Golden	СО	80401-3305	FSBE				
Navigant Consulting Inc.	30 S. Wacker Dr.	Chicago	IL	60606-7444	FSBE				

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NESCAUM	89 South Street	Boston	MA	02111	FSBE				
NESEA	50 Miles Street	Greenfield	MA	01301	FSBE				
Netanium Inc	116 John Street	Lowell	MA	01852	FSBE				
Netsparker Limited	220 Industrial Blvd., Suite 102	Austin	TX	78745	FSBE				
Network Craze Technologies	7037 Fly Rd.	East Syracuse	NY	13057	NYSBE				
Network Experts of New York, Inc.	. 407 Vesper Court	Slingerlands	NY	12159	NYSBE	х	Х		
New Buildings Institute, Inc.	623 SW Oak Street	Portland	OR	97205	FSBE				
New Venture Advisors LLC	630 W. Wrightwood Ave. #5W	Chicago	IL	60614	FSBE				
New York Academy of Sciences	7 WTC - 250 Greenwich St., 40th Fl	New York	NY	10007-2157	NYSBE				
New York Battery and Energy Storage	Technology Consortium, Inc.	Albany	NY	12203	NYSBE				
New York Marriott Marquis	1535 Broadway	New York	NY	10036	NYSBE				
New York Passive House Inc.	334 Douglass Street	Brooklyn	NY	11217	NYSBE				
New York Power Authority,	123 Main Street, 4th Floor	White Plains	NY	10601	NYSBE				
New York Solar Energy Industries Assoc.	PO Box 1523	Long Island City	NY	11101	NYSBE				
New York State Ag & Markets	10B Airline Drive	Albany	NY	12235	NYSBE				
New York State Forum for IRM	24 Aviation Rd., Suite 206	Albany	NY	12205	NYSBE				
Newport Ventures, Inc.	22 Jay St	Schenectady	NY	12305-1917	NYSBE				
Nexant, Incorporated	49 Stevenson Street	San Francisco	CA	94105-2954	FSBE				
nfrastructure	5 Enterprise Avenue	Clifton Park	NY	12065	NYSBE				
NGenious Solutions Inc.	30 Knightsbridge Road	Piscataway	NJ	08854	FSBE				
Nixon Peabody LLP	1300 Clinton Square	Rochester	NY	14604	NYSBE				
NMR Group, Inc.	50-2 Howard Street	Somerville	MA	02144	FSBE				
North American Passive House Network, In	1250 Broadway	New York	NY	10001	NYSBE				
Northco Products, Inc.	1612 NY Route 7	Troy	NY	12180	NYSBE				
Northeast Energy Efficiency Partnerships	81 Hartwell Ave., Ste 220	Lexington	MA	02421-3137	FSBE				
NYC Climate Action Alliance Inc.	560 Lexington Ave	New York	NY	10022	NYSBE				
Nye Automotive Group, Inc	1441 Genesee Street	Oneida	NY	13421	NYSBE				
NYS Department of Agriculture and Marke	108 Airline Drive	Albany	NY	12235	NYSBE				
NYS Office for Technology	1 S Swan St Fl 3rd	Albany	NY	12210-2416	NYSBE				
ANNO OFFICE A COMMENT OF THE	1220 Washington Ave	Albany	NY	12226	NYSBE				
NYS Office of General Services	P.O. Box 2117	Albany	NY	12220-0117	NYSBE				

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NYS Office of Information Technology Ser	State Capital ESP	Albany	NY	12220-0062	NYSBE				
O'Brien & Gere Engineers, Inc.	333 W. Washington Street	Syracuse	NY	13202	NYSBE				
Offshore Electric Corp.	200 Atlantic Ave	Oceanside	NY	11572	NYSBE				
OGS State Office Building Campus	Empire State Plaza	Albany	NY	12246	NYSBE				
Oliver Kinross Ltd.	1st Floor, Landmark	London		EC14 4HD	FSBE				
Omnicap Group, LLC	2286 E Maple Avenue	El Segundo	CA	90245	FSBE				
Opinion Dynamics Corporation	1000 Winter St	Waltham	MA	02451	FSBE				
Optimal Energy Inc.	10600 Rte 116, Ste 3	Hinesburg	VT	05461	FSBE				
Oracle America, Inc.	PO Box 203448	Dallas	TX	75320-3448	FSBE				
OwnBackup Inc.	940 Sylvan Ave FL 1	Englewood Cliffs	NJ	07632	FSBE				
PA Consulting Group	55 Cambridge Parkway	Cambridge	MA	02142	FSBE				
Passive House Institute US	116 West Illinois Street	Chicago	IL	60654	FSBE				
Paul A Bradbury	4872 Sherwood Drive	Syracuse	NY	13215	NYSBE				
PC Learning Centers, Inc.	dba NYC Seminar & Conf. Ctr	New York	NY	10010	NYSBE				
Pedro Barretto Leite de Barros	188 E 78th Street, Apartment 14C	New York	NY	10075	NYSBE				
Penda Aiken Inc.	330 Livingston Street	Brooklyn	NY	11217	NYSBE	Х	х		
Performance Systems Development	of New York, LLC	Ithaca	NY	14850	NYSBE				
Peter L. Krog	4 Centre Drive	Orchard Park	NY	14127	NYSBE				
PGR Group LLC	36 Plymouth Drive South	Glen Head	NY	11545	NYSBE				
Philip Hopke	22 Barrington Park	Rochester	NY	14607	NYSBE				
Phire, Inc	8370 Greensboro Dr.	McLean	VA	22102	FSBE				
PitchBook Data, Inc.	901 5th Ave., Ste 1200	Seattle	WA	98164	FSBE				
Pitney Bowes, Inc.	PO Box 856390	Louisville	KY	40285-6390	FSBE				
PLB Oil & Gas Consult LLC	2 Pinecrest Road	Riverside	СТ	06878	FSBE				
Plugged In Strategies	9492 Olympia Drive	Eden Prairie	MN	55347	FSBE				
Poseidon Systems, LLC	200 Canal View Boulevard, Suite 300	Rochester	NY	14623	NYSBE				
Power Advisory LLC	212 Thoreau Street	Concord	MA	01742	FSBE				
Praveen Amar	119 Simonds Road	Lexington	MA	02420	FSBE				
Proenergy Consulting LLC	245 West 99th Street	New York	NY	10025	NYSBE				
Provantage, LLC	7576 Freedom Ave. NW	North Canton	ОН	44720	FSBE				
Pterra, LLC	4 Automation Lane	Albany	NY	12205	NYSBE				

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						WDE	WIDE	35405	JBE	
Quanta Technology LLC	4020 Westchase Blvd, Ste 300	Raleigh	NC	27607	FSBE					
R.W. Beck Group, Inc.	Leidos Engineering, LLC	Reston	VA	20190	FSBE					
Rafferty Enterprises, Inc.	1767 Central Avenue	Albany	NY	12205	NYSBE	Х				
Raj Technologies Inc.	110 Terminal Dr.	Plainview	NY	11803	NYSBE		X			
Randstad North America Inc	PO Box 2084	Carol Stream	IL	60132-2084	FSBE					
Randstad North America, Inc.	PO Box 2084	Carol Stream	IL	60132-2084	FSBE	Х				
Rasky Baerlein Strategic Communications	70 Franklin St	Boston	MA	02110	FSBE					
RD & Associates Consulting LLC	11 Portofino Circle	Henrietta	NY	14467	NYSBE					
Reed Midem SAS	27 Quai Alphonse Le Gallo	Boulogne-Billancourt	92	92100	FSBE					
Regional Economic Models, Inc	433 West St	Amherst	MA	01002	FSBE					
Regional Greenhouse Gas Initiative, Inc.	90 Church St	New York	NY	10007-2919	NYSBE					
Rensselaer Polytechnic Institute-LRC	21 Union St	Troy	NY	12180-3352	NYSBE					
Research Foundation of CUNY	230 W 41ST ST., 7th Floor	NEW YORK	NY	10036	NYSBE					
Research Foundation of SUNY	P.O. Box 9	Albany	NY	12201	NYSBE					
Research Foundation of SONT	SUNY, Stony Brook	Stony Brook	NY	11794-0002	NYSBE					
Research Into Action, Inc.	3934 NE MLK Boulevard	Portland	OR	97212	FSBE	Х				
Resource Refocus LLC	2120 University Ave.	Berkeley	CA	94704	FSBE					
Resources for the Future Inc	1616 P Street, NW	Washington	DC	20036-1400	FSBE					
RHC Operating LLC	The Roosevelt Hotel	New York	NY	10017	NYSBE					
Richard E. Gibbs, Ph.D., P.E.	287 Hidley Rd	Wynantskill	NY	12198-8068	NYSBE					
Ringlead, Inc.	223 Wall St., #144	Huntington	NY	11743	NYSBE					
Robison Energy LLC	500 Executive Blvd Ste 128	Elmsford	NY	10523-1234	NYSBE					
Rochester Computer Recycling & Recovery,	7318 Victor Mendon Road	Victor	NY	14564	NYSBE					
Rochester Institute of Technology	74 Lomb Memorial Dr	Rochester	NY	14623	NYSBE					
Rocky Mountain Institute	2490 Junction Place, Suite 200	Boulder	СО	80301	FSBE					
Rosenblum Property Services, LLC	PO Box 38070	Albany	NY	12203	NYSBE					
Ruskin Moscou Faltischek, P.C.'s	East Tower 15th Floor, 1425 RXR plaza	Uniondale	NY	11556-1425	NYSBE					
Russell Unger Consulting LLC	154 Underhill Avenue	Brooklyn	NY	11238	NYSBE					
Saratoga Media Group, Inc.	35 Bath St	Ballston Spa	NY	12020-1768	NYSBE					
SBW Consulting	2820 Northup Way , Suite 230	Bellevue	WA	98004	FSBE					
Scotto Brothers Woodbury Restaurant, LLC	d/b/a Fox Hollow	Woodbury	NY	11797	NYSBE					

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Second Nature Inc	18 Tremont St	Boston	MA	02108	FSBE					
Seek More LLC	2796 State Route 29	Greenwich	NY	12834	NYSBE					
Seven Springs West LLC	7186 Peters Road	Springville	NY	14141	NYSBE	х				
SHI, Inc.	P.O. Box 952121	Dallas	TX	75395	FSBE					
Siemens Industry, Inc.	85 Northpointe Parkway	Buffalo	NY	14228	NYSBE					
Sierra-Cedar, Inc.	PO Box 402521	Atlanta	GA	30384-2521	FSBE					
Sitecore USA, Inc.	591 Redwood Hwy, Bldg 4000	Mill Valley	CA	94941	FSBE					
Siteimprove, Inc.	7807 Creekridge Circle	Minneapolis	MN	55439	FSBE					
Sive Paget & Riesel PC	560 Lexington Ave., Floor 15	New York	NY	10022-1994	NYSBE					
SMG Partners	55 Eagle Street	Albany	NY	12207	NYSBE					
Smiley Brothers, Inc.	dba Mohonk Mountain House	New Paltz	NY	12561-2814	NYSBE					
Spectrotel Holding Company LLC	3535 State Hwy 66 Bldg 7	Neptune	NJ	07753	FSBE					
SS&C Technologies, Inc.	80 Lamberton Rd	Windsor	СТ	06095	FSBE					
Stance Renewable Risk Partners LLC	22 Mariposa Avenue	San Anselmo	CA	94960	FSBE					
Steven Winter Associates, Inc.	61 Washington St	Norwalk	СТ	06854	FSBE					
Stichting Energiesprong		Amsterdam		1093 NK	FSBE					
Stone Environmental, Inc.	535 Stone Cutters Way	Montpelier	VT	05602	FSBE					
Sunset Green Home LLC	112 E 74th St., #2N	New York	NY	10021	NYSBE	Х				
SUNY - ESF	The Research Foundation - SUNY	Albany	NY	12201-0009	NYSBE					
Sustainable CUNY CUNY/RF	205 E. 42nd Street, 11th FI	New York	NY	10017	NYSBE					
Sustainable Energy Advantage, LLC	161 Worcester Rd., Ste 503	Framingham	MA	01701	FSBE					
Sustainable Westchester	55 Maple Ave	Mount Kisco	NY	10549	NYSBE					
Systems Management Planning, Inc.	1020 John St	West Henrietta	NY	14586	NYSBE					
Taitem Engineering, P.C.	110 South Albany Street	Ithaca	NY	14850	NYSBE					
Taylor Group LTD	d/b/a Apogee Exhibits	Macedon	NY	14502	NYSBE					
Tech Home Electric, LLC	6804 Duanesburg Rd	Duanesburg	NY	12056	NYSBE					
Tech Valley Talent, LLC	PO Box 935587	Atlanta	GA	31193-5587	FSBE	Х				
Technology Professionals Group Inc.	D/B/A Cloud and Things	Loudonville	NY	12211	NYSBE	х	х			
TEKSYSTEMS Global Services, LLC	7437 Race Road	Hanover	MD	21076	FSBE					
TEKsystems Inc	PO Box 402042	Altanta	GA	30384-2042	FSBE					
Tendril Networks, Inc.	2580 55th Street	Boulder	СО	80301	FSBE					

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Terremark Federal Group, LLC	One Biscayne Tower	Miami	FL	33131-1802	FSBE					
Tetra Tech MA, Inc.	6410 Enterprise Ln	Madison	WI	53719	FSBE					
The Business Council of NYS, Inc.	12 Corporate Woods Blvd, Suite 17	Albany	NY	12211	NYSBE					
The Cadmus Group, LLC	100 5th Ave., Ste 100	Waltham	MA	02451	FSBE					
The Garrick Co., LLC	221 Cresent Bay Drive	Laguna Beach	CA	92651	FSBE					
The Initiatives Group	83 Fieldstone Dr.	Gansevoort	NY	12831	NYSBE					
The Logue Group	33 Holbrook Road	West Hartford	СТ	06107	FSBE					
The McAulay Smith Firm, LTD	100 North Tryon St., Ste 5220	Charlotte	NC	28202	FSBE					
The Renewables Consulting Group, LLC	433 Broadway, 6th Floor	New York	NY	10013	NYSBE					
The Research Foundation for the	SUNY-ESF, ESF Outreach	Syracuse	NY	13210	NYSBE					
State	University of New York	Albany	NY	12201-0009	NYSBE					
The Trustees of Columbia University	1210 Amsterdam Ave	New York	NY	10027-7003	NYSBE					
The Walters Company Air Conditioning, In	9 Petra Lane	Albany	NY	12205	NYSBE	х	Х			
Thornton Tomasetti, Inc.	51 Madison Avenue	New York	NY	10010	NYSBE					
ThunderCat Technology LLC	1925 Isaac Newton Square	Reston	VA	20190	FSBE			х		
Time Warner Cable	130 Washington Ave Ext	Albany	NY	12203	NYSBE					
Tobi Jo Creative, LLC	28 Main Avenue	Sea Cliff	NY	11579	NYSBE	Х				
Towerstream 1 Incorporated	76 Hammarlund Way # 130	Middletown	RI	02842	FSBE					
TRC Energy Services	21 Griffin Rd North	Windsor	СТ	06095	FSBE					
Triad Technology Partners LLC	7910 Woodmont Ave Suite 220	Bethesda	MD	20814	FSBE					
Trove Predictive Data Science, Inc.	640 Ellicott Street	Buffalo	NY	14203	NYSBE					
Troy Web Consulting, LLC	21 Westover Rd.	Troy	NY	12180	NYSBE					
Trust for Conservation Innovation	405 14th St., Ste 164	Oakland	CA	94612-2705	FSBE					
Tully Rinckey PLLC	441 New Karner Road	Albany	NY	12205	NYSBE			Х		
TVC Albany Inc.	FirstLight Fiber	Williston	VT	05495-1301	FSBE					
U.S. Geological Survey (Troy).	425 Jordan Rd	Troy	NY	12180-8349	NYSBE					
U.S. Nuclear Regulatory Commission	P.O. Box 979051	Saint Louis	МО	63197-9000	FSBE					
Unique Comp Inc.	2708 42nd Road	Long Island City	NY	11101	NYSBE	Х	Х			
Unique Electric Solutions of NYS LLC	34 E Main St. STE 313	Smithtown	NY	11787	NYSBE					
United Way of Long Island	819 Grand Boulevard	Deer Park	NY	11729	NYSBE					
Uplight, Inc.	2580 55th Street	Boulder	со	80301	FSBE					

Contractor	SupplierAddress	SupplierCity		SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
Upstate Capital Association of	180 South St.	Highland	NY	12528	NYSBE			33.02		
New York										
Upstate Venture Connect	235 Harrison Street	Syracuse	NY	13202	NYSBE					
Van Nostrand Energy & Environmental	Consulting LLC	Pittsburgh	PA	15228	FSBE					
Varun Sivaram	18300 Twin Creeks Road	Monte Sereno	CA	95030	FSBE					
Vatsal Bhatt	4 Friar Tuck Ct	Setauket	NY	11733	NYSBE					
Verizon Network Integration Corp.	52 E. Swedesford Road	Frazer	PA	19355	FSBE					
Verizon Wireless	1770 Central Ave	Albany	NY	12205-4755	NYSBE					
Vermont Energy Investment Corporation	128 Lakeside Ave., Ste 401	Burlington	VT	05401	FSBE					
Versar, Inc	6850 Versar Center	Springfield	VA	22151	FSBE					
Vervent Inc.	10182 Telesis Court	San Diego	CA	92121	FSBE					
VHB Engineering, Surveying and	Landscape Architecture, P.C.	Albany	NY	12203	NYSBE					
Village of Skaneateles	26 Fennell St	Skaneateles	NY	13152	NYSBE					
Village of Tupper Lake	53 PARK ST	TUPPER LAKE	NY	12986	NYSBE					
W & E Phillips Locksmith, Inc	P.O. Box 6310	Albany	NY	12206-0310	NYSBE					
Wadsworth Energy LLC	16378 Viansa Way, Unit 302	Naples	FL	34110	FSBE					
Walter Snyder Printer, Inc.	691 River St	Troy	NY	12180-1504	NYSBE					
Watershed Assessment Associates, LLC	1861 Chrisler Ave.	Schenectady	NY	12303	NYSBE					
Watertown, City of	245 Washington St., Ste 203	Watertown	NY	13601-3334	NYSBE					
Wendel Energy Services, LLC	Centerpointe Corporate Park	Williamsville	NY	14221	NYSBE					
Wendel WD Architecture, Engineering,	375 Essjay Rd., Ste 200	Williamsville	NY	14221	NYSBE					
West Hill Energy & Computing, Inc.	205 Main Street, Suite 14	Brattleboro	VT	05301	FSBE					
Westchester Chamber Educational	Foundation Inc.	Rye Brook	NY	10573	NYSBE					
Wichcraft Operating, LLC	60 E 8th St	New York	NY	10003	NYSBE					
Willdan Energy Solutions	Wall Street Plaza	New York	NY	10005	NYSBE					
William Morlok	2410 Pine Street	Philadelphia	PA	19103	FSBE					
Wood Mackenzie Power & Renewables, Inc.	545 Washington Blvd	Jersey City	NJ	07310	FSBE					
Xerox Corp	800 Phillips Rd	Webster	NY	14580	NYSBE					
Yale University	2 Whitney Avenue, 6th Floor	New Haven	СТ	06510	FSBE					
Yue Chen	45 W 9th St	New York	NY	10011	NYSBE	x				
Zone 5, Inc.	25 Monroe Street, Suite 300	Albany	NY	12210	NYSBE					
Zones LLC	1102 15th St. SW. STE 102	Auburn	WA	98001	FSBE					

Annual Report - Section 2: Non-Contract Vendor Payments

Date	Vendor ID	Contractor	Account Description	Business Type	Amt Paid this Period
4/1/2019	0000025207	National Grid	Utilities	NYSBE	\$99,915
	0000026824	Weston Bros.	Program Marketing	NYSBE	\$50,000
	0000026827	WK Mechanical	Program Marketing	NYSBE	\$5,100
	0000029220	First Environment, Inc.	Professional Svcs-Admin	FSBE	\$5,750
	0000034218	Long Island Power Authority	Program Implementation	NYSBE	\$112,835
	0000034356	United Parcel Service	Postage and Delivery	FSBE	\$6,857
	0000034358	United States Postal Service	Postage and Delivery	FSBE	\$12,000
	0000034360	Verizon Wireless	Telecommunications	FSBE	\$100,538
	0000034437	Frontier	Telecommunications	FSBE	\$5,738
	0000034530	Time Warner Cable	Telecommunications	NYSBE	\$35,236
	0000035097	Staples, Inc.	Office Supplies & Expense	FSBE	\$20,607
	0000035147	University of Rochester	Program Marketing	NYSBE	\$6,100
	0000035169	Wisconsin Energy Conservation Corp	Program Implementation	FSBE	\$1,294,040
	0000035504	BlueOx Corporation	Program Marketing	NYSBE	\$22,456
	0000035599	E and V Energy Corporation	Program Marketing	NYSBE	\$31,370
	0000036053	Buffalo Energy, Inc.	Program Marketing	NYSBE	\$17,170
	0000036526	Airquip	Program Marketing	NYSBE	\$25,033
	0000037132	Betlem Service Corporation	Program Marketing	NYSBE	\$36,356
	0000037134	Saratoga County Sewer District	Utilities	NYSBE	\$11,260
	0000037575	Plaza Deli of Albany, Inc.	Miscellaneous Expense	NYSBE	\$5,133
	0000038187	American Consumer Shows	Program Marketing	NYSBE	\$6,061
	0000038913	Meier Supply Company	Program Marketing	NYSBE	\$37,300

Annual Report - Section 2: Non-Contract Vendor Payments

Date 4/1/2019

Vendor ID	Contractor	Account Description	Business Type	Amt Paid this Period
0000039015	Sure Temp Company Inc.	Program Marketing	NYSBE	\$13,880
0000039473	LCO Buildings LLC	Rent (Real Estate)	NYSBE	\$72,638
0000055896	Malcarne Contracting, Inc.	Program Implementation	NYSBE	\$14,500
0000058316	Intrado Enterprise Colloration Inc	Telecommunications	FSBE	\$39,807
0000059025	Aztech Geothermal, LLC	Program Implementation	NYSBE	\$10,275
0000061519	Concord Servicing Corporation	Program Implementation	FSBE	\$1,289,050
0000070344	IHS Global Inc.	Publications	FSBE	\$13,920
0000072892	New York City Energy Efficiency Corp	Miscellaneous Expense	NYSBE	\$8,730
0000074259	Advantage Title Agency, Inc.	Program Implementation	NYSBE	\$476,310
0000076295	WEX Bank	Travel	FSBE	\$7,561
0000076556	Bosch Thermotechnology Corp.	Program Marketing	FSBE	\$45,334
0000078131	Empire State Realty OP, LP	Utilities	NYSBE	\$289,546
0000079532	Columbia Circle Owner, LLC	Utilities	FSBE	\$522,798
0000081225	Irr Supply Centers Inc	Program Marketing	NYSBE	\$36,002
0000082172	LF Distribution Holding Inc.	Utilities	FSBE	\$962,705
0000083234	Specialty Advertising Products Inc.	Printing	FSBE	\$8,550
0000084048	Clay Drywall, Inc.	Maint & Repairs(non recurring)	NYSBE	\$5,565
0000084427	Sun Dance Pool N Patio Inc.	Program Marketing	NYSBE	\$13,945
0000085884	Peter Tavino PE PC	Program Implementation	FSBE	\$24,911
0000085910	Earth Sensitive Solutions, LLC	Program Implementation	NYSBE	\$8,734
0000086135	Rycor LLC	Program Marketing	NYSBE	\$71,065
0000086161	Iceberg Mechanical Corp	Program Marketing	NYSBE	\$46,775

Annual Report - Section 2: Non-Contract Vendor Payments

Date	Vendor ID	Contractor	Account Description	Business Type	Amt Paid this Period
4/1/2019	0000086165	SCOOP HVAC, LLC	Program Marketing	NYSBE	\$26,718
	0000086203	Dandelion Energy Inc	Program Implementation	NYSBE	\$12,500
	0000086243	Perfection Contracting Inc	Program Implementation	FSBE	\$8,775
	0000086273	T' F' Obrien	Program Marketing	NYSBE	\$11,088
	0000086286	Northeast Ductless Heating and Cooling	Program Marketing	NYSBE	\$5,507
	0000086704	Harvey Bloch Ortiz Bailer Inc	Program Implementation	NYSBE	\$8,986
	0000086712	WaterFurnace International, Inc.	Program Implementation	FSBE	\$6,706
	0000086883	Phoenix Geothermal Services	Program Implementation	NYSBE	\$19,379
	0000086988	Bishop House Consulting, Inc.	Staff Development	NYSBE	\$9,992
	0000087326	W. B. Mason Co. Inc	Office Supplies & Expense	FSBE	\$13,210
	0000087360	Indeed Inc.	Recruitment	FSBE	\$7,498
	0000087647	Grassroots Environmental Education, Inc.	Program Marketing	NYSBE	\$10,750
	0000087649	ME HVAC LLC	Program Marketing	FSBE	\$45,711
	0000088340	Modular Comfort Systems	Program Marketing	NYSBE	\$50,000
Grand Total					\$6,166,273

ANNUAL CONTRACTS REPORT : Section 1 Summary 4/1/2019 to 3/31/2020

Category	Report Type	Туре	Count of Contracts	Committed this period
PGRM	Program	Competitive	2,862	\$7,342,932,975
		Discretionary	44	\$1,699,383
		Non-Competitive	17	\$13,646,975
	Total		2,923	\$7,358,279,333
Grand Total			2,923	\$7,358,279,333

Section 1 Summary - Percentages

% Contract Counts Competitively % of \$Committed this period Competitively

99.41%	99.81%
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NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2019 to 3/31/2020 Graph: All Market Focus Committed this Period

MarketFocus														
Large Scale Renewables														\$6,611,728,495
NY-Sun		10,382,099												
Energy Storage	\$202,7	37,614												
Commercial	\$51,374,917													
Combined Heat & Power														
Technology to Market														
	\$19,541,737													
	\$17,990,503													
Renewables Optimization	\$10,407,499													
Grid Modernization	\$9,868,734													
Workforce Development	\$8,957,992													
Communities and Local Gov	\$8,865,987													
Fuel Cells	\$8,784,750													
New Construction	\$8,153,643													
Clean Heating and Cooling	\$6,993,844													
Clean Trans (Innov & Resear	\$4,512,252													
Codes	\$4,208,469													
Energy-Rltd Environmental	\$4,169,563													
Multifamily (Mkt Rate Only)	\$2,889,420													
Innovation	\$2,821,341													
Agriculture	\$2,426,501													
Energy & EnvironmentalAna	\$2,049,290													
Single Family Residential	\$2,009,610													
REV Technical Assistance	\$1,930,000													
Building Innovation	\$1,760,231													
Mkt Char & Design (Mkt Dev)	\$796,018													
Information Brokering	\$693,958													
Other Program	\$564,342													
Fuel NY	\$496,000													
Small Wind	\$436,114													
Products	\$301,070													
On-Site Power	\$300,000													
Anaerobic Digesters	\$285,000													
Null	\$280,248													
Financing Solutions	\$241,113													
Low Income	\$125,000													
Solar Thermal	\$32,440													
Saratoga Tech & Energy Park	\$13,500													
Administration														
		\$500,000,000	\$1,000,000,000	\$1,500,000,000	\$2,000,000,000	\$2,500,000,000	\$3,000,000,000	\$3,500,000,000 Committed this period	\$4,000,000,000	\$4,500,000,000	\$5,000,000,000	\$5,500,000,000	\$6,000,000,000	\$6,500,000,000

REDC Region	County	Count of Contracts	Committed this period
Capital Region	Albany	62	\$8,385,228
· ·	Columbia	25	\$3,596,958
	Greene	9	\$2,147,701
	Rensselaer	40	\$14,463,117
	Saratoga	46	\$11,045,649
	Schenectady	36	\$34,764,109
	Warren	14	\$897,900
	Washington	7	\$2,028,966
	Total	239	\$77,329,629
Central New York	Cayuga	25	\$236,195,815
- Cin	Cortland	14	\$10,745,881
	Madison	13	\$18,237,100
	Onondaga	75	\$30,716,305
	Oswego	23	\$9,373,104
	Total	150	\$305,268,205
Finger Lakes	Genesee	15	\$7,892,438
	Livingston	19	\$3,515,912
	Monroe	113	\$21,215,266
	Ontario	42	\$2,040,954

REDC Region	County	Count of Contracts	Committed this period
Finger Lakes	Orleans	7	\$1,463,265
	Seneca	7	\$2,740,535
	Wayne	34	\$4,829,988
	Wyoming	10	\$1,374,496
	Yates	3	\$38,377
	Total	250	\$45,111,231
Long Island	Nassau	30	\$499,318
	Suffolk	81	\$3,737,654
	Total	111	\$4,236,972
Mid-Hudson	Dutchess	82	\$11,642,287
	Orange	91	\$37,462,956
	Putnam	10	\$224,491
	Rockland	40	\$1,198,422
	Sullivan	32	\$11,063,646
	Ulster	73	\$12,174,421
	Westchester	125	\$29,419,974
	Total	453	\$103,186,196
Mohawk Valley	Fulton	19	\$12,133,493
-	Herkimer	10	\$16,139,263
	Montgomery	5	\$1,237,504
	Oneida	42	\$19,703,986

REDC Region	County	Count of Contracts	Committed this period
Mohawk Valley	Otsego	10	\$1,442,138
	Schoharie	7	\$150,542
	Total	93	\$50,806,926
New York City	Bronx	146	\$10,528,170
	Kings	200	\$17,169,736
	New York	365	\$46,910,553
	Queens	148	\$14,580,350
	Richmond	33	\$10,116,871
	Total	891	\$98,914,323
North Country	Clinton	16	\$6,756,965
	Essex	15	\$298,958
	Franklin	8	\$1,103,158
	Jefferson	38	\$31,876,762
	Lewis	7	\$3,893,004
	St. Lawrence	22	\$182,016,215
	Total	106	\$225,945,061
Southern Tier	Broome	18	\$2,894,301
	Chemung	26	\$8,971,657
	Chenango	14	\$10,284,929
	Delaware	9	\$265,070
	Schuyler	10	\$3,896,744

REDC Region	County	Count of Contracts	Committed this period
Southern Tier	Steuben	12	\$3,383,398
	Tioga	20	\$10,615,315
	Tompkins	66	\$18,463,463
	Total	175	\$58,774,878
Statewide	STATEWIDE	330	\$6,337,817,260
	Total	330	\$6,337,817,260
Western New York	Allegany	8	\$6,026,408
	Cattaraugus	22	\$23,502,362
	Chautauqua	15	\$3,493,223
	Erie	87	\$9,433,072
	Niagara	22	\$8,042,230
	Total	154	\$50,497,296
Grand Total		2,953	\$7,358,279,333

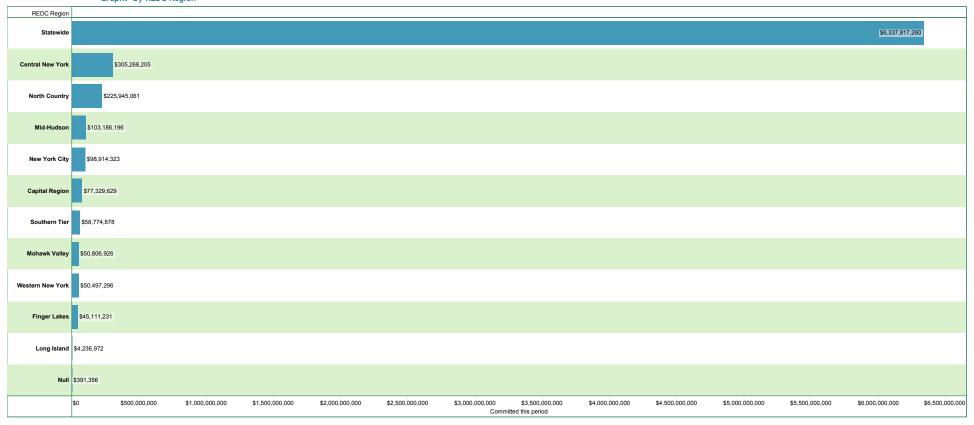
NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2019 to 3/31/2020 Table: By Electric Utility

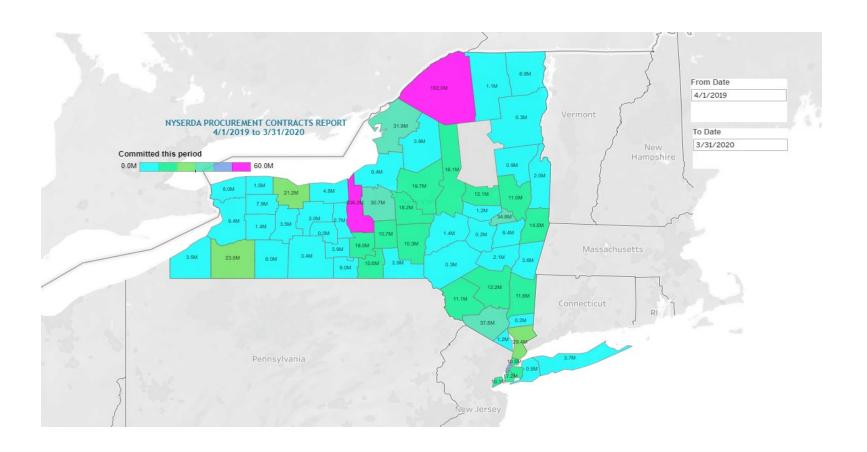
Electric Utility	Count of Contracts	Committed this period
Null	6	\$406,989
ватн	1	\$60,000
BOONVILLE	1	\$50,000
Central Hudson Gas and Electric	182	\$34,654,589
Consolidated Edison	986	\$124,810,884
FAIRPORT	1	\$50,000
GREEN ISLAND	2	\$44,145
JAMESTOWN	1	\$150,000
Long Island Power Authority	111	\$4,236,972
MASSENA	1	\$510,000
National Grid	630	\$459,657,099
NYS Electric and Gas	402	\$103,336,610
Orange and Rockland Utilities	113	\$30,396,395
PENN YAN	1	\$5,120
PLATTSBURGH	2	\$50,044
Rochester Gas and Electric	156	\$253,549,822
SALAMANCA	1	\$100,000

NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2019 to 3/31/2020 Table: By Electric Utility

Electric Utility	Count of Contracts	Committed this period
SPENCERPORT	3	\$5,857,348
Statewide	330	\$6,337,817,260
WATKINS GLEN	3	\$2,536,056
Grand Total	2,933	\$7,358,279,333

NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2019 to 3/31/2020 Graph: By REDC Region





NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

PROCUREMENT AND PROGRAM CONTRACT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

June 2019

Article I. Purpose and Applicability

- 1.1 These Procurement and Program Contract Guidelines ("Guidelines"), adopted pursuant to Public Authorities Law Sections 1854, 1855, and 2879, set forth the operative policies of the Authority and instructions to its officers and employees regarding the use, awarding, monitoring, and reporting of Procurement and Program Contracts.
- 1.2 These Guidelines apply to any Procurement or Program Contract entered into after they become effective pursuant to the provisions of Section 1853 of the Public Authorities Law.

Article II. Definitions

- 2.1 As used in these Guidelines, "Procurement Contract" means a written agreement for the Authority's acquisition of goods or services, in the actual or estimated amount of \$5,000 or more.
- 2.2 As used in these Guidelines, "Program Contract" means a contract in the actual or estimated amount of \$5,000 or more that is not a Procurement Contract. Program Contracts may include but are not limited to grants, investments, awards, incentives, memberships and other arrangements by which the Authority provides financial assistance to fund a third party's performance of work in furtherance of the mission of the Authority. Program Contracts shall also include: memberships in industry groups, professional societies and similar cooperative associations, and any cooperative projects conducted or sponsored by such organizations; and direct purchase advertising with radio, television or print media regarding program activities. Loans, guarantees, letters of credit and other contractual arrangements executed by Green Bank are not Program Contracts for purposes of these Guidelines; the consideration and approval of such transactions are governed by the relevant provisions of the Authority's Internal Control Manual and by Green Bank's internal rules and guidelines. Contracts for interests in real property are governed by separate Board approved Guidelines for Real Property.
- 2.3 As used in these Guidelines, "Other Administrative Contracts" mean Procurement Contracts to provide services to support the Authority's administrative functions for a fee, commission, or other compensation by a person or organization that is not performing that work as an officer or employee of the Authority, another public corporation, or a state agency. Other Administrative Contracts include, but are not limited to, equipment maintenance contracts, leases, insurance, telecommunications, or other similar services, but do not include Personal Services Contracts.

- 2.4 As used in these Guidelines, "Contractor" means a person or organization that enters into a Procurement Contract with the Authority.
- 2.5 As used in these Guidelines, "Minority Business Enterprise" means any business enterprise certified by the Division of Minority and Women-Owned Business Development as a Minority Business Enterprise.
- 2.6 As used in these Guidelines, "Women-Owned Business Enterprise" means a business enterprise certified by the Division of Minority and Women-Owned Business Development as a Women-Owned Business Enterprise.
- 2.7 As used in these Guidelines, "New York State Business Enterprise" means a business enterprise, including a sole proprietorship, partnership, or corporation, which offers for sale or lease or other form of exchange goods which are sought by the Authority and which are substantially manufactured, produced, or assembled in New York State or services which are sought by the Authority and which are substantially performed in New York State.
- 2.8 As used in these Guidelines, "New York State Small Business Enterprise" means a company that is a resident to New York State, independently owned and operated, with 100 or fewer employees, and not dominant in its field. See New York State Finance Law.
- 2.9 As used in these Guidelines, "Service-Disabled Veteran-Owned Business Enterprise (SDVOB)" means any business that is certified by the Office of General Services Division of Service-Disabled Veterans' Business Development as a certified service-disabled veteran-owned business enterprise.
- 2.10 As used in these Guidelines, a "New York State Resident" means a natural person who maintains a fixed, permanent, and principal home within New York State and to which such person, whenever temporarily located, always intends to return.
- 2.11 As used in these Guidelines, "Competitive Selection Method" shall include:
 - i. solicitations, including program opportunity notices, requests for proposals, requests for information, requests for quotations and requests for qualifications;
 - ii. subscription program offers;
 - iii. for administrative purchases, if the issuance of a solicitation is reasonably expected to result in no more than nominal savings, obtaining at a minimum three (3) quotations from different providers or firms;
 - iv. Procurement or Program Contracts made pursuant to centralized contracts let by other public entities pursuant to a competitive process, including those contracts of the New York State Office of General Services;
 - v. procurement of commodities from a Contractor where the price to be charged by the Contractor is less than that which would be charged for the purchase substantially similar in function, form or utility made pursuant to a centralized contract let by the New York

- State Office of General Services or when other contract terms such as delivery or warranty terms are more economically beneficial; or
- vi. any other competitive method of selection that is consistent with these guidelines.

Article III. Requirements Regarding Selection of Contractors

- 3.0 Unless otherwise directed by law or order in the form of an authorization and direction to use funds in a certain manner¹, the Authority shall use its best efforts to secure offers from Contractors by using a Competitive Selection Method and to select from such offerers the Contractor offering the most favorable terms, weighing expected ability to perform against projected costs. To this end, the Authority shall:
- (a) solicit offers in writing from several persons or organizations known, believed, or reputed to be qualified in the area of supplying the goods, personal services, Authority program work, or other administrative services to be provided or performed, except that for administrative purchases authorized by Section 2.10 (iii), such quotations may be secured by telephone solicitations where time constraints do not permit securing a written bid and for procurement of catalog and other items generally purchased in the ordinary course of business or which do not require a detailed bid or description of materials or specifications.
- (b) evaluate those offers received on the basis of such information as the Authority has received on, as may be relevant, each offerer's technical or professional qualifications, financial stability, past performance for the Authority, staff, equipment, and facilities availability, experience, reputation, and other factors bearing on expected capability and quality of performance, possible conflicts of interest, and contract price or fee structure; and
- (c) document the processes by which a Contractor is selected, by making a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative services sought, the name of each person or organization submitting, or requested to submit, a bid or proposal, the price or fee bid, and the basis for selection of the Contractor.
- 3.1 In any instance, the members of the Authority may, by resolution, waive the use of the procedure for selecting Contractors outlined in Section 3.0 if they determine such waiver to be in the best interest of the Authority.
- 3.2 The members of the Authority, upon adoption of these Guidelines, hereby waive use of the procedures for selecting Contractors outlined in section 3.0 in those instances when:

¹ For avoidance of doubt, this provision is included to acknowledge that the Authority's contracting guidelines do not apply in instances where the Authority is directed by law or order to use finds in a certain manner.

- a) the goods, personal services, Authority program work, or other administrative services involved are expected to cost \$50,000 or less;
- b) the goods, personal services, or other administrative services involved are expected to cost \$200,000 or less and are procured from a Minority Business Enterprise or Women-Owned Business Enterprise; a New York State Small Business Enterprise; or a Certified Service-Disabled Veteran-Owned Business Enterprise.
- c) for any Authority program work, the contract is based upon an unsolicited proposal, submitted at the sole initiative of the offerer, not duplicating work then being performed or in the project planning request stage, and involving unique, innovative, or unusual meritorious methods or ideas;
- d) an Authority Officer determines that:
- i. the interest of the Authority for timely obtainment of the goods, personal services, Authority program work, or other administrative services involved precludes selection of a Contractor pursuant to such procedure; or,
- ii. even though two or more Contractors could supply the required goods, personal services, Authority program work, or other administrative service, one particular Contractor has unique or exceptionally scarce qualifications or experience, specialized equipment, or facilities not readily available from other sources, or patents, copyrights, or proprietary data; or,
- iii. there is only one source for a required good, personal service, Authority program work, or other administrative service; or,
- iv. the contract is for goods, personal services or other administrative services and is based upon a contract awarded by the United States government, or any state or any political subdivision thereof, in accordance with the requirements of New York State Finance Law and the criteria established by the New York State Office of General Services (aka piggybacking); or,
- v. the contract is for a membership in an industry group, professional society, or similar cooperative association the work of which has been determined by an Officer of the authority to be aligned with the strategy of the Authority and membership in which will benefit the Authority's mission; or
- vi. the contract is for a sponsorship or procurement of space or services in relation to an industry or other mission-related conference, symposium or other similar event, the topic of which has been determined by an Officer of the Authority to be aligned with the strategy of the Authority and participation will benefit the Authority's mission.

<u>provided</u>, that in those instances the Authority shall nonetheless make a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative service involved, the name of the Contractor, the contract price or fee, and the basis for waiver and selection of the Contractor.

3.3 Board Approval of Procurement and Program Contracts

- (a) Approval of the members of the Authority, either by prior action, when time permits, or by ratification at the next meeting of the Authority shall be required for any:
 - i. Procurement Contract which provides for a period of performance by the Contractor in excess of one year;
 - ii. Program Contract that is the result of a competitive process and which provides an estimated or actual amount of \$3 Million or more; and,
 - iii. Program Contract that is the result of a noncompetitive process and which provides an estimated or actual amount greater than \$1 Million.
- 3.4 Independent auditors for the Authority shall be retained only with the prior approval of the members of the Authority.
- 3.5 The Authority may use its Competitive Selection Methods to select multiple Contractors to provide goods, personal services, Authority program work, and other administrative services. Individual task work orders may be awarded to these Contractors on an as-needed basis.

Article IV. Compliance with State Finance Law Sections 139-j and 139-k in the Selection of Contractors; Contractor Responsibilities and Types of Contract Provisions

4.0 The Authority shall comply with the requirements of State Finance Law Sections 139-j and 139-k in its selection of Contractors. Solicitations shall identify NYSERDA's Designated Contacts, require bidders to disclose any prior determination of non-responsibility, and to provide the other information required by State Finance Law Sections 139-j and 139-k.

The responsibilities of a Contractor, including continuing responsibilities under State Finance Law Sections 139-j and 139-k, shall be detailed in the contract. Contract provisions shall address the nature and scope of the goods, personal services, or Authority program work to be provided; the standard for performance, if practical; the duration of the work; any relevant time requirements or deadlines; and the amount of compensation to be paid or the price, rates, or fees which will be used to determine such compensation. Personal Services Contracts and Program Contracts shall also include provisions on monitoring of the work to be performed; provisions governing the Contractor's use of Authority supplies, facilities, or personnel, if permitted; any provisions required by applicable law; and any other provisions the Authority deems necessary or desirable.

Article V. Minority and Women-Owned Business Enterprises

5.1 It is the policy of the Authority to foster and promote participation of Minority Business Enterprises and Women-Owned Business Enterprises in its procurements and the development of such enterprises and to facilitate a fair share of the awarding of Procurement Contracts to such enterprises.

The MWBE rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 15-A of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project. Article 15-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Minority and Women-Owned Business Development to certify and decertify Minority Business Enterprises and Women-Owned Business Enterprises through a single process that meets applicable state and federal requirements.

On an annual basis, the Authority shall establish appropriate statewide goals for participation by Minority or Women-Owned Business Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified procurement contracts with the Authority pursuant to § 313(1-b) of the Executive Law. In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Minority and Women's Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by

Minority and Women-Owned Business Enterprises. This includes, but is not limited to:

- (a) The Authority shall maintain measures and procedures, as detailed in the Master Goal Plan, to ensure that certified businesses shall be given the opportunity for maximum feasible participation in the performance of appropriate state contracts and to assist in the Authority's identification of those state contracts for which certified businesses may best bid to actively and affirmatively promote and assist their participation.
- (b) The Authority will consult with the Division of Minority and Women's Business Development for assistance in identifying Minority Business Enterprises or Women-Owned Business Enterprises, and refer to any known list maintained by any other State department or agency that identifies such enterprises by area of expertise.
- (c) With the assistance of the Director of Contract Management, the Authority shall maintain its own list of such enterprises, including professional firms that have expressed an interest in doing business with the Authority, and shall ensure that the list is updated regularly.
- (d) The Authority shall provide notice of procurement opportunities to professional and other organizations that serve Minority and Women-Owned Business Enterprises providing the types of services the Authority procures, and solicit or request offers from Minority and Women-Owned Businesses known to have experience in the type of goods, personal services, and other administrative services involved.
- (e) Each solicitation document for a qualified solicitation shall set forth the expected degree of Minority and Women-Owned Business Enterprise participation, and the Authority shall provide to each prospective contractor a current list of certified Minority and Women-Owned Business Enterprises. The expected degree of Minority and Women-Owned Business Enterprise participation shall be based, in part, on (i) the potential subcontract opportunities available in the prime procurement contract; and (ii) the availability of certified Minority and Women-Owned Business Enterprises to respond competitively to the potential subcontract opportunities.
- (f) Written solicitations or requests for bids or proposals for Procurement Contracts will include a statement of the Authority's affirmative action policy.
- (g) Allow bidders to count the Minority and Women-Owned Business Enterprise portion of a joint venture towards meeting its minority business enterprise goal.
- (h) For each qualified contract, the Authority shall: (i) consider, where practicable, the severability of construction projects and other bundled contracts; (ii) evaluate the appropriateness of the goal established in the Master Goal Plan; (iii) consider compliance with the requirements of any federal law concerning opportunities for Minority and Women-Owned Business Enterprises which effectuates the purpose of the Authority's policy; and (iv) consult the most recent disparity study pursuant to Article 15-A of the Executive Law.

The Authority may waive obligations of a contractor relating to Minority and Women-Owned Business Enterprise participation after a showing of good faith efforts to comply with the requirements of Article 9 of the Public Authorities Law relative to the waiver provisions contained in § 313(6) and (7) of the Executive Law. In addition, the Authority shall verify that Minority and Women-Owned Business Enterprises listed in a successful bid are actually participating to the extent listed in the project for which the bid was submitted.

The President and CEO of the Authority has general policy responsibility for the Authority's Minority and Women-Owned Business Enterprise program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Treasurer, shall manage day-to-day responsibilities for M/WBE reporting and implementation. The Authority Counsel's Office shall be responsibility for M/WBE legislation oversight and compliance.

Through its program, the Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified procurement contracts, as identified by the Director of Contract Management, to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified procurement contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified procurement contracts with the Authority.

Article VI. Contracts with Former Officers or Employees

6.0 Contracts with former officers or employees of the Authority shall be permitted where the goods, personal services, Authority program work, or other administrative services are to the best advantage of the Authority and the contractual relationship is not otherwise prohibited by law or Authority policy. In particular, any former officer or employee of the Authority shall be held to the restrictions set forth in Public Authorities Law Section 73(8) on receiving compensation for any services rendered with respect to specified types of cases, proceedings, applications, matters, and transactions.

Article VII. New York State Business Enterprises and New York State Residents

7.0 It is the policy of the Authority to promote participation in qualified Procurement Contracts by New York State Business Enterprises and New York State Residents, by encouraging them to compete through measures including, but not limited to:

(a) Collecting and consulting the specifications of New York State Business Enterprises in developing any specifications for any Procurement or Program Contract for the purchase of

goods where possible, practicable, feasible, and consistent with open bidding, except for Procurement or Program Contracts for which the Authority would be expending funds received from another state. The Authority will, where feasible, make use of the stock order specification forms prepared by the Commissioner of General Services and, where necessary, consult with the Commissioner of General Services in developing such specifications and making such determinations.

- With the cooperation of the Department of Economic Development and through cooperative (b) efforts with Contractors, providing for the notification of New York State Business Enterprises of opportunities to participate as subcontractors and suppliers on qualified Procurement Contracts in an amount estimated to be equal to or greater than one million dollars and promulgating procedures which will assure compliance by Contractors with such notification. Once awarded the contract, such Contractors shall document their efforts to encourage the participation of New York State Business Enterprises as subcontractors and suppliers on such qualified Procurement Contracts. Documented efforts by a successful Contractor shall consist of and be limited to showing that such Contractor has (a) solicited bids, in a timely and adequate manner, from New York State Business Enterprises, including certified minority and women-owned businesses, or (b) contacted the New York State Department of Economic Development to obtain listings of New York State Business Enterprises, or (c) placed notices for subcontractors and suppliers in newspapers, journals, and other trade publications circulated in New York State, or (d) participated in bidder outreach conferences. If the Contractor determines that New York State Business Enterprises are not available to participate on the contract as subcontractors or suppliers, the Contractor shall provide a statement indicating the method by which such determination was made. If the Contractor does not intend to use subcontractors on the contract, the Contractor shall provide a statement verifying such intent.
- (c) Except for Procurement Contracts for which the Authority would be expending funds received from another state, including in all bid documents provided to potential bidders a statement that information concerning the availability of New York State subcontractors and suppliers is available from the New York State Department of Economic Development, including the directory of certified minority and women-owned businesses, and that it is the policy of New York State to encourage the use of New York State subcontractors and suppliers and to promote the participation of minority and women-owned businesses, where possible, in the procurement of goods and services.
- (d) With the cooperation of the Community Services Division of the Department of Labor and through cooperative efforts with Contractors, providing for the notification of New York State residents of employment opportunities arising in New York State out of Procurement Contracts in an amount estimated to be equal to or greater than one million dollars; and promulgating procedures that will assure compliance by Contractors with notification by requiring Contractors to submit post-award compliance reports documenting their efforts to provide such notification through listing any such positions with the Community Services

Division or providing for such notification in such manner as is consistent with existing collective bargaining contracts or agreements.

- (e) Including in each set of documents soliciting bids on qualified Procurement Contracts a statement notifying potential bidders in foreign countries that the Authority may assign or otherwise transfer offset credits created by such Procurement Contract to third parties located in New York State; providing for the assignment or other form of transfer of offset credits created by such Procurement Contracts, directly or indirectly, to third parties located in New York State, in accordance with the written directions of the Commissioner of Economic Development; and providing for the Authority otherwise to cooperate with the Department of Economic Development in efforts to get foreign countries to recognize offset credits assigned or transferred to third parties located in New York State created by such Procurement Contracts.
- (f) Promulgating procedures that will assure compliance with the federal Equal Employment Opportunity Act of 1972 (Pub. L. 92-261), as amended, by Contractors.

The Authority shall notify the Commissioner of Economic Development of the expected award of any Procurement or Program Contract for the purchase of goods, personal services, Authority program work, or other administrative services from a foreign business enterprise in an amount equal to or greater than one million dollars (\$1,000,000) simultaneously with notifying the successful bidder therefor. The Authority shall not enter into the Procurement Contract until at least fifteen (15) days have elapsed, except for a Procurement Contract awarded on an emergency or critical basis. The notification to the Commissioner shall include the name, address, telephone and facsimile number of the foreign business enterprise, a brief description of the goods or services to be obtained pursuant to the proposed Procurement Contract, the amount of the proposed Procurement Contract, the term of the proposed Procurement Contract, and the name of the individual at the foreign business enterprise or person acting on behalf of the same who is principally responsible for the proposed Procurement Contract. For the purposes of this subdivision, "foreign business enterprise" means a business enterprise, including a sole proprietorship, partnership or corporation, which offers for sale, lease or other form of exchange, goods which are sought by the Authority and which are substantially produced outside New York State, or services, other than construction services, sought by the Authority and which are substantially performed outside New York State. For purposes of construction services, a foreign business enterprise shall mean a business enterprise, including a sole proprietorship, partnership or corporation, which has its principal place of business outside of New York State.

Article VIII. Publication of Notice of Procurement and Program Contracts

8.1 Except as provided in Section 9.1 below, prior to awarding any Procurement or Program Contract, the Authority shall submit to the Commissioner of the Department of Economic Development information on: (i) the contract identification number; (ii) a brief description of the goods or services sought, the location where goods are to be delivered or services provided and the contract term; (iii) the address where bids or proposals are to be submitted; (iv) the date when

bids or proposals are due; (v) a description of any eligibility or qualification requirement or preference; (vi) a statement as to whether the contract requirements may be fulfilled by a subcontracting, joint venture, or co-production arrangement; (vii) any other information deemed useful to potential Contractors; and (viii) the name, address, and telephone number of the person to be contacted for additional information. Such information shall be submitted in sufficient time to allow a minimum of fifteen business days between publication of such notice and the date on which a bid or proposal is due, except where a shorter period is specifically authorized by law.

8.2 The provisions of Section 9.0 shall not apply to Procurement or Program Contracts: (i) awarded on an emergency or critical basis, or on the basis that publication is otherwise not feasible, such as those described in Sections 4.2 and 2.11 (ii) - (vi) of these Guidelines; (ii) being re-bid or re-solicited for substantially the same goods or services, within forty-five business days after the date bids or proposals were originally due; or (iii) any other procurements the Commissioner of the Department of Economic Development has determined do not require publication.

Article IX. Reporting of Procurement and Program Contracts

9.1 Procurement Contracts

- (a) As required by Public Authorities Law Section 2879, the Authority shall prepare for approval by the members at their June meeting, or at least annually, a report on Procurement Contracts, for the fiscal year ending March 31 of each year, which report shall include:
 - i. The Procurement Contract Guidelines;
 - ii. An explanation of the Guidelines and any amendments since the last annual report on Procurement Contracts;
 - iii. A list of all Procurement Contracts entered into and active during the reporting period. This will include identification of:
 - a. All contracts with New York business enterprises;
 - b. All contracts with foreign business enterprises;
 - c. All contracts with certified Minority or Women-Owned Business Enterprises;
 - d. All contracts with certified Service-Disabled Veteran-Owned Business Enterprises;
 - e. The subject matter and value thereof;
 - iv. A summary of all Procurement Contracts which were exempt from the publication requirements under article 4-c of the economic development law, the basis for any such exemption and the status of existing Procurement Contracts.
- (b) The members' approval of this report, which will include a list of all Procurement Contracts entered into during the prior year which provide for a period of performance by the contractor in excess of one year or which have continued for over one year, will be the

members' approval of such individual Procurement Contracts, as required by Public Authorities Law Section 2879(3)(b)(iii).

Upon approval by the members of the Authority, the Authority shall submit the annual report on Procurement Contracts to the Division of the Budget, with copies to the Senate Finance Committee, the Assembly Ways and Means Committee, the Department of Audit and Control, and the Department of Economic Development.

9.2 Program Contracts

- (a) The Authority shall prepare for review by the members at their June meeting, or at least annually, a report on Program Contracts, which report shall include description of the program contracting performed by the fiscal year, broken down by portfolio and program, that is sufficient to provide to the members an accurate reflection of the kinds and level of investment made by each of the Authority's programmatic portfolios and programs. Separate from this requirement, the Authority will also make available upon request to the members, a copy of the semi-annual reports that are required to be prepared under Public Authorities Law Section 1867(7).
- 9.3 The Authority shall make copies of its reports on Procurement and Program Contracts available on its website.

Article X. Miscellaneous Provisions

- 10.1 No violation of or failure to comply with the provisions of these Guidelines shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract; nor shall any provision of these Guidelines or any violation of or failure to comply with such provisions be the basis for any claim against the Authority or any member, officer, or employee of the Authority.
- 10.2 The members of the Authority may, from time to time, amend these Guidelines, provided that no such amendment shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract.

Article XI. Service-Disabled Veteran-Owned Business Enterprises

11.1 It is the policy of the Authority to increase participation of Certified Service-Disabled Veteran-Owned Business (SDVOB) Enterprises in its procurements.

The SDVOB rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d) of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess

of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project.

Article 17-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified SDVOB Enterprises in qualified Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified SDVOB Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified SDVOB Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Service-Disabled Veterans' Business Development (DSDVD) within the New York State Office of General Services to certify and decertify eligible SDVOB Enterprises through a process that meets applicable state requirements.

On an annual basis, the Authority shall establish appropriate agency-specific goals for participation by SDVOB Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of SDVOB Enterprises as subcontractors and suppliers by entities having qualified State Contracts with the Authority pursuant to Article 17-B of the Executive Law and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d). In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Service-Disabled Veterans' Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by SDVOB enterprises.

The Authority has three primary options for using SDVOB Enterprises in its procurements: SDVOB Set Asides; SDVOB Contract Goal Setting; and, SDVOB Discretionary Purchasing. It is up to the Authority to determine which option, or combination of options, can best achieve the Authority goals in the Master Goal Plan.

(a) SDVOB Set Asides

- i. Set-asides permit the reservation in whole or in part of certain procurements by the Authority for SDVOBs when more than one SDVOB Enterprise is available and can provide the necessary construction, construction services, non-construction related services (including finance/bond management), technology, commodities, products and other classifications that will facilitate meeting the goal and meeting the Authority's form, function and utility.
- ii. SDVOB Contract Goal Setting
 - i. A required percentage of SDVOB participation may be placed on qualified procurements. Any contract that conforms to the definition of State Contract in Article 17-B of the Executive Law, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d), unless exempt or excluded, may be assessed for SDVOB participation goals.
- iii. SDVOB Discretionary Purchasing
 - i. SDVOB Enterprises may be chosen when making discretionary purchases up to \$200,000, pursuant to Section 4.2(b) of these Guidelines and State Finance Law.

(b) Waivers

i. An SDVOB waiver is a reduction or elimination of the SDVOB goal that has been established for a qualified contract. The Authority may determine to make such a waiver in the event that it determines that such a waiver is necessary; moreover, it may grant a partial or total waiver of goal requirements established on a State Contract upon the submission of a waiver form by a contractor, documenting good faith efforts, as defined in the regulations, by the contractor to meet the goal requirements of the State Contract. The Authority shall consider the factors set out in the regulations in making its determination to grant or deny the waiver request.

The President and CEO of the Authority has general policy responsibility for the Authority's SDVOB Program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Chief Operating Officer, shall manage day-to-day responsibilities for SDVOB reporting and implementation. The Authority Counsel's Office shall be responsible for SDVOB legislation oversight and compliance.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

PROCUREMENT AND PROGRAM CONTRACT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

June 2020

Article I. Purpose and Applicability

- 1.0 These Procurement and Program Contract Guidelines ("Guidelines"), adopted pursuant to Public Authorities Law Sections 1854, 1855, and 2879, set forth the operative policies of the Authority and instructions to its officers and employees regarding the use, awarding, monitoring, and reporting of Procurement and Program Contracts.
- 1.1 These Guidelines apply to any Procurement or Program Contract entered into after they become effective pursuant to the provisions of Section 1853 of the Public Authorities Law.

Article II. Definitions

- 2.0 As used in these Guidelines, "Procurement Contract" means a written agreement for the Authority's acquisition of goods or services, in the actual or estimated amount of \$5,000 or more.
- 2.1 As used in these Guidelines, "Program Contract" means a contract in the actual or estimated amount of \$5,000 or more that is not a Procurement Contract. Program Contracts may include but are not limited to grants, investments, awards, incentives, memberships and other arrangements by which the Authority provides financial assistance to fund a third party's performance of work in furtherance of the mission of the Authority. Program Contracts shall also include: memberships in industry groups, professional societies and similar cooperative associations, and any cooperative projects conducted or sponsored by such organizations; and direct purchase advertising with radio, television or print media regarding program activities. Loans, guarantees, letters of credit and other contractual arrangements executed by Green Bank are not Program Contracts for purposes of these Guidelines; the consideration and approval of such transactions are governed by the relevant provisions of the Authority's Internal Control Manual and by Green Bank's internal rules and guidelines. Contracts for interests in real property are governed by separate Board approved Guidelines for Real Property.
- 2.2 As used in these Guidelines, "Other Administrative Contracts" mean Procurement Contracts to provide services to support the Authority's administrative functions for a fee, commission, or other compensation by a person or organization that is not performing that work as an officer or employee of the Authority, another public corporation, or a state agency. Other Administrative Contracts include, but are not limited to, equipment maintenance contracts, leases, insurance, telecommunications, or other similar services, but do not include Personal Services Contracts.

- 2.3 As used in these Guidelines, "Contractor" means a person or organization that enters into a Procurement or Program Contract with the Authority.
- 2.4 As used in these Guidelines, "Minority Business Enterprise" means any business enterprise certified by the Division of Minority and Women-Owned Business Development as a Minority Business Enterprise.
- 2.5 As used in these Guidelines, "Women-Owned Business Enterprise" means a business enterprise certified by the Division of Minority and Women-Owned Business Development as a Women-Owned Business Enterprise.
- 2.6 As used in these Guidelines, "New York State Business Enterprise" means a business enterprise, including a sole proprietorship, partnership, or corporation, which offers for sale or lease or other form of exchange goods which are sought by the Authority and which are substantially manufactured, produced, or assembled in New York State or services which are sought by the Authority and which are substantially performed in New York State.
- 2.7 As used in these Guidelines, "New York State Small Business Enterprise" means a company that is a resident to New York State, independently owned and operated, with 100 or fewer employees, and not dominant in its field. See New York State Finance Law.
- 2.8 As used in these Guidelines, "Service-Disabled Veteran-Owned Business Enterprise (SDVOB)" means any business that is certified by the Office of General Services Division of Service-Disabled Veterans' Business Development as a certified service-disabled veteran-owned business enterprise.
- 2.9 As used in these Guidelines, a "New York State Resident" means a natural person who maintains a fixed, permanent, and principal home within New York State and to which such person, whenever temporarily located, always intends to return.
- 2.10 As used in these Guidelines, "Competitive Selection Method" shall include:
 - i. solicitations, including program opportunity notices, requests for proposals, requests for information, requests for quotations and requests for qualifications;
 - ii. subscription program offers;
- iii. for administrative purchases, if the issuance of a solicitation is reasonably expected to result in no more than nominal savings, obtaining at a minimum three (3) quotations from different providers or firms;
- iv. Procurement or Program Contracts made pursuant to centralized contracts let by other public entities pursuant to a competitive process, including those contracts of the New York State Office of General Services;
- v. procurement of commodities from a Contractor where the price to be charged by the Contractor is less than that which would be charged for the purchase substantially similar in function, form or utility made pursuant to a centralized contract let by the New York

- State Office of General Services or when other contract terms such as delivery or warranty terms are more economically beneficial;
- vi. processes to award agreements for disposition of personal or real property in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law; or
- vii. any other competitive method of selection that is consistent with these guidelines.

Article III. Requirements Regarding Selection of Contractors

- 3.0 Unless otherwise directed by law or order in the form of an authorization and direction to use funds in a certain manner¹, the Authority shall use its best efforts to secure offers from Contractors by using a Competitive Selection Method and to select from such offerers the Contractor offering the most favorable terms, weighing expected ability to perform against projected costs. To this end, the Authority shall:
- (a) solicit offers in writing from several persons or organizations known, believed, or reputed to be qualified in the area of supplying the goods, personal services, Authority program work, or other administrative services to be provided or performed, except that for administrative purchases authorized by Section 2.10 (iii), such quotations may be secured by telephone solicitations where time constraints do not permit securing a written bid and for procurement of catalog and other items generally purchased in the ordinary course of business or which do not require a detailed bid or description of materials or specifications.
- (b) evaluate those offers received on the basis of such information as the Authority has received on, as may be relevant, each offerer's technical or professional qualifications, financial stability, past performance for the Authority, staff, equipment, and facilities availability, experience, reputation, and other factors bearing on expected capability and quality of performance, possible conflicts of interest, and contract price or fee structure; and
- (c) document the processes by which a Contractor is selected, by making a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative services sought, the name of each person or organization submitting, or requested to submit, a bid or proposal, the price or fee bid, and the basis for selection of the Contractor.
- 3.1 In any instance, the members of the Authority may, by resolution, waive the use of the procedure for selecting Contractors outlined in Section 3.0 if they determine such waiver to be in the best interest of the Authority.
- 3.2 The members of the Authority, upon adoption of these Guidelines, hereby waive use of the

¹ For avoidance of doubt, this provision is included to acknowledge that the Authority's contracting guidelines do not apply in instances where the Authority is directed by law or order to use finds in a certain manner.

procedures for selecting Contractors outlined in section 3.0 in those instances when:

- a) the goods, personal services, Authority program work, or other administrative services involved are expected to cost \$50,000 or less;
- b) the goods, personal services, or other administrative services involved are expected to cost \$500,000 or less and are procured from a Minority Business Enterprise or Women-Owned Business Enterprise; a New York State Small Business Enterprise; or a Certified Service-Disabled Veteran-Owned Business Enterprise.
- c) for any Authority program work, the contract is based upon an unsolicited proposal, submitted at the sole initiative of the offerer, not duplicating work then being performed or in the project planning request stage, and involving unique, innovative, or unusual meritorious methods or ideas;
- d) an Authority Officer determines that:
- i. the interest of the Authority for timely obtainment of the goods, personal services, Authority program work, or other administrative services involved precludes selection of a Contractor pursuant to such procedure; or,
- ii. even though two or more Contractors could supply the required goods, personal services, Authority program work, or other administrative service, one particular Contractor has unique or exceptionally scarce qualifications or experience, specialized equipment, or facilities not readily available from other sources, or patents, copyrights, or proprietary data; or,
- iii. there is only one source for a required good, personal service, Authority program work, or other administrative service; or,
- iv. the contract is for goods, personal services or other administrative services and is based upon a contract awarded by the United States government, or any state or any political subdivision thereof, in accordance with the requirements of New York State Finance Law and the criteria established by the New York State Office of General Services (aka piggybacking); or,
- v. the contract is for a membership in an industry group, professional society, or similar cooperative association the work of which has been determined by an Officer of the authority to be aligned with the strategy of the Authority and membership in which will benefit the Authority's mission; or
- vi. the contract is for a sponsorship or procurement of space or services in relation to an industry or other mission-related conference, symposium or other similar event, the topic

- of which has been determined by an Officer of the Authority to be aligned with the strategy of the Authority and participation will benefit the Authority's mission; or
- vii. processes to enter into agreements to acquire applicable personal or real property in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law,

<u>provided</u>, that in those instances the Authority shall nonetheless make a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative service involved, the name of the Contractor, the contract price or fee, and the basis for waiver and selection of the Contractor.

- 3.3 Board Approval of Procurement and Program Contracts
 - (a) Approval of the members of the Authority, either by prior action, when time permits, or by ratification at the next meeting of the Authority shall be required for any:
 - i. Procurement Contract which provides for a period of performance by the Contractor in excess of one year;
 - ii. Program Contract that is the result of a competitive process and which provides an estimated or actual amount of \$3 Million or more; and,
 - iii. Program Contract that is the result of a noncompetitive process and which provides an estimated or actual amount greater than \$1 Million.
- 3.4 Independent auditors for the Authority shall be retained only with the prior approval of the members of the Authority.
- 3.5 The Authority may use its Competitive Selection Methods to select multiple Contractors to provide goods, personal services, Authority program work, and other administrative services. Individual task work orders may be awarded to these Contractors on an as-needed basis.

Article IV. Compliance with State Finance Law Sections 139-j and 139-k in the Selection of Contractors; Contractor Responsibilities and Types of Contract Provisions

4.0 The Authority shall comply with the requirements of State Finance Law Sections 139-j and 139-k in its selection of Contractors. Solicitations shall identify NYSERDA's Designated Contacts, require bidders to disclose any prior determination of non-responsibility, and to provide the other information required by State Finance Law Sections 139-j and 139-k.

The responsibilities of a Contractor, including continuing responsibilities under State Finance Law Sections 139-j and 139-k, shall be detailed in the contract. Contract provisions shall address the nature and scope of the goods, personal services, or Authority program work to be provided; the standard for performance, if practical; the duration of the work; any relevant time requirements or deadlines; and the amount of compensation to be paid or the price, rates, or fees which will be used

to determine such compensation. Personal Services Contracts and Program Contracts shall also include provisions on monitoring of the work to be performed; provisions governing the Contractor's use of Authority supplies, facilities, or personnel, if permitted; any provisions required by applicable law; and any other provisions the Authority deems necessary or desirable.

Article V. Minority and Women-Owned Business Enterprises

5.0 It is the policy of the Authority to foster and promote participation of Minority Business Enterprises and Women-Owned Business Enterprises in its procurements and the development of such enterprises and to facilitate a fair share of the awarding of Procurement Contracts to such enterprises.

The MWBE rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 15-A of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project. Article 15-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Minority and Women-Owned Business Development to certify and decertify Minority Business Enterprises and Women-Owned Business Enterprises through a single process that meets applicable state and federal requirements.

On an annual basis, the Authority shall establish appropriate statewide goals for participation by Minority or Women-Owned Business Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified procurement contracts with the Authority pursuant to § 313(1-b) of the Executive Law. In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Minority and Women's Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by Minority and Women-Owned Business Enterprises. This includes, but is not limited to:

- (a) The Authority shall maintain measures and procedures, as detailed in the Master Goal Plan, to ensure that certified businesses shall be given the opportunity for maximum feasible participation in the performance of appropriate state contracts and to assist in the Authority's identification of those state contracts for which certified businesses may best bid to actively and affirmatively promote and assist their participation.
- (b) The Authority will consult with the Division of Minority and Women's Business Development for assistance in identifying Minority Business Enterprises or Women-Owned Business Enterprises, and refer to any known list maintained by any other State department or agency that identifies such enterprises by area of expertise.
- (c) With the assistance of the Director of Contract Management, the Authority shall maintain its own list of such enterprises, including professional firms that have expressed an interest in doing business with the Authority, and shall ensure that the list is updated regularly.
- (d) The Authority shall provide notice of procurement opportunities to professional and other organizations that serve Minority and Women-Owned Business Enterprises providing the types of services the Authority procures, and solicit or request offers from Minority and Women-Owned Businesses known to have experience in the type of goods, personal services, and other administrative services involved.
- (e) Each solicitation document for a qualified solicitation shall set forth the expected degree of Minority and Women-Owned Business Enterprise participation, and the Authority shall provide to each prospective contractor a current list of certified Minority and Women-Owned Business Enterprises. The expected degree of Minority and Women-Owned Business Enterprise participation shall be based, in part, on (i) the potential subcontract opportunities available in the prime procurement contract; and (ii) the availability of certified Minority and Women-Owned Business Enterprises to respond competitively to the potential subcontract opportunities.
- (f) Written solicitations or requests for bids or proposals for Procurement Contracts will include a statement of the Authority's affirmative action policy.
- (g) Allow bidders to count the Minority and Women-Owned Business Enterprise portion of a joint venture towards meeting its minority business enterprise goal.

(h) For each qualified contract, the Authority shall: (i) consider, where practicable, the severability of construction projects and other bundled contracts; (ii) evaluate the appropriateness of the goal established in the Master Goal Plan; (iii) consider compliance with the requirements of any federal law concerning opportunities for Minority and Women-Owned Business Enterprises which effectuates the purpose of the Authority's policy; and (iv) consult the most recent disparity study pursuant to Article 15-A of the Executive Law.

The Authority may waive obligations of a contractor relating to Minority and Women-Owned Business Enterprise participation after a showing of good faith efforts to comply with the requirements of Article 9 of the Public Authorities Law relative to the waiver provisions contained in § 313(6) and (7) of the Executive Law. In addition, the Authority shall verify that Minority and Women-Owned Business Enterprises listed in a successful bid are actually participating to the extent listed in the project for which the bid was submitted.

The President and CEO of the Authority has general policy responsibility for the Authority's Minority and Women-Owned Business Enterprise program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Treasurer, shall manage day-to-day responsibilities for M/WBE reporting and implementation. The Authority Counsel's Office shall be responsibility for M/WBE legislation oversight and compliance.

Through its program, the Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified procurement contracts, as identified by the Director of Contract Management, to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified procurement contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified procurement contracts with the Authority.

Article VI. Contracts with Former Officers or Employees

6.0 Contracts with former officers or employees of the Authority shall be permitted where the goods, personal services, Authority program work, or other administrative services are to the best advantage of the Authority and the contractual relationship is not otherwise prohibited by law or Authority policy. In particular, any former officer or employee of the Authority shall be held to the restrictions set forth in Public Authorities Law Section 73(8) on receiving compensation for any services rendered with respect to specified types of cases, proceedings, applications, matters, and transactions.

Article VII. New York State Business Enterprises and New York State Residents

7.0 It is the policy of the Authority to promote participation in qualified Procurement or Program Contracts by New York State Business Enterprises and New York State Residents, by encouraging them to compete through measures including, but not limited to:

- (a) Collecting and consulting the specifications of New York State Business Enterprises in developing any specifications for any Procurement or Program Contract for the purchase of goods where possible, practicable, feasible, and consistent with open bidding, except for Procurement or Program Contracts for which the Authority would be expending funds received from another state. The Authority will, where feasible, make use of the stock order specification forms prepared by the Commissioner of General Services and, where necessary, consult with the Commissioner of General Services in developing such specifications and making such determinations.
- (b) With the cooperation of the Department of Economic Development and through cooperative efforts with Contractors, providing for the notification of New York State Business Enterprises of opportunities to participate as subcontractors and suppliers on qualified Procurement Contracts in an amount estimated to be equal to or greater than one million dollars and promulgating procedures which will assure compliance by Contractors with such notification. Once awarded the contract, such Contractors shall document their efforts to encourage the participation of New York State Business Enterprises as subcontractors and suppliers on such qualified Procurement Contracts. Documented efforts by a successful Contractor shall consist of and be limited to showing that such Contractor has (a) solicited bids, in a timely and adequate manner, from New York State Business Enterprises, including certified minority and women-owned businesses, or (b) contacted the New York State Department of Economic Development to obtain listings of New York State Business Enterprises, or (c) placed notices for subcontractors and suppliers in newspapers, journals, and other trade publications circulated in New York State, or (d) participated in bidder outreach conferences. If the Contractor determines that New York State Business Enterprises are not available to participate on the contract as subcontractors or suppliers, the Contractor shall provide a statement indicating the method by which such determination was made. If the Contractor does not intend to use subcontractors on the contract, the Contractor shall provide a statement verifying such intent.
- (c) Except for Procurement Contracts for which the Authority would be expending funds received from another state, including in all bid documents provided to potential bidders a statement that information concerning the availability of New York State subcontractors and suppliers is available from the New York State Department of Economic Development, including the directory of certified minority and women-owned businesses, and that it is the policy of New York State to encourage the use of New York State subcontractors and suppliers and to promote the participation of minority and women-owned businesses, where possible, in the procurement of goods and services.

- (d) With the cooperation of the Community Services Division of the Department of Labor and through cooperative efforts with Contractors, providing for the notification of New York State residents of employment opportunities arising in New York State out of Procurement Contracts in an amount estimated to be equal to or greater than one million dollars; and promulgating procedures that will assure compliance by Contractors with notification by requiring Contractors to submit post-award compliance reports documenting their efforts to provide such notification through listing any such positions with the Community Services Division or providing for such notification in such manner as is consistent with existing collective bargaining contracts or agreements.
- (e) Including in each set of documents soliciting bids on qualified Procurement Contracts a statement notifying potential bidders in foreign countries that the Authority may assign or otherwise transfer offset credits created by such Procurement Contract to third parties located in New York State; providing for the assignment or other form of transfer of offset credits created by such Procurement Contracts, directly or indirectly, to third parties located in New York State, in accordance with the written directions of the Commissioner of Economic Development; and providing for the Authority otherwise to cooperate with the Department of Economic Development in efforts to get foreign countries to recognize offset credits assigned or transferred to third parties located in New York State created by such Procurement Contracts.
- (f) Promulgating procedures that will assure compliance with the federal Equal Employment Opportunity Act of 1972 (Pub. L. 92-261), as amended, by Contractors.

The Authority shall notify the Commissioner of Economic Development of the expected award of any Procurement or Program Contract for the purchase of goods, personal services, Authority program work, or other administrative services from a foreign business enterprise in an amount equal to or greater than one million dollars (\$1,000,000) simultaneously with notifying the successful bidder therefor. The Authority shall not enter into the Procurement or Program Contract until at least fifteen (15) days have elapsed, except for a Procurement Contract awarded on an emergency or critical basis. The notification to the Commissioner shall include the name, address, telephone and facsimile number of the foreign business enterprise, a brief description of the goods or services to be obtained pursuant to the proposed Procurement Contract, the amount of the proposed Procurement Contract, the term of the proposed Procurement Contract, and the name of the individual at the foreign business enterprise or person acting on behalf of the same who is principally responsible for the proposed Procurement Contract. For the purposes of this subdivision, "foreign business enterprise" means a business enterprise, including a sole proprietorship, partnership or corporation, which offers for sale, lease or other form of exchange, goods which are sought by the Authority and which are substantially produced outside New York State, or services, other than construction services, sought by the Authority and which are substantially performed outside New York State. For purposes of construction services, a foreign business enterprise shall mean a business enterprise, including a sole proprietorship, partnership or corporation, which has its principal place of business outside of New York State.

Article VIII. Publication of Notice of Procurement and Program Contracts

- 8.0 Except as provided in Section 9.1 below, prior to awarding any Procurement or Program Contract, the Authority shall submit to the Commissioner of the Department of Economic Development information on: (i) the contract identification number; (ii) a brief description of the goods or services sought, the location where goods are to be delivered or services provided and the contract term; (iii) the address where bids or proposals are to be submitted; (iv) the date when bids or proposals are due; (v) a description of any eligibility or qualification requirement or preference; (vi) a statement as to whether the contract requirements may be fulfilled by a subcontracting, joint venture, or co-production arrangement; (vii) any other information deemed useful to potential Contractors; and (viii) the name, address, and telephone number of the person to be contacted for additional information. Such information shall be submitted in sufficient time to allow a minimum of fifteen business days between publication of such notice and the date on which a bid or proposal is due, except where a shorter period is specifically authorized by law.
- 8.1 The provisions of Section 9.0 shall not apply to Procurement or Program Contracts: (i) awarded on an emergency or critical basis, or on the basis that publication is otherwise not feasible, such as those described in Sections 4.2 and 2.11 (ii) (vi) of these Guidelines; (ii) being re-bid or re-solicited for substantially the same goods or services, within forty-five business days after the date bids or proposals were originally due; or (iii) any other procurements the Commissioner of the Department of Economic Development has determined do not require publication.

Article IX. Reporting of Procurement and Program Contracts

9.0 Procurement Contracts

- (a) As required by Public Authorities Law Section 2879, the Authority shall prepare for approval by the members at their June meeting, or at least annually, a report on Procurement Contracts, for the fiscal year ending March 31 of each year, which report shall include:
 - i. The Procurement Contract Guidelines:
 - ii. An explanation of the Guidelines and any amendments since the last annual report on Procurement Contracts;
 - iii. A list of all Procurement Contracts entered into and active during the reporting period. This will include identification of:
 - a. All contracts with New York business enterprises;
 - b. All contracts with foreign business enterprises;
 - c. All contracts with certified Minority or Women-Owned Business Enterprises;
 - d. All contracts with certified Service-Disabled Veteran-Owned Business Enterprises;
 - e. The subject matter and value thereof;

- iv. A summary of all Procurement Contracts which were exempt from the publication requirements under article 4-c of the economic development law, the basis for any such exemption and the status of existing Procurement Contracts.
- (b) The members' approval of this report, which will include a list of all Procurement Contracts entered into during the prior year which provide for a period of performance by the contractor in excess of one year or which have continued for over one year, will be the members' approval of such individual Procurement Contracts, as required by Public Authorities Law Section 2879(3)(b)(iii).

Upon approval by the members of the Authority, the Authority shall submit the annual report on Procurement Contracts to the Division of the Budget, with copies to the Senate Finance Committee, the Assembly Ways and Means Committee, the Department of Audit and Control, and the Department of Economic Development.

9.1 Program Contracts

- (a) The Authority shall prepare for review by the members at their June meeting, or at least annually, a report on Program Contracts, which report shall include description of the program contracting performed by the fiscal year, broken down by portfolio and program, that is sufficient to provide to the members an accurate reflection of the kinds and level of investment made by each of the Authority's programmatic portfolios and programs. Separate from this requirement, the Authority will also make available upon request to the members, a copy of the semi-annual reports that are required to be prepared under Public Authorities Law Section 1867(7).
- 9.2 The Authority shall make copies of its reports on Procurement and Program Contracts available on its website.

Article X. Miscellaneous Provisions

10.0 No violation of or failure to comply with the provisions of these Guidelines shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract; nor shall any provision of these Guidelines or any violation of or failure to comply with such provisions be the basis for any claim against the Authority or any member, officer, or employee of the Authority.

10.1 The members of the Authority may, from time to time, amend these Guidelines, provided that no such amendment shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract.

Article XI. Service-Disabled Veteran-Owned Business Enterprises

11.0 It is the policy of the Authority to increase participation of Certified Service-Disabled Veteran-Owned Business (SDVOB) Enterprises in its procurements.

The SDVOB rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d) of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project.

Article 17-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified SDVOB Enterprises in qualified Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified SDVOB Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified SDVOB Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Service-Disabled Veterans' Business Development (DSDVD) within the New York State Office of General Services to certify and decertify eligible SDVOB Enterprises through a process that meets applicable state requirements.

On an annual basis, the Authority shall establish appropriate agency-specific goals for participation by SDVOB Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of SDVOB Enterprises as subcontractors and suppliers by entities having qualified State Contracts with the Authority pursuant to Article 17-B of the Executive Law and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d). In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Service-Disabled Veterans' Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by

SDVOB enterprises.

The Authority has three primary options for using SDVOB Enterprises in its procurements: SDVOB Set Asides; SDVOB Contract Goal Setting; and, SDVOB Discretionary Purchasing. It is up to the Authority to determine which option, or combination of options, can best achieve the Authority goals in the Master Goal Plan.

(a) SDVOB Set Asides

- i. Set-asides permit the reservation in whole or in part of certain procurements by the Authority for SDVOBs when more than one SDVOB Enterprise is available and can provide the necessary construction, construction services, non-construction related services (including finance/bond management), technology, commodities, products and other classifications that will facilitate meeting the goal and meeting the Authority's form, function and utility.
- ii. SDVOB Contract Goal Setting
 - i. A required percentage of SDVOB participation may be placed on qualified procurements. Any contract that conforms to the definition of State Contract in Article 17-B of the Executive Law, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d), unless exempt or excluded, may be assessed for SDVOB participation goals.
- iii. SDVOB Discretionary Purchasing
 - i. SDVOB Enterprises may be chosen when making discretionary purchases up to \$200,000, pursuant to Section 4.2(b) of these Guidelines and State Finance Law.

(b) Waivers

i. An SDVOB waiver is a reduction or elimination of the SDVOB goal that has been established for a qualified contract. The Authority may determine to make such a waiver in the event that it determines that such a waiver is necessary; moreover, it may grant a partial or total waiver of goal requirements established on a State Contract upon the submission of a waiver form by a contractor, documenting good faith efforts, as defined in the regulations, by the contractor to meet the goal requirements of the State Contract. The Authority shall consider the factors set out in the regulations in making its determination to grant or deny the waiver request.

The President and CEO of the Authority has general policy responsibility for the Authority's SDVOB Program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Chief Operating Officer, shall manage day-to-day responsibilities for SDVOB reporting and implementation. The Authority Counsel's Office shall be responsible for SDVOB legislation oversight and compliance.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

PROCUREMENT AND PROGRAM CONTRACT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

January June 2020

Article I. Purpose and Applicability

- 1.0 These Procurement and Program Contract Guidelines ("Guidelines"), adopted pursuant to Public Authorities Law Sections 1854, 1855, and 2879, set forth the operative policies of the Authority and instructions to its officers and employees regarding the use, awarding, monitoring, and reporting of Procurement and Program Contracts.
- 1.1 These Guidelines apply to any Procurement or Program Contract entered into after they become effective pursuant to the provisions of Section 1853 of the Public Authorities Law.

Article II. Definitions

- 2.0 As used in these Guidelines, "Procurement Contract" means a written agreement for the Authority's acquisition of goods or services, in the actual or estimated amount of \$5,000 or more.
- 2.1 As used in these Guidelines, "Program Contract" means a contract in the actual or estimated amount of \$5,000 or more that is not a Procurement Contract. Program Contracts may include but are not limited to grants, investments, awards, incentives, memberships and other arrangements by which the Authority provides financial assistance to fund a third party's performance of work in furtherance of the mission of the Authority. Program Contracts shall also include: memberships in industry groups, professional societies and similar cooperative associations, and any cooperative projects conducted or sponsored by such organizations; and direct purchase advertising with radio, television or print media regarding program activities. Loans, guarantees, letters of credit and other contractual arrangements executed by Green Bank are not Program Contracts for purposes of these Guidelines; the consideration and approval of such transactions are governed by the relevant provisions of the Authority's Internal Control Manual and by Green Bank's internal rules and guidelines. Contracts for interests in real property are governed by separate Board approved Guidelines for Real Property.
- 2.2 As used in these Guidelines, "Other Administrative Contracts" mean Procurement Contracts to provide services to support the Authority's administrative functions for a fee, commission, or other compensation by a person or organization that is not performing that work as an officer or employee of the Authority, another public corporation, or a state agency. Other Administrative Contracts include, but are not limited to, equipment maintenance contracts, leases, insurance, telecommunications, or other similar services, but do not include Personal Services Contracts.

- 2.3 As used in these Guidelines, "Contractor" means a person or organization that enters into a Procurement or Program Contract with the Authority.
- 2.4 As used in these Guidelines, "Minority Business Enterprise" means any business enterprise certified by the Division of Minority and Women-Owned Business Development as a Minority Business Enterprise.
- 2.5 As used in these Guidelines, "Women-Owned Business Enterprise" means a business enterprise certified by the Division of Minority and Women-Owned Business Development as a Women-Owned Business Enterprise.
- 2.6 As used in these Guidelines, "New York State Business Enterprise" means a business enterprise, including a sole proprietorship, partnership, or corporation, which offers for sale or lease or other form of exchange goods which are sought by the Authority and which are substantially manufactured, produced, or assembled in New York State or services which are sought by the Authority and which are substantially performed in New York State.
- 2.7 As used in these Guidelines, "New York State Small Business Enterprise" means a company that is a resident to New York State, independently owned and operated, with 100 or fewer employees, and not dominant in its field. See New York State Finance Law.
- 2.8 As used in these Guidelines, "Service-Disabled Veteran-Owned Business Enterprise (SDVOB)" means any business that is certified by the Office of General Services Division of Service-Disabled Veterans' Business Development as a certified service-disabled veteran-owned business enterprise.
- 2.9 As used in these Guidelines, a "New York State Resident" means a natural person who maintains a fixed, permanent, and principal home within New York State and to which such person, whenever temporarily located, always intends to return.
- 2.10 As used in these Guidelines, "Competitive Selection Method" shall include:
 - solicitations, including program opportunity notices, requests for proposals, requests for information, requests for quotations and requests for qualifications;
- ii. subscription program offers;
- iii. for administrative purchases, if the issuance of a solicitation is reasonably expected to result in no more than nominal savings, obtaining at a minimum three (3) quotations from different providers or firms;
- iv. Procurement or Program Contracts made pursuant to centralized contracts let by other public entities pursuant to a competitive process, including those contracts of the New York State Office of General Services;
- v. procurement of commodities from a Contractor where the price to be charged by the Contractor is less than that which would be charged for the purchase substantially similar in function, form or utility made pursuant to a centralized contract let by the New York

- State Office of General Services or when other contract terms such as delivery or warranty terms are more economically beneficial; or
- v.vi. processes to award applicableenter into agreements to acquire applicable for disposition of personal or real property in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law; or
- vi.vii. any other competitive method of selection that is consistent with these guidelines.

Article III. Requirements Regarding Selection of Contractors

- 3.0 Unless otherwise directed by law or order in the form of an authorization and direction to use funds in a certain manner¹, the Authority shall use its best efforts to secure offers from Contractors by using a Competitive Selection Method and to select from such offerers the Contractor offering the most favorable terms, weighing expected ability to perform against projected costs. To this end, the Authority shall:
- (a) solicit offers in writing from several persons or organizations known, believed, or reputed to be qualified in the area of supplying the goods, personal services, Authority program work, or other administrative services to be provided or performed, except that for administrative purchases authorized by Section 2.10 (iii), such quotations may be secured by telephone solicitations where time constraints do not permit securing a written bid and for procurement of catalog and other items generally purchased in the ordinary course of business or which do not require a detailed bid or description of materials or specifications.
- (b) evaluate those offers received on the basis of such information as the Authority has received on, as may be relevant, each offerer's technical or professional qualifications, financial stability, past performance for the Authority, staff, equipment, and facilities availability, experience, reputation, and other factors bearing on expected capability and quality of performance, possible conflicts of interest, and contract price or fee structure; and
- (c) document the processes by which a Contractor is selected, by making a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative services sought, the name of each person or organization submitting, or requested to submit, a bid or proposal, the price or fee bid, and the basis for selection of the Contractor.
- 3.1 In any instance, the members of the Authority may, by resolution, waive the use of the procedure for selecting Contractors outlined in Section 3.0 if they determine such waiver to be in the best interest of the Authority.
- 3.2 The members of the Authority, upon adoption of these Guidelines, hereby waive use of the

¹ For a voidance of doubt, this provision is included to acknowledge that the Authority's contracting guidelines do not apply in instances where the Authority is directed by law or order to use finds in a certain manner.

procedures for selecting Contractors outlined in section 3.0 in those instances when:

- a) the goods, personal services, Authority program work, or other administrative services involved are expected to cost \$50,000 or less;
- b) the goods, personal services, or other administrative services involved are expected to cost \$500,000 or less and are procured from a Minority Business Enterprise or Women-Owned Business Enterprise; a New York State Small Business Enterprise; or a Certified Service-Disabled Veteran-Owned Business Enterprise.
- c) for any Authority program work, the contract is based upon an unsolicited proposal, submitted at the sole initiative of the offerer, not duplicating work then being performed or in the project planning request stage, and involving unique, innovative, or unusual meritorious methods or ideas;
- d) an Authority Officer determines that:
- the interest of the Authority for timely obtainment of the goods, personal services, Authority program work, or other administrative services involved precludes selection of a Contractor pursuant to such procedure; or,
- ii. even though two or more Contractors could supply the required goods, personal services, Authority program work, or other administrative service, one particular Contractor has unique or exceptionally scarce qualifications or experience, specialized equipment, or facilities not readily available from other sources, or patents, copyrights, or proprietary data; or.
- iii. there is only one source for a required good, personal service, Authority program work, or other administrative service; or,
- iv. the contract is for goods, personal services or other administrative services and is based upon a contract awarded by the United States government, or any state or any political subdivision thereof, in accordance with the requirements of New York State Finance Law and the criteria established by the New York State Office of General Services (aka piggybacking); or,
- v. the contract is for a membership in an industry group, professional society, or similar cooperative association the work of which has been determined by an Officer of the authority to be aligned with the strategy of the Authority and membership in which will benefit the Authority's mission; or
- vi. the contract is for a sponsorship or procurement of space or services in relation to an industry or other mission-related conference, symposium or other similar event, the topic

of which has been determined by an Officer of the Authority to be aligned with the strategy of the Authority and participation will benefit the Authority's mission; or

vi.vii. processes to enter into agreements to acquire applicable personal or real property in accordance with the provisions of Section 1902 of Title 9-B of Article 8 of the Public Authorities Law,

<u>provided</u>, that in those instances the Authority shall nonetheless make a record summarizing the nature and scope of the goods, personal services, Authority program work, or other administrative service involved, the name of the Contractor, the contract price or fee, and the basis for waiver and selection of the Contractor.

- 3.3 Board Approval of Procurement and Program Contracts
 - (a) Approval of the members of the Authority, either by prior action, when time permits, or by ratification at the next meeting of the Authority shall be required for any:
 - Procurement Contract which provides for a period of performance by the Contractor in excess of one year;
 - ii. Program Contract that is the result of a competitive process and which provides an estimated or actual amount of \$3 Million or more; and,
 - iii. Program Contract that is the result of a noncompetitive process and which provides an estimated or actual amount greater than \$1 Million.
- 3.4 Independent auditors for the Authority shall be retained only with the prior approval of the members of the Authority.
- 3.5 The Authority may use its Competitive Selection Methods to select multiple Contractors to provide goods, personal services, Authority program work, and other administrative services. Individual task work orders may be awarded to these Contractors on an as-needed basis.

Article IV. Compliance with State Finance Law Sections 139-j and 139-k in the Selection of Contractors; Contractor Responsibilities and Types of Contract Provisions

4.0 The Authority shall comply with the requirements of State Finance Law Sections 139-j and 139-k in its selection of Contractors. Solicitations shall identify NYSERDA's Designated Contacts, require bidders to disclose any prior determination of non-responsibility, and to provide the other information required by State Finance Law Sections 139-j and 139-k.

The responsibilities of a Contractor, including continuing responsibilities under State Finance Law Sections 139-j and 139-k, shall be detailed in the contract. Contract provisions shall address the nature and scope of the goods, personal services, or Authority program work to be provided; the standard for performance, if practical; the duration of the work; any relevant time requirements or deadlines; and the amount of compensation to be paid or the price, rates, or fees which will be used

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to determine such compensation. Personal Services Contracts and Program Contracts shall also include provisions on monitoring of the work to be performed; provisions governing the Contractor's use of Authority supplies, facilities, or personnel, if permitted; any provisions required by applicable law; and any other provisions the Authority deems necessary or desirable.

Article V. Minority and Women-Owned Business Enterprises

5.0 It is the policy of the Authority to foster and promote participation of Minority Business Enterprises and Women-Owned Business Enterprises in its procurements and the development of such enterprises and to facilitate a fair share of the awarding of Procurement Contracts to such enterprises.

The MWBE rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 15-A of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project. Article 15-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Minority and Women-Owned Business Development to certify and decertify Minority Business Enterprises and Women-Owned Business Enterprises through a single process that meets applicable state and federal requirements.

On an annual basis, the Authority shall establish appropriate statewide goals for participation by Minority or Women-Owned Business Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of Minority and Women-Owned Business Enterprises as

subcontractors and suppliers by entities having qualified procurement contracts with the Authority pursuant to § 313(1-b) of the Executive Law. In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Minority and Women's Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by Minority and Women-Owned Business Enterprises. This includes, but is not limited to:

- (a) The Authority shall maintain measures and procedures, as detailed in the Master Goal Plan, to ensure that certified businesses shall be given the opportunity for maximum feasible participation in the performance of appropriate state contracts and to assist in the Authority's identification of those state contracts for which certified businesses may best bid to actively and affirmatively promote and assist their participation.
- (b) The Authority will consult with the Division of Minority and Women's Business Development for assistance in identifying Minority Business Enterprises or Women-Owned Business Enterprises, and refer to any known list maintained by any other State department or agency that identifies such enterprises by area of expertise.
- (c) With the assistance of the Director of Contract Management, the Authority shall maintain its own list of such enterprises, including professional firms that have expressed an interest in doing business with the Authority, and shall ensure that the list is updated regularly.
- (d) The Authority shall provide notice of procurement opportunities to professional and other organizations that serve Minority and Women-Owned Business Enterprises providing the types of services the Authority procures, and solicit or request offers from Minority and Women-Owned Businesses known to have experience in the type of goods, personal services, and other administrative services involved.
- (e) Each solicitation document for a qualified solicitation shall set forth the expected degree of Minority and Women-Owned Business Enterprise participation, and the Authority shall provide to each prospective contractor a current list of certified Minority and Women-Owned Business Enterprises. The expected degree of Minority and Women-Owned Business Enterprise participation shall be based, in part, on (i) the potential subcontract opportunities available in the prime procurement contract; and (ii) the availability of certified Minority and Women-Owned Business Enterprises to respond competitively to the potential subcontract opportunities.
- (f) Written solicitations or requests for bids or proposals for Procurement Contracts will include a statement of the Authority's affirmative action policy.
- (g) Allow bidders to count the Minority and Women-Owned Business Enterprise portion of a joint venture towards meeting its minority business enterprise goal.

(h) For each qualified contract, the Authority shall: (i) consider, where practicable, the severability of construction projects and other bundled contracts; (ii) evaluate the appropriateness of the goal established in the Master Goal Plan; (iii) consider compliance with the requirements of any federal law concerning opportunities for Minority and Women-Owned Business Enterprises which effectuates the purpose of the Authority's policy; and (iv) consult the most recent disparity study pursuant to Article 15-A of the Executive Law.

The Authority may waive obligations of a contractor relating to Minority and Women-Owned Business Enterprise participation after a showing of good faith efforts to comply with the requirements of Article 9 of the Public Authorities Law relative to the waiver provisions contained in § 313(6) and (7) of the Executive Law. In addition, the Authority shall verify that Minority and Women-Owned Business Enterprises listed in a successful bid are actually participating to the extent listed in the project for which the bid was submitted.

The President and CEO of the Authority has general policy responsibility for the Authority's Minority and Women-Owned Business Enterprise program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Treasurer, shall manage day-to-day responsibilities for M/WBE reporting and implementation. The Authority Counsel's Office shall be responsibility for M/WBE legislation oversight and compliance.

Through its program, the Authority endeavors to promote and assist: (i) participation by certified Minority or Women-Owned Business Enterprises in applicable Authority procurement opportunities and facilitation of the award of qualified procurement contracts, as identified by the Director of Contract Management, to such enterprises; (ii) the utilization of certified Minority and Women-Owned Business Enterprises as subcontractors and suppliers by entities having qualified procurement contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified Minority and Women-Owned Business Enterprises and other entities having qualified procurement contracts with the Authority.

Article VI. Contracts with Former Officers or Employees

6.0 Contracts with former officers or employees of the Authority shall be permitted where the goods, personal services, Authority program work, or other administrative services are to the best advantage of the Authority and the contractual relationship is not otherwise prohibited by law or Authority policy. In particular, any former officer or employee of the Authority shall be held to the restrictions set forth in Public Authorities Law Section 73(8) on receiving compensation for any services rendered with respect to specified types of cases, proceedings, applications, matters, and transactions.

Article VII. New York State Business Enterprises and New York State Residents

- 7.0 It is the policy of the Authority to promote participation in qualified Procurement or Program Contracts by New York State Business Enterprises and New York State Residents, by encouraging them to compete through measures including, but not limited to:
- (a) Collecting and consulting the specifications of New York State Business Enterprises in developing any specifications for any Procurement or Program Contract for the purchase of goods where possible, practicable, feasible, and consistent with open bidding, except for Procurement or Program Contracts for which the Authority would be expending funds received from another state. The Authority will, where feasible, make use of the stock order specification forms prepared by the Commissioner of General Services and, where necessary, consult with the Commissioner of General Services in developing such specifications and making such determinations.
- (b) With the cooperation of the Department of Economic Development and through cooperative efforts with Contractors, providing for the notification of New York State Business Enterprises of opportunities to participate as subcontractors and suppliers on qualified Procurement Contracts in an amount estimated to be equal to or greater than one million dollars and promulgating procedures which will assure compliance by Contractors with such notification. Once awarded the contract, such Contractors shall document their efforts to encourage the participation of New York State Business Enterprises as subcontractors and suppliers on such qualified Procurement Contracts. Documented efforts by a successful Contractor shall consist of and be limited to showing that such Contractor has (a) solicited bids, in a timely and adequate manner, from New York State Business Enterprises, including certified minority and women-owned businesses, or (b) contacted the New York State Department of Economic Development to obtain listings of New York State Business Enterprises, or (c) placed notices for subcontractors and suppliers in newspapers, journals, and other trade publications circulated in New York State, or (d) participated in bidder outreach conferences. If the Contractor determines that New York State Business Enterprises are not available to participate on the contract as subcontractors or suppliers, the Contractor shall provide a statement indicating the method by which such determination was made. If the Contractor does not intend to use subcontractors on the contract, the Contractor shall provide a statement verifying such intent.
- (c) Except for Procurement Contracts for which the Authority would be expending funds received from another state, including in all bid documents provided to potential bidders a statement that information concerning the availability of New York State subcontractors and suppliers is available from the New York State Department of Economic Development, including the directory of certified minority and women-owned businesses, and that it is the policy of New York State to encourage the use of New York State subcontractors and suppliers and to promote the participation of minority and women-owned businesses, where possible, in the procurement of goods and services.

- (d) With the cooperation of the Community Services Division of the Department of Labor and through cooperative efforts with Contractors, providing for the notification of New York State residents of employment opportunities arising in New York State out of Procurement Contracts in an amount estimated to be equal to or greater than one million dollars; and promulgating procedures that will assure compliance by Contractors with notification by requiring Contractors to submit post-award compliance reports documenting their efforts to provide such notification through listing any such positions with the Community Services Division or providing for such notification in such manner as is consistent with existing collective bargaining contracts or agreements.
- (e) Including in each set of documents soliciting bids on qualified Procurement Contracts a statement notifying potential bidders in foreign countries that the Authority may assign or otherwise transfer offset credits created by such Procurement Contract to third parties located in New York State; providing for the assignment or other form of transfer of offset credits created by such Procurement Contracts, directly or indirectly, to third parties located in New York State, in accordance with the written directions of the Commissioner of Economic Development; and providing for the Authority otherwise to cooperate with the Department of Economic Development in efforts to get foreign countries to recognize offset credits assigned or transferred to third parties located in New York State created by such Procurement Contracts.
- (f) Promulgating procedures that will assure compliance with the federal Equal Employment Opportunity Act of 1972 (Pub. L. 92-261), as amended, by Contractors.

The Authority shall notify the Commissioner of Economic Development of the expected award of any Procurement or Program Contract for the purchase of goods, personal services, Authority program work, or other administrative services from a foreign business enterprise in an amount equal to or greater than one million dollars (\$1,000,000) simultaneously with notifying the successful bidder therefor. The Authority shall not enter into the Procurement or Program Contract until at least fifteen (15) days have elapsed, except for a Procurement Contract awarded on an emergency or critical basis. The notification to the Commissioner shall include the name, address, telephone and facsimile number of the foreign business enterprise, a brief description of the goods or services to be obtained pursuant to the proposed Procurement Contract, the amount of the proposed Procurement Contract, the term of the proposed Procurement Contract, and the name of the individual at the foreign business enterprise or person acting on behalf of the same who is principally responsible for the proposed Procurement Contract. For the purposes of this subdivision, "foreign business enterprise" means a business enterprise, including a sole proprietorship, partnership or corporation, which offers for sale, lease or other form of exchange, goods which are sought by the Authority and which are substantially produced outside New York State, or services, other than construction services, sought by the Authority and which are substantially performed outside New York State. For purposes of construction services, a foreign business enterprise shall mean a business enterprise, including a sole proprietorship, partnership or corporation, which has its principal place of business outside of New York State.

Article VIII. Publication of Notice of Procurement and Program Contracts

- 8.0 Except as provided in Section 9.1 below, prior to awarding any Procurement or Program Contract, the Authority shall submit to the Commissioner of the Department of Economic Development information on: (i) the contract identification number; (ii) a brief description of the goods or services sought, the location where goods are to be delivered or services provided and the contract term; (iii) the address where bids or proposals are to be submitted; (iv) the date when bids or proposals are due; (v) a description of any eligibility or qualification requirement or preference; (vi) a statement as to whether the contract requirements may be fulfilled by a subcontracting, joint venture, or co-production arrangement; (vii) any other information deemed useful to potential Contractors; and (viii) the name, address, and telephone number of the person to be contacted for additional information. Such information shall be submitted in sufficient time to allow a minimum of fifteen business days between publication of such notice and the date on which a bid or proposal is due, except where a shorter period is specifically authorized by law.
- 8.1 The provisions of Section 9.0 shall not apply to Procurement or Program Contracts: (i) awarded on an emergency or critical basis, or on the basis that publication is otherwise not feasible, such as those described in Sections 4.2 and 2.11 (ii) (vi) of these Guidelines; (ii) being re-bid or re-solicited for substantially the same goods or services, within forty-five business days after the date bids or proposals were originally due; or (iii) any other procurements the Commissioner of the Department of Economic Development has determined do not require publication.

Article IX. Reporting of Procurement and Program Contracts

9.0 Procurement Contracts

- (a) As required by Public Authorities Law Section 2879, the Authority shall prepare for approval by the members at their June meeting, or at least annually, a report on Procurement Contracts, for the fiscal year ending March 31 of each year, which report shall include:
 - i. The Procurement Contract Guidelines;
 - ii. An explanation of the Guidelines and any amendments since the last annual report on Procurement Contracts;
 - iii. A list of all Procurement Contracts entered into and active during the reporting period. This will include identification of:
 - a. All contracts with New York business enterprises;
 - b. All contracts with foreign business enterprises;
 - c. All contracts with certified Minority or Women-Owned Business Enterprises;
 - d. All contracts with certified Service-Disabled Veteran-Owned Business Enterprises;
 - e. The subject matter and value thereof;

- iv. A summary of all Procurement Contracts which were exempt from the publication requirements under article 4-c of the economic development law, the basis for any such exemption and the status of existing Procurement Contracts.
- (b) The members' approval of this report, which will include a list of all Procurement Contracts entered into during the prior year which provide for a period of performance by the contractor in excess of one year or which have continued for over one year, will be the members' approval of such individual Procurement Contracts, as required by Public Authorities Law Section 2879(3)(b)(iii).

Upon approval by the members of the Authority, the Authority shall submit the annual report on Procurement Contracts to the Division of the Budget, with copies to the Senate Finance Committee, the Assembly Ways and Means Committee, the Department of Audit and Control, and the Department of Economic Development.

9.1 Program Contracts

- (a) The Authority shall prepare for review by the members at their June meeting, or at least annually, a report on Program Contracts, which report shall include description of the program contracting performed by the fiscal year, broken down by portfolio and program, that is sufficient to provide to the members an accurate reflection of the kinds and level of investment made by each of the Authority's programmatic portfolios and programs. Separate from this requirement, the Authority will also make available upon request to the members, a copy of the semi-annual reports that are required to be prepared under Public Authorities Law Section 1867(7).
- 9.2 The Authority shall make copies of its reports on Procurement and Program Contracts available on its website.

Article X. Miscellaneous Provisions

- 10.0 No violation of or failure to comply with the provisions of these Guidelines shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract, nor shall any provision of these Guidelines or any violation of or failure to comply with such provisions be the basis for any claim against the Authority or any member, officer, or employee of the Authority.
- 10.1 The members of the Authority may, from time to time, amend these Guidelines, provided that no such amendment shall be deemed to alter, affect the validity of, modify the terms of, or impair any Procurement or Program Contract.

Article XI. Service-Disabled Veteran-Owned Business Enterprises

11.0 It is the policy of the Authority to increase participation of Certified Service-Disabled Veteran-Owned Business (SDVOB) Enterprises in its procurements.

The SDVOB rules and regulations apply to any procurement that conforms to the definition of State Contract as described in the rules and regulations, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d) of New York State Executive Law. State Contract is defined as: a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby a contracting agency is committed to expend or does expend funds in return for labor, services including but not limited to legal, financial and other professional services, commodities, supplies, equipment, materials, technology or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; a written agreement in excess of \$100,000 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; and, a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project.

Article 17-A explicitly applies to NYSERDA only to the extent of State Contracts entered into for its own account or for the benefit of another qualifying state agency.

The Authority endeavors to promote and assist: (i) participation by certified SDVOB Enterprises in qualified Authority procurement opportunities and facilitation of the award of qualified Procurement Contracts to such enterprises; (ii) the utilization of certified SDVOB Enterprises as subcontractors and suppliers by entities having qualified Procurement Contracts with the Authority; and (iii) the utilization of partnerships, joint ventures or other similar arrangements between certified SDVOB Enterprises and other entities having qualified Procurement Contracts with the Authority.

The Authority hereby designates the Division of Service-Disabled Veterans' Business Development (DSDVD) within the New York State Office of General Services to certify and decertify eligible SDVOB Enterprises through a process that meets applicable state requirements.

On an annual basis, the Authority shall establish appropriate agency-specific goals for participation by SDVOB Enterprises in qualified Procurement Contracts awarded by the Authority, and for the utilization of SDVOB Enterprises as subcontractors and suppliers by entities having qualified State Contracts with the Authority pursuant to Article 17-B of the Executive Law and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d). In accordance therewith, the Authority shall submit a Master Goal Plan, or Master Goal Plan update, for acceptance by the Division of Service-Disabled Veterans' Business Development.

The Authority shall conduct procurements in a manner that will enable it to achieve the maximum feasible portion of the goals it establishes and that will eliminate barriers to participation by

SDVOB enterprises.

The Authority has three primary options for using SDVOB Enterprises in its procurements: SDVOB Set Asides; SDVOB Contract Goal Setting; and, SDVOB Discretionary Purchasing. It is up to the Authority to determine which option, or combination of options, can best achieve the Authority goals in the Master Goal Plan.

(a) SDVOB Set Asides

- i. Set-asides permit the reservation in whole or in part of certain procurements by the Authority for SDVOBs when more than one SDVOB Enterprise is available and can provide the necessary construction, construction services, non-construction related services (including finance/bond management), technology, commodities, products and other classifications that will facilitate meeting the goal and meeting the Authority's form, function and utility.
- ii. SDVOB Contract Goal Setting
 - A required percentage of SDVOB participation may be placed on qualified procurements. Any contract that conforms to the definition of State Contract in Article 17-B of the Executive Law, and as specifically applied to NYSERDA in Article 17-B Section 369-h(6)(d), unless exempt or excluded, may be assessed for SDVOB participation goals.
- iii. SDVOB Discretionary Purchasing
 - i. SDVOB Enterprises may be chosen when making discretionary purchases up to \$200,000, pursuant to Section 4.2(b) of these Guidelines and State Finance Law.

(b) Waivers

i. An SDVOB waiver is a reduction or elimination of the SDVOB goal that has been established for a qualified contract. The Authority may determine to make such a waiver in the event that it determines that such a waiver is necessary; moreover, it may grant a partial or total waiver of goal requirements established on a State Contract upon the submission of a waiver form by a contractor, documenting good faith efforts, as defined in the regulations, by the contractor to meet the goal requirements of the State Contract. The Authority shall consider the factors set out in the regulations in making its determination to grant or deny the waiver request.

The President and CEO of the Authority has general policy responsibility for the Authority's SDVOB Program. The Treasurer provides executive oversight and reports to the President, is familiar with the procurement of the types of construction, financial, legal and professional services utilized by the Authority, and participates in the procurement process directly and through designees. The Director of Contract Management, who reports to the Chief Operating Officer, shall manage day-to-day responsibilities for SDVOB reporting and implementation. The Authority Counsel's Office shall be responsible for SDVOB legislation oversight and compliance.

RESOLVED, that the Authority's 2019-2020 Annual Contracts Report, as presented at this meeting, is adopted and approved as the annual report of the Authority required by Section 2800(1)(a)(6) and Section 2879 of the Public Authorities Law; and

BE IT FURTHER RESOLVED, that the "Procurement and Program Contract Guidelines, Operative Policy and Instructions (June 2020)" as presented at this meeting, are approved and adopted.

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Section 1 Summary - 3/16/2020 to 5/15/2020

Category	Report Type	Туре	Count of Contracts	Committed this period
PCMT	Procurement	Competitive	48	\$10,349,814
		Discretionary	7	\$313,561
		Non-Competitive	2	\$202,650
	Total		57	\$10,866,026
PGRM	Procurement	Competitive	7	\$892,333,312
		Non-Competitive	1	\$2,190,000
	Total		8	\$894,523,312
Grand Total			65	\$905,389,337

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 3/16/2020 to 5/15/2020

Initiative	Туре	Term > 1 Year	1 Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
	Competitive	Υ	46964	Luminate, LLC	Outside Technical and Eng. Srv	09/05/2014	\$3,100	\$42,382	\$3,100	\$42,259
>200KW PV	Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$15,000	\$315,000	\$2,420	\$89,029
Clean Energy Communiti	es Competitive	Υ	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016	\$63,000	\$604,000	\$60,663	\$595,32
Code to Zero	Competitive	Υ	152390	Willdan Energy Solutions	Staff Augmentation Services	03/11/2020	\$825,926	\$825,926	\$5,468	\$5,468
EMERGING TECHNOLOGY / ACCEL	Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$25,050	\$459,891	\$13,392	\$103,284
ENERGY ANALYSIS	Competitive	Υ	101128	ICF Resources, LLC	Tech Assist, REV Pool	07/15/2016	\$120,000	\$801,977	\$43,316	\$712,490
	Competitive	Υ	127158	The Cadmus Group, LLC	RFQL 3685 R2 Umbrella	05/22/2018	\$72,000	\$222,332	\$59,552	\$179,87
	Competitive	Υ	152281	Energy and Environmental Economics Inc.	TWO#22 Bldg. Elec. Roadmap	03/09/2020	\$250,000	\$250,000	\$7,307	\$7,30
	Competitive	Υ	152640	Resources for the Future Inc	TWO #1 Social Cost of Carbon	03/17/2020	\$150,000	\$150,000		
ENVIRONMENTAL RESEARCH	Competitive	Υ	140110A	Guidehouse Inc.	TWO 1 - Assessment of Carbon C	04/06/2020	\$20,977	\$20,977		
TESE ITOTA	Competitive	Υ	145446A	Guidehouse Inc.	TWO #2 Equitable Cooling	04/06/2020	\$261,887	\$261,887	\$43,221	\$43,22
	Competitive	Υ	152319	NESCAUM	TWO #7 LISTOS Air Quality Mode	03/10/2020	\$134,500	\$134,500		
	Competitive	Υ	152820	ICF Resources, LLC	TWO #6 Climate Technical Asst.	03/23/2020	\$200,000	\$200,000		
	Competitive	Υ	152856	Industrial Economics, Incorporated	TWO#4 Climate Econ. Impact	03/24/2020	\$99,949	\$99,949		
	Competitive	Υ	153679	Columbia University	TWO#1 Updating CLIMAID	04/23/2020	\$99,552	\$99,552		
	Competitive	Υ	154005	Ecology and Environment Engineering	TWO #20 G&G Survey	05/05/2020	\$84,700	\$84,700		
	Discretionary	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016	\$49,843	\$390,159		\$213,29
Geothermal Incentive Program	Competitive	Υ	127557	Frontier Energy, Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$200,000	\$600,000	\$62,416	\$459,03
Healthy Homes VB Payment Pilot	Competitive	Υ	150497	Guidehouse Inc.	TWO 3 NYS Healthy Homes VBP	01/22/2020	\$200,000	\$200,000		
Home Perf w Energy Star	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$139,149	\$8,366,854	\$355,947	\$6,067,62
	Competitive	Υ	121807B	Uplight, Inc.	Residential Program MgtRFP3545	10/23/2019	\$1,576,144	\$1,871,966	\$3,106	\$106,15
Mkt Char: Tech Assist	Competitive	Υ	101159A	Guidehouse Inc.	Tech Assist, REV Pool	04/06/2020	\$394,750	\$394,750	\$17,170	\$17,17
Multifam Performance Pg	m Competitive	Υ	141803	Fusco Personnel, Inc.	TS.002_Multifamily Coordinator	06/25/2019	\$50,000	\$81,325	\$4,773	\$30,71
New Construction- Housi	ng Competitive	Υ	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	02/19/2019	\$261,105	\$529,605	\$53,646	\$233,20
NEW YORK GREEN BANK	Competitive	Υ	98838	DealCloud Inc.	DealCloud Licensing	05/24/2016	\$2,355	\$259,105	\$4,950	\$259,10
	Competitive	Υ	98839A	Advent Software Luxembourg S A R L	Fund Administration/Loan Inves	04/08/2020	\$1,718,254	\$1,718,254		
	Competitive	Υ	109917	BDO USA LLP	Background Investigation Servi	02/07/2017	\$2,200	\$39,650	\$2,200	\$39,65
	Competitive	Υ	152910	Guidehouse Inc.	TWO #1 - Price Forecast	03/25/2020	\$250,000	\$250,000	\$17,729	\$17,72
	Discretionary	Υ	152717	Andrew Seiden	NYGB Investment Support	03/19/2020	\$50,000	\$50,000		

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 3/16/2020 to 5/15/2020

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Competitive	Υ	137225	Systems Management Planning, Inc.	Webex Services - 2019 2020	02/15/2019	\$105	\$19,116	\$12,008	\$19,116
		Competitive	Υ	152212	Systems Management Planning, Inc.	VMware Licensing - End User	03/05/2020	\$21,244	\$21,244	\$21,244	\$21,244
		Competitive	Υ	152384	SHI, Inc.	Adobe DC Pro Creative Cloud	03/11/2020	\$55,457	\$55,457	\$55,457	\$55,457
		Competitive	Υ	152608	Marshall & Sterling, Inc.	RFP 4301 Insurance	03/16/2020	\$246,745	\$246,745	\$241,461	\$241,461
		Competitive	Υ	153148	Tech Valley Talent, LLC	TWO Senior Software - Kurant	04/02/2020	\$187,200	\$187,200		
		Competitive	Υ	153492	Systems Management Planning, Inc.	VMware - Workspace (Airwatch)	04/15/2020	\$6,685	\$6,685	\$6,685	\$6,685
		Competitive	Υ	153802	Zones LLC	Webex Licenses 2020-2021 Zones	04/29/2020	\$48,380	\$48,380		
		Competitive	Υ	154032	Dell, Inc.	DELL - Wyse 100, WMS license	05/06/2020	\$34,733	\$34,733		
		Competitive	Υ	154055	Systems Management Planning, Inc.	vROPS for Horizon - SMP	05/07/2020	\$30,095	\$30,095		
		Competitive	Υ	154095	Gartner Inc.	Gartner - Membership 20 - 21	05/11/2020	\$39,164	\$39,164		
		Discretionary	Υ	152278	Atlantic Data Security, LLC	Check Point Training	03/09/2020	\$15,000	\$15,000	\$4,995	\$4,995
		Discretionary	Υ	152822	Randstad North America, Inc.	Temp Services	03/23/2020	\$112,223	\$112,223	\$4,773	\$4,773
		Discretionary	Υ	153184	APPEXTREMES, LLC	Conga Composer maintenance 1 y	04/03/2020	\$14,400	\$14,400		
		Discretionary	Υ	153365	ThunderCat Technology LLC	Test Management Jira 1 yr	04/10/2020	\$5,600	\$5,600	\$5,600	\$5,600
		Discretionary	Υ	153641	Fusco Personnel, Inc.	TS.015 Contract Mangament Coor	04/21/2020	\$66,495	\$66,495	\$1,279	\$1,279
		Non-Competiti.	Y	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	04/17/2018	\$144,000	\$409,000	\$72,735	\$337,237
	OREC: Technical Support	Competitive	Υ	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$220,000	\$334,550	\$7,447	\$63,977
	OTHER PROGRAM AREA	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$150,000	\$2,863,570	\$227,257	\$2,202,073
		Competitive	Υ	129761	Four Points Group, Inc.	RFQL 3685 R2	08/06/2018	\$150,000	\$284,927	\$2,600	\$81,792
	Pay for Performance	Competitive	Υ	153574	Robert K. Harmon & Company LLC	P4P - MEETS TWO	04/17/2020	\$50,000	\$50,000		
	POLICY DEVELOPMENT	Competitive	Υ	153579	NYS Office of General Services	NYS DPS Printing Services	04/17/2020	\$50,000	\$50,000		
	Real Time Enrgy Management	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$56,531	\$1,674,733	\$93,793	\$971,272
	REC:CES REC System Dev Costs	Competitive	Υ	153678	Unique Comp Inc.	TWO Salesforce Dev Asrith	04/23/2020	\$243,880	\$243,880		
	Remote Energy Management	Competitive	Υ	147433	Rocky Mountain Institute	Technical support for NYSERDA	11/12/2019	\$250,000	\$250,000	\$25,018	\$25,018
	Talent Pipeline:CE and OJT	Competitive	Υ	153701	Steven Winter Associates, Inc.	Steven Winter Assoc. Training	04/27/2020	\$799,999	\$799,999		
		Competitive	Υ	154034	BW Research Partnership	TWO# 1 CE Industry Report	05/06/2020	\$240,000	\$240,000		
	WEST VALLEY DEVELOPMENT	Competitive	Υ	153048	McMahon and Mann Consulting Engineers	Engineering Services WV	03/31/2020	\$250,000	\$250,000	\$33,265	\$33,265
	PROGRAM	Non-Competiti.	Y	53151	GZA GeoEnvironmental of New York	Trench 14 Investigation	11/24/2014	\$58,650	\$692,777	\$23,838	\$649,370
PGRM	Clean Energy Communities	Non-Competiti.	Y	134735	Energy Improvement Corporation	EIC PACE financing program	12/04/2018	\$2,190,000	\$3,690,000	\$469,660	\$1,964,000

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 3/16/2020 to 5/15/2020

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PGRM	NY-SUN	Competitive	Υ	131209A	AES DE RS XI, LLC.	NY-Sun C&I	04/03/2020	\$5,040,000	\$5,040,000		
		Competitive	Υ	152810	ELP Stanford Solar LLC	NY Sun	03/23/2020	\$3,522,744	\$3,522,744		
		Competitive	Υ	153541	ESNY-MED-MONTGOMERY LLC	NY Sun	04/16/2020	\$3,474,917	\$3,474,917		
		Competitive	Υ	153789	AMERESCO, Inc.	NY Sun	04/29/2020	\$3,226,080	\$3,226,080		
	REC:CES REC Contracts	Competitive	Υ	121500-1	Invenergy Wind, LLC	CESRFP1_Tier 1 RECS.	04/22/2020	\$466,841,264	\$466,841,264		
		Competitive	Υ	148795	Garnet Energy Center LLC	CESRFP1_Tier 1 RECS	12/11/2019	\$234,144,030	\$234,144,030		
		Competitive	Υ	148796	North Side Energy Center, LLC -	CESRFP1_Tier 1 RECS	12/11/2019	\$176,084,277	\$176,084,277		
Grand Tota	l							\$905,389,337	\$924,394,025	\$2,069,487	\$15,910,547

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 3/16/2020 to 5/15/2020

Categor y	Туре	Term > 1 Year	Contract ID	Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
PCMT	Competitive	Y	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	Added New Tasks	04/11/2018	\$15,000	\$474,891
	Competitive	Y	70333	Cornell University	76West Building a Clean Energy	Added New Tasks	08/03/2015	\$15,755	\$4,648,668
	Competitive	Y	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	Added New Tasks	12/18/2015	\$461,938	\$8,019,070
	Competitive	Y	107299	CLEAResult Consulting, Inc.	Phone Email & Web Support	Added New Tasks	11/28/2016	\$75,198	\$513,202
	Competitive	Y	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	Added New Tasks	12/08/2016	\$70,000	\$8,436,854
	Competitive	Y	117926	TRC Energy Services	Staff Augmentation Services	Added New Tasks	09/06/2017	\$2,757,426	\$8,833,077
	Competitive	Y	117928	Allegis Group Holdings Inc	Staff Augmentation Services	Added New Tasks	09/06/2017	\$89,060	\$1,763,793
	Competitive	Y	117989	Arcadis of New York, Inc.	Staff Augmentation Services	Added New Tasks	09/08/2017	\$734,525	\$1,381,320
	Competitive	Y	118163	D.L. English Consulting, Inc.	Indian Point Consultant	Added New Tasks	09/13/2017	\$50,000	\$406,475
	Competitive	Y	134906	New York Power Authority,	RTEM Data Store	New Agreement	12/07/2018	\$1,500,000	\$1,500,000
	Competitive	Y	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	Added New Tasks	02/19/2019	\$268,938	\$798,543
	Competitive	Y	143834	Allegis Group Holdings Inc	SA.054_TWO #9 - SFR PM	Added New Tasks	08/16/2019	\$133,523	\$263,448
	Competitive	Y	143835	EME Consulting Engineering Group, LLC	SA.056_TWO #10_RTEM MF PM	Added New Tasks	08/16/2019	\$178,877	\$367,544
	Competitive	Y	144450	Energy & Resource Solutions, Inc.	TWO 4 - P4P Event Evaluation	New Agreement	09/04/2019	\$53,716	\$213,716
	Competitive	Y	148235	Energy & Resource Solutions, Inc.	TWO 6 - Performance Monitoring	Added New Tasks	11/27/2019	\$190,046	\$1,318,975
	Competitive	Y	153604	Karpman Consulting, LLC	KARPMAN TWO#1 Training	Added New Tasks	04/20/2020	\$414,702	\$414,702
	Competitive	Y	154006	Ecology & Environment, Inc.	Owner's Engineering	Added New Tasks	05/05/2020	\$599,984	\$599,984
	Competitive	Y	154094	Sustainable Endowment Institute	GRITS Goals Development - SEI	Added New Tasks	05/11/2020	\$50,000	\$50,000
	Discretionary	Y	102013	Infogroup Government Division	Infogroup	Exercising Option to Renew	08/05/2016	\$12,500	\$512,500
	Discretionary	Y	114800	Dowd-Witbeck Printing Corp.	NYSERDA-Use Print Materials	Added New Tasks	06/13/2017	\$470	\$5,219
	Discretionary	Y	124007	Concur Technologies, Inc.	2018-2020 Concur annual cost	New Agreement	03/01/2018	\$40,000	\$79,700
	Discretionary	Y	151289	USGS National Center MS270	Biological Recovery	New Agreement	02/12/2020	\$49,600	\$49,600
	Discretionary	Y	153829	Owahgena Consulting, Inc.	Heat Pump Technical Assistance	New Agreement	04/30/2020	\$50,000	\$50,000
	Discretionary	Y	154099	Concur Technologies, Inc.	Concur Services 2020-2022	New Agreement	05/11/2020	\$40,000	\$40,000
	Discretionary	Y	154188	Systems Management Planning, Inc.	ManageEngine Desktop/ AD 1yr	New Agreement	05/14/2020	\$10,419	\$10,419
PGRM	Competitive	Y	37382	TRC Energy Services	Technical Review and Program S	Exercising Option to Renew	11/15/2013	\$113,425	\$3,099,569
	Competitive	Y	129293	Consolidated Edison Company	P4P Con Ed MOU and NDA	New Agreement	07/26/2018	\$7,366,666	\$7,366,666
	Competitive	Y	135316	SED NY Holdings	SED Watkins Road Solar I	New Agreement	12/18/2018	\$15,457,722	\$15,457,722
	Competitive	Y	135317	SED NY Holdings	SED Skyline Solar	New Agreement	12/18/2018	\$15,759,750	\$15,759,750
	Competitive	Y	135319	SED NY Holdings	SED Dog Corners Solar	New Agreement	12/18/2018	\$15,913,702	\$15,913,702
	Competitive	Y	135621	Silver Lake Solar LLC	Silver Lake Solar	New Agreement	12/28/2018	\$19,252,800	\$19,252,800
	Competitive	Y	135627	SunEast Renewables LLC	Manchester Solar	New Agreement	12/28/2018	\$17,134,785	\$17,134,785

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 3/16/2020 to 5/15/2020

Categor y	Туре	Term > 1 Year	Contract ID	Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
PGRM	Competitive	Y	140398	National Wind Technology Consortium, Inc	National OSW R&D Concortium.	Extend Contract Term	05/20/2019	\$450,000	\$5,596,103
	Competitive	Y	153330	Gardline Marine Sciences Inc	G&G Investigation for OSW		04/09/2020	\$5,998,102	\$5,998,102
	Competitive	Y	153425	Stillwell Energy Storage, LLC	Bulk Storage Incentive	New Agreement	04/13/2020	\$4,000,000	\$4,000,000
	Competitive	Y	153428	Groundvault Energy Storage, LLC	Bulk Storage Incentive	New Agreement	04/13/2020	\$5,000,000	\$5,000,000
	Competitive	Y	153429	Cleancar Energy Storage, LLC	Bulk Storage Incentive	New Agreement	04/13/2020	\$6,000,000	\$6,000,000
Grand To	Grand Total							\$120,308,629	\$161,330,899

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 3/16/2020 to 5/15/2020

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
Advent Software Luxembourg S A R L	d/b/a SS&C Financial Services LLC	Windsor	СТ	06095	FSBE					
AES DE RS XI, LLC.	dba Finchville Solar, LLC.	Louisville	СО	80027	FSBE					
Allegis Group Holdings Inc	7301 Parkway Drive	Hanover	MD	21076	FSBE					
AMERESCO, Inc.	500 Ygnacio Valley Rd., Ste 450	Walnut Creek	CA	94596	FSBE					
Andrew Seiden	286 Pacific Street Apt 1	Brooklyn	NY	11201	NYSBE					
APPEXTREMES, LLC	PO BOX 7839	Broomfield	со	80021	FSBE					
Arch Street Communications, Inc.	31 Mamaroneck Ave., Ste 400	White Plains	NY	10601	NYSBE	х				
Atlantic Data Security, LLC	23 Shoddy Mill Road	Bolton	СТ	06043	FSBE					
BDO USA LLP	PO Box 642743	Pittsburgh	PA	15264-2743	FSBE					
BW Research Partnership	6120 Paseo Del Norte, Suite D2	Carlsbad	CA	92011	FSBE					
CLEAResult Consulting, Inc.	4301 Westbank Dr., A-150	Austin	TX	78746	FSBE					
Columbia University	500 W 120th St	New York	NY	10027-6623	NYSBE					
DealCloud Inc.	129 West Trade St., Ste 1025	Charlotte	NC	28202	FSBE					
Dell, Inc.	1 Dell Way, RR8, Box 8716	Round Rock	TX	78682	FSBE					
Ecology and Environment Engineering	368 Pleasant View Drive	Lancaster	NY	14086	NYSBE					
ELP Stanford Solar LLC	552 Massachusetts Avenue	Cambridge	MA	02139	FSBE					
EME Consulting Engineering Group, LLC	129 West 27th Street	New York	NY	10001	NYSBE					
Energy and Environmental Economics Inc.	2401 E Katella Ave.	Anaheim	CA	92806	FSBE					
Energy Improvement Corporation	2875 Route 35, Suite 6N76	Katonah	NY	10536	NYSBE					
ESNY-MED-MONTGOMERY LLC	805 3rd Ave, 20th Floor	New York	NY	10022	NYSBE					
Essense Partners Inc.	216 East 45th St., 11th Floor	New York	NY	10017	NYSBE	х	х			
Four Points Group, Inc.	4451 Brookfield Corp Dr.	Chantilly	VA	20151	FSBE					
Frontier Energy, Inc.	2695 Bingley Rd	Cazenovia	NY	13035	NYSBE					
Fusco Personnel, Inc.	4 Executive Park Dr Ste B	Albany	NY	12203-3718	NYSBE	x				
Garnet Energy Center LLC	700 Universe Blvd	Juno Beach	FL	33408	FSBE					
Gartner Inc.	56 Top Gallant Rd	Stamford	СТ	06902	FSBE					
Guidehouse Inc.	150 N Riverside Plz Ste 2100	Chicago	IL	60606-1528	FSBE					
GZA GeoEnvironmental of New York	300 Pearl St.,Ste 700	Buffalo	NY	14202	NYSBE					
Harris Wiltshire & Grannis LLP	1919 M Street, NW, Eighth Floor	Washington	DC	20036	FSBE					
Hodgson Russ LLP	140 Pearl Street, Suite 100	Buffalo	NY	14202	NYSBE					

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 3/16/2020 to 5/15/2020

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
ICF Resources, LLC	9300 Lee Highway	Fairfax	VA	22031	FSBE					
Industrial Economics, Incorporated	2067 Massachusetts Avenue	Cambridge	MA	02140	FSBE					
Invenergy Wind, LLC	Alle-Catt Wind Energy LLC	Chicago	IL	60606	FSBE					
Level 3 Communications, LLC	1025 Eldorado Blvd	Broomfield	со	80021	FSBE					
Luminate, LLC	1801 Broadway, Ste 1620	Denver	со	80202	FSBE					
Marshall & Sterling, Inc.	125 High Rock Ave., Ste 206	Saratoga Springs	NY	12866	NYSBE					
McMahon and Mann Consulting Engineers	2495 Main St, Ste 432	Buffalo	NY	14214-2103	NYSBE					
NESCAUM	89 South Street	Boston	MA	02111	FSBE					
North Side Energy Center, LLC -	700 Universe Blvd	Juno Beach	FL	33408	FSBE					
NYS Office of General Services	1220 Washington Ave	Albany	NY	12226	NYSBE					
Randstad North America, Inc.	PO Box 2084	Carol Stream	IL	60132-2084	FSBE	х				
Resources for the Future Inc	1616 P Street, NW	Washington	DC	20036-1400	FSBE					
Robert K. Harmon & Company LLC	PO Box 2777	Vashon	WA	98070	FSBE					
Rocky Mountain Institute	2490 Junction Place, Suite 200	Boulder	со	80301	FSBE					
SHI, Inc.	P.O. Box 952121	Dallas	TX	75395	FSBE					
Steven Winter Associates, Inc.	61 Washington St	Norwalk	СТ	06854	FSBE					
Systems Management Planning, Inc.	1020 John St	West Henrietta	NY	14586	NYSBE					
Tech Valley Talent, LLC	PO Box 935587	Atlanta	GA	31193-5587	FSBE	х				
The Cadmus Group, LLC	100 5th Ave., Ste 100	Waltham	MA	02451	FSBE					
The Trustees of Columbia University	1210 Amsterdam Ave	New York	NY	10027-7003	NYSBE					
ThunderCat Technology LLC	1925 Isaac Newton Square	Reston	VA	20190	FSBE			x		
Unique Comp Inc.	2708 42nd Road	Long Island City	NY	11101	NYSBE	х	х			
Uplight, Inc.	2580 55th Street	Boulder	со	80301	FSBE					
Willdan Energy Solutions	Wall Street Plaza	New York	NY	10005	NYSBE					
Zones LLC	1102 15th St. SW. STE 102	Auburn	WA	98001	FSBE					

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Section 1 Summary - 3/16/2020 to 5/15/2020

Category	Report Type	Туре	Count of Contracts	Committed this period
PGRM	Program	Competitive	443	\$994,427,350
		Discretionary	3	\$84,070
		Non-Competitive	3	\$2,460,000
	Total		449	\$996,971,420
Grand Total			449	\$996,971,420

Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
Null	1	\$154,000
Agriculture	3	\$15,244
Building Innovation	1	\$300,000
Clean Heating and Cooling	4	\$658,500
Clean Trans (Innov & Research)	6	\$2,999,465
Codes	1	\$31,000
Combined Heat & Power	4	\$98,700
Commercial	67	\$8,872,940
Communities and Local Governme	6	\$2,950,712
Energy & EnvironmentalAnalysis	2	\$317,000
Energy Storage	19	\$9,236,400
Evaluation	1	\$972,473
Fuel Cells	1	\$862,500
Grid Modernization	6	\$5,227,313
Industrial	10	\$1,755,161
Information Brokering	2	\$96,764
Innovation	1	\$49,000
Large Scale Renewables	7	\$877,919,520
LMI	23	\$2,568,929
Low Income	1	\$60,000
Mkt Char & Design (Mkt Dev)	2	\$20,675

Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
Moderate Income	1	\$60,000
Multifamily (Mkt Rate Only)	5	\$149,421
New Construction	23	\$2,171,641
NY-Sun	280	\$85,200,379
Renewables Optimization	1	\$250,000
REV Technical Assistance	3	\$3,896,529
Solar Thermal	1	\$29,070
Technology to Market	9	\$1,153,942
Workforce Development	25	\$699,031
Grand Total	516	\$1,008,776,309

Graph: All Market Focus Committed this Period

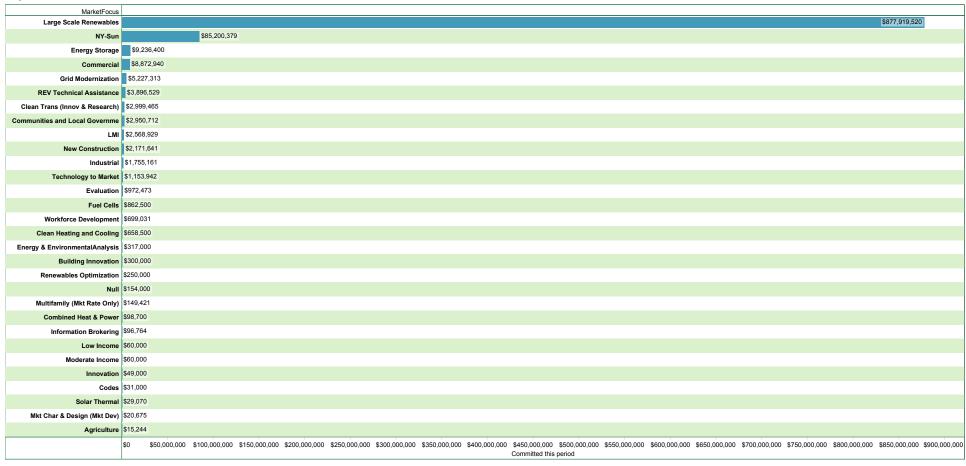


Table: By REDC Region and County

REDC Region	County	Count of Contracts	Committed this period
Capital Region	Albany	11	\$1,017,864
	Columbia	5	\$789,402
	Greene	4	\$3,467,471
	Rensselaer	5	\$3,485,556
	Saratoga	6	\$1,501,312
	Schenectady	5	\$5,739,571
	Warren	1	\$6,802
	Washington	2	\$13,520
	Total	39	\$16,021,497
Central New York	Cayuga	2	\$234,147,280
	Cortland	2	\$2,550,000
	Madison	3	\$149,379
	Onondaga	7	\$2,061,021
	Oswego	1	\$562,046
	Total	15	\$239,469,725
Finger Lakes	Genesee	1	\$5,688
	Livingston	6	\$1,081,606
	Monroe	14	\$4,160,171
	Ontario	8	\$285,593
	Seneca	1	\$55,400
	Wayne	1	\$9,960

NYSERDA PERIODIC PROGRAM REPORT 3/16/2020 to 5/15/2020

Table: By REDC Region and County

REDC Region	County	Count of Contracts	Committed this period
Finger Lakes	Wyoming	1	\$5,997
	Yates	1	\$10,363
	Total	33	\$5,614,778
Long Island	Nassau	6	\$198,350
	Suffolk	14	\$535,090
	Total	20	\$733,440
Mid-Hudson	Dutchess	15	\$9,758,322
	Orange	18	\$16,486,536
	Putnam	1	\$5,005
	Rockland	8	\$48,927
	Sullivan	5	\$35,400
	Ulster	13	\$1,998,466
	Westchester	14	\$1,125,410
	Total	74	\$29,458,065
Mohawk Valley	Fulton	2	\$2,374,322
	Montgomery	5	\$2,718,809
	Oneida	7	\$2,236,646
	Otsego	3	\$117,914
	Schoharie	1	\$8,640
	Total	18	\$7,456,331
New York City	Bronx	27	\$2,949,250

NYSERDA PERIODIC PROGRAM REPORT 3/16/2020 to 5/15/2020

Table: By REDC Region and County

REDC Region	County	Count of Contracts	Committed this period
New York City	Kings	90	\$3,115,984
	New York	57	\$5,009,672
	Queens	29	\$3,229,428
	Richmond	8	\$11,492,477
	Total	211	\$25,796,811
North Country	Essex	2	\$66,759
	Franklin	1	\$503,010
	Jefferson	8	\$5,618,053
	Lewis	1	\$1,447,200
	St. Lawrence	4	\$177,116,215
	Total	16	\$184,751,237
Southern Tier	Broome	1	\$87,200
	Chemung	4	\$38,920
	Chenango	1	\$8,190
	Steuben	3	\$1,388,869
	Tioga	1	\$6,720
	Tompkins	7	\$361,341
	Total	17	\$1,891,240
Statewide	STATEWIDE	53	\$20,874,586
	Total	53	\$20,874,586
Western New York	Allegany	2	\$2,545,169

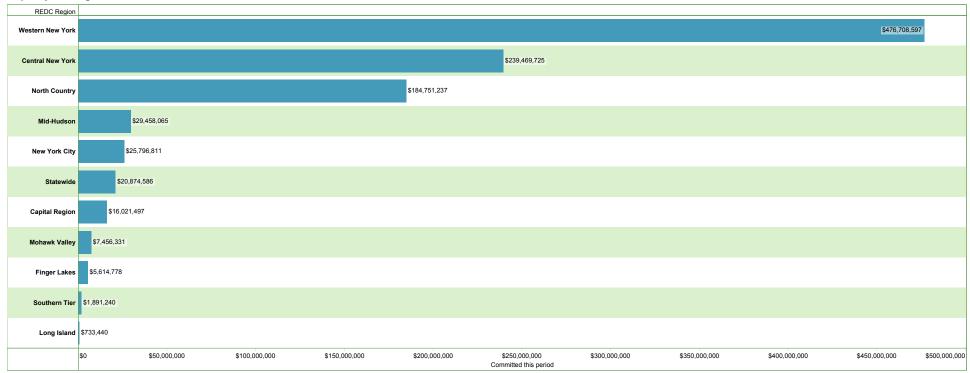
NYSERDA PERIODIC PROGRAM REPORT 3/16/2020 to 5/15/2020

Table: By REDC Region and County

REDC Region	County	Count of Contracts	Committed this period
Western New York	Cattaraugus	2	\$466,848,250
	Chautauqua	3	\$318,035
	Erie	8	\$5,670,364
	Niagara	1	\$1,326,780
	Total	16	\$476,708,597
Grand Total		512	\$1,008,776,309

NYSERDA PERIODIC PROGRAM REPORT

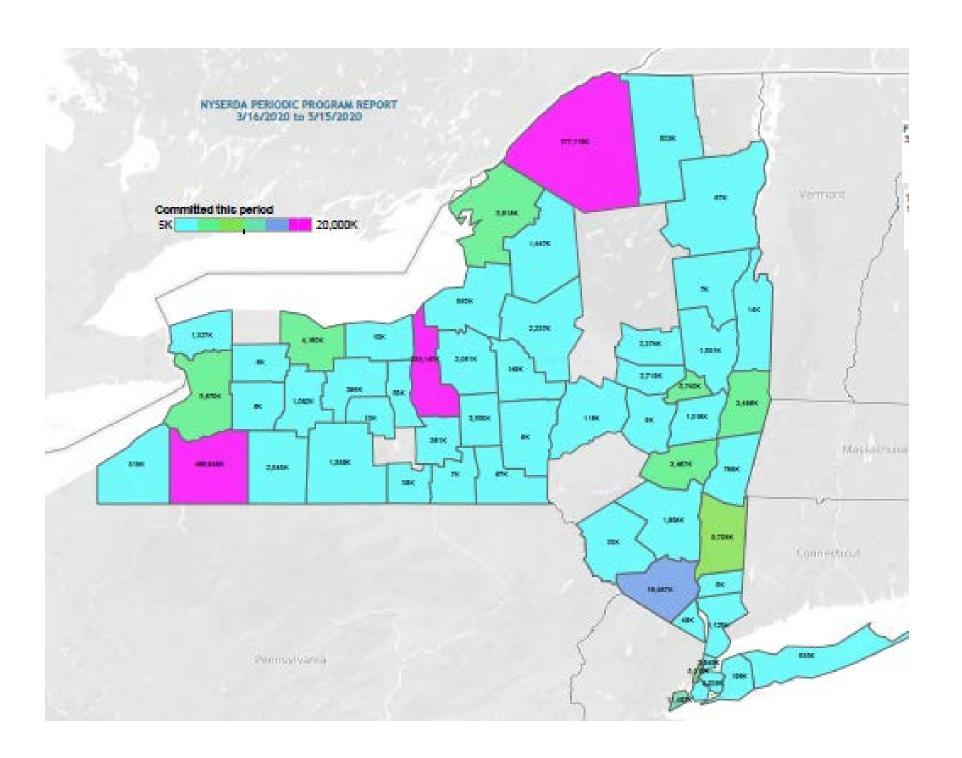
3/16/2020 to 5/15/2020 Graph: By REDC Region



NYSERDA PERIODIC PROGRAM REPORT 3/16/2020 to 5/15/2020

Table: By Electric Utility

Electric Utility	Count of Contracts	Committed this period
Central Hudson Gas and Electric	37	\$20,655,202
Consolidated Edison	219	\$26,906,366
Long Island Power Authority	20	\$733,440
Municipal Utilities	2	\$10,620
National Grid	93	\$686,467,954
NYS Electric and Gas	45	\$9,230,419
Orange and Rockland Utilities	20	\$7,324,669
Rochester Gas and Electric	19	\$236,573,053
Statewide	53	\$20,874,586
Grand Total	508	\$1,008,776,309



RESOLVED, that the Periodic Contracts Report, covering the period March 16, 2020 through May 15, 2020, as presented at this meeting, including but not limited to the contracts identified therein which have been, or are expected to be, executed and which do have, or are expected to have, a period of performance in excess of one year, is hereby approved in accordance with Public Authorities Law Section 2879.

ANNUAL PROMPT PAYMENT POLICY REPORT

FISCAL YEAR ENDED MARCH 31, 2020

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

ANNUAL PROMPT PAYMENT POLICY REPORT

FISCAL YEAR ENDED MARCH 31, 2020

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Section 2880 of the Public Authorities Law requires each public authority to prepare an annual report on the implementation of its prompt payment policy. This report for the New York State Energy Research and Development Authority covers the period April 1, 2019, through March 31, 2020.

The Members of the Authority adopted a resolution establishing its prompt payment policy, effective January 1, 1989. The rules and regulations detailing the Authority's prompt payment policy are contained in its Prompt Payment Policy Statement (21 NYCRR Part 504). The Authority is required to make payment to contractors and vendors within 30 days on all valid invoices received. If the Authority fails to make payment on amounts properly due and owing within 30 days, interest on the late payment is to be calculated at the rate prescribed by Section 2880. When the amount of interest computed equals or exceeds ten dollars, that amount of interest must be paid to the contractor.

Section 2880 requires that the annual report include the following:

1. Listing of the types and categories of contracts that the Authority entered into during the twelve month period covered by this report:

485 procurement contracts goods contracts;

2,923 program contracts.

3.408 Total

During the reporting period, the Authority processed a total of 80,803 vendor invoices for payment.

- 2. Number and amount of all interest payments: See attached table
- 3. Number of interest chargeable days and total number of days taken to process each late contract payment: See attached table
- 4. Principal reasons that the late payments occurred:

The two exceptions were the result of isolated human error made in the processing of the invoices. Given that these exceptions were isolated in occurrence and extremely small in number, and given that in both instances the exceptions did not result in the Authority incurring late payment interest charges, the Authority believes its existing systems and processes are sufficient to provide compliance with the Prompt Payment Policy.

Table 1 Prompt payment detail

Number	Name	Invoice Amount	Days taken to process payment	Interest chargeable days	Interest payment	Comment
1	CHA Consulting Inc.	\$3,409.50	58	28	\$0.00	Interest less than \$10
2	Energy Resource Solutions, Inc.	\$91,694.30	37	7	\$0.00	Vendor waived interest of \$158.38
	Total				\$0.00	

RESOLVED, that the Annual Prompt Payment Policy Report presented to the Members of the Authority at this June 23, 2020 meeting is adopted and approved as the annual report required by Section 2880 of the Public Authorities Law.