

Governor

RICHARD L. KAUFFMAN Chair ALICIA BARTON
President and CEO

NOTICE OF MEETING AND AGENDA

June 18, 2019

TO THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY:

PLEASE TAKE NOTICE that the Annual Meeting (the 243rd) of the New York State Energy Research and Development Authority will be held in the Authority's Albany Office at 17 Columbia Circle, Albany, New York, and in the Authority's New York City Office at 1359 Broadway, 19th floor, New York, New York on Wednesday, June 26, 2019, commencing at 2:30 p.m., for the following purposes:

- 1. To receive information from the Governance Committee and:
 - a. to consider and act upon a resolution approving a compensation schedule.
 - b. to consider and act upon a resolution approving a Cost of Living salary increase for Officers of the Authority
 - c. to consider and act upon a resolution approving amendments made to the Authority's By-laws.
- 2. To consider and act upon a resolution appointing the Vice President for Policy and Regulatory Affairs.
- 3. To receive information from the Audit and Finance Committee and:
 - a. to consider and act upon a resolution approving the Annual Investment Report of the Authority and the *Investment Guidelines, Operative Policy and Instructions (June 2019)*;
 - b. to consider and act upon a resolution approving the Annual Investment Report for the NYSERDA OPEB (Other Post-Employment Benefits) Trust for the year ended March 31, 2019 and the Investment Policy Statement for the NYSERDA OPEB Trust (June 2019);

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- c. to consider and act upon a resolution approving the Financial Statements of the Authority and NY Green Bank for fiscal year 2018-19;
- d. to consider and act upon a resolution approving the appointment of the Authority's independent auditors for fiscal year 2019-20;
- e. to consider and act upon a resolution approving an annual bond sales report; and
- f. to receive a report on the Authority's Tax Reporting and Compliance.
- 4. To receive a report from the Waste and Facilities Management Committee and to consider and act upon a resolution approving the Waste and Facilities Management Committee Charter.
- 5. To receive a report from the Program Planning Committee.
- 6. To consider and act upon a resolution approving the Operations and Accomplishments, and Mission Statement and Measurements Annual Report.
- 7. To consider and act upon a resolution approving the Annual Report on Disposition of Real and Personal Property and the *Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2019).*
- 8. To consider and act upon a resolution approving the Annual Report on Contracts and the *Procurement and Program Contract Guidelines, Operative Policy and Instructions (June 2019).*
- 9. To consider and act upon a resolution approving the periodic contracts report.
- 10. To consider and act upon a resolution approving the annual report on the implementation of the Authority's prompt payment policy.
- 11. To consider and act upon a resolution recommending approval of revisions to the plan entitled *Operating Plan for Investments in New York Under the CO*₂ *Budget Trading Program and the CO*₂ *Allowance Auction Program*.
- 12. To transact such other business as may properly come before the meeting.

Members of the public may attend the meeting at any of the above locations. Video conferencing will be used at all locations and the Authority will be posting a video of the meeting to the web within a reasonable time after the meeting. The video will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.

Noah C. Shaw Secretary

NYSERDA Compensation Schedule as of March 31, 2019 Pursuant to Public Authorities Law Section 2800

Compensation Schedule as of March 31, 2019 Pursuant to Public Authorities Law Section 2800					
Name			Annual Salary	otal Compensation* Year Ended	
Last	First	Title	March 31, 2019	March 31, 2019	
Adkins	David	Chief Information Officer	\$150,000	\$137,077	
Allen	Kara	Sr Advisor	\$108,866	\$111,641	
Angoorly	Caroline	Managing Director/Chief Operating Officer GB	\$180,922	\$188,734	
Baldyga	Todd	Director	\$166,696	\$171,498	
Barton	Alicia	President and CEO	\$186,848	\$186,638	
Bembia	Paul	Director			
			\$166,696	\$171,498 \$117,500	
Berman	Joseph	Sr Advisor, Market Development	\$130,000	\$117,500	
Berry	Bryan	Asst Director	\$148,293	\$147,951 \$128,520	
Borowiec	Joseph	Program Manager	\$136,042	\$138,529	
Brown	Matthew	Program Manager	\$136,042	\$140,181	
Bryk	Dale	Deputy Secretary	\$170,000	\$21,961	
Chappoz	Loic	Program Manager	\$129,098	\$131,749	
Chick	Mary	Director	\$156,880	\$156,519	
Ciampa	Francis	Program Manager	\$128,634	\$128,395	
Coll	Christopher	Program Manager	\$134,111	\$134,402	
Corcoran	Christopher	Program Manager	\$133,956	\$139,732	
Costello	Peter	Managing Director of Legal and Reg. Affairs	\$163,804	\$164,747	
Coup	James	Asst Director	\$151,228	\$157,429	
Crudele	Fred	Program Manager	\$115,197	\$116,531	
Dean	Emily	Director	\$168,166	\$144,967	
DeRocker	Abbey	Program Manager	\$130,000	\$132,770	
Doling	Jason	Asst Director	\$140,123	\$144,532	
Egbert	Scott	Program Manager	\$132,960	\$132,654	
Engel-Fowles	Victoria	Program Manager	\$136,042	\$139,990	
Ferranti	Adele	Program Manager	\$136,042	\$140,180	
Frank	Bradley	Program Manager	\$120,729	\$39,696	
Geel	Laura	Program Manager	\$124,462	\$124,700	
Glanton	Cheryl	Director	\$155,765	\$157,967	
Gordon	Donovan	Director	\$146,475	\$146,203	
Gordon	Jonathan	Sr Advisor	\$153,056	\$152,883	
Griffin	Alfred	President of the New York Green Bank	\$204,488	\$212,273	
Hale	Kevin	Director	\$160,735	\$161,036	
Hale	John	Sr Advisor for Energy Efficiency Markets	\$177,507	\$180,332	
Hall	Christopher	Sr Advisor	\$130,000	\$133,274	
Hammer	Hillel	Sr Advisor	\$140,000	\$38,507	
Harmon	Victoria	Sr Advisor	\$165,673	\$168,512	
Harris	Doreen	Director	\$162,256	\$162,385	
Joel	Max	Program Manager	\$134,748	\$140,463	
Joseph	Janet	Sr VP Strategy & Market Dev	\$182,589	\$182,384	
Joshi	Rohit	Director	\$163,717		
Kaatz				\$166,438 \$156,048	
	Glen	Director	\$151,228	\$156,048	
Kasson-Muzio	Amy	Program Manager	\$115,410	\$115,144	
Kessler	Andrew	Managing Director of NY Green Bank	\$175,000	\$84,220	
Lampman	Gregory	Program Manager	\$136,042	\$141,461	
Leach	Bradford	Program Manager	\$125,000	\$52,115	
Lee	Brian	Managing Director, Risk & Compliance	\$180,922	\$188,734	
Lepeniotis	Stefanos	Program Manager	\$136,042	\$142,136	
Levy	Dana	Program Manager	\$136,042	\$138,529	
Lynch	Thomas	Director	\$166,696	\$171,498	
MacPherson	Wendy	Program Manager	\$136,042	\$140,879	
Mahar	Peter	Controller & Asst Treasurer	\$151,228	\$158,829	
Marcotte	Jaime	Program Manager	\$136,041	\$114,993	
Mas	Carl	Director	\$151,264	\$150,824	
McKeon Jr.	Robert	Web Manager	\$111,005	\$114,382	
Meissner	Jennifer	Director	\$166,696	\$171,794	

NYSERDA Compensation Schedule as of March 31, 2019 Pursuant to Public Authorities Law Section 2800

Total Compensation* Name **Annual Salary** Year Ended **First Title** March 31, 2019 March 31, 2019 Last Mellon \$140,180 Andrea Program Manager \$136,042 Sr Adv for Strategy, Clean Energy Siting \$150,000 \$151,509 Moaveni Houtan Moriarta Courtney Director \$140,000 \$17,769 Moyer Susan Director \$151,228 \$156,048 Muller Katherine Director \$166,696 \$171,498 O'Connor Christopher Program Manager \$123,624 \$123,484 O'Shei Patrick Director \$168,225 \$173,025 Peck Mary Director of Internal Audit \$144,228 \$105,397 Sr Advisor for Entrepreneurship Peterson Jeffrey \$151,228 \$153,994 Pitkin Jeffrey Treas & Internal Contr Officer \$177,438 \$177,238 Porubcan Ashley Program Manager \$116,284 \$105,659 Querques Nicholas Program Manager \$118,231 \$120,887 Rabito Donna Director \$151,228 \$155,829 \$116,284 Rambacher Sarah Program Manager \$118,972 Reed Michael Program Manager \$118,988 \$121,668 Richards Priscilla Program Manager \$136,042 \$138,529 Ruder Adam Program Manager \$126,958 \$126,589 David Sandbank Director \$168,225 \$173,025 Erich Sr Advisor Scherer \$131,643 \$137,966 Kimberlie \$136,041 Schryer Program Manager \$138,528 Scicchitano John Director \$154,168 \$154,113 Shaw Noah General Counsel \$173,959 \$173,763 Shimazu Michael Sr Advisor for Business Growth and Innovation \$151,228 \$152,913 Smith Scott Program Manager \$136,042 \$140,180 Tito Bradford Program Manager \$130,671 \$133,396 Torpey Mark Director \$166,696 \$169,744 Trybulski Director Stanley \$139,749 \$145,453 Tyler Kelly Director \$161,541 \$145,653 Ulmer Vanessa Sr Advisor \$130,000 \$136,900 Nicholas Managing Director of NY Green Bank Whitcombe \$180,922 \$189,034 Williams John Director \$166,696 \$171,498

^{*} 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.

Noah Shaw

Noah Shaw was appointed as General Counsel and Secretary of NYSERDA on September 22, 2014. Before joining NYSERDA, Mr. Shaw served as senior advisor to the general counsel at the U.S. Department of Energy (DOE). In that role, he worked closely with the Secretary and his staff, as well as other DOE senior management and officials, advising on a broad range of issues. He was a member of the Energy Finance Working Group and the Secretary's Climate Action Plan team; in those roles, he worked within DOE and with interagency partners including the White House Office of Science and Technology Policy and Council on Environmental Quality, the Department of the Treasury, the Securities and Exchange Commission, and the Office of Management and Budget to help provide market certainty and close funding gaps for renewable energy and energy efficiency projects. Prior to DOE, Mr. Shaw was a senior litigation associate at the Boston office of Mintz Levin Cohn Ferris Glovsky & Popeo, PC, where he represented clients in complex business disputes concerning real estate, intellectual property, health care, employment, and financial fraud. Mr. Shaw received a bachelor's degree in American studies from Brandeis University and a juris doctor degree from Northeastern University 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.

Caroline Angoorly

Caroline Angoorly joined NY Green Bank as Chief Operating Officer and Managing Director in March 2014. Caroline is a senior energy and environmental industry executive with more than 20 years of domestic and international experience in business building, strategy, operations, project and asset management, investment, project finance, and mergers and acquisitions. She knows the energy, resources and environmental sectors, especially power and fuels markets and projects across generating technologies and clean tech, as well as environmental instruments, markets, regulation, and policy, with particular expertise in project development and finance. As COO, Caroline is responsible for all aspects of strategy, finance and operations, and supports investment activities. Before joining NY Green Bank, Caroline led GreenTao LLC, a specialized business growth, project development, financing, strategy and execution firm. She was also previously head of environmental markets for North America at J.P. Morgan, held several senior executive roles at NRG Energy including SVP & Head of Development, Northeast, was vice president and general counsel at EnelGreenPower, and a partner in the Global Project Finance Group at Milbank, Tweed. Through all these roles, Caroline has been involved in originating, structuring, negotiating, closing and managing billions of dollars of energy and infrastructure projects across the globe. Caroline holds geology and law honors degrees from Monash University and a Master of Business Administration degree from Melbourne Business School in Australia (partly undertaken at Columbia University in New York). She has lived and worked in the United States, Australia, Singapore, and Hong Kong. She has also done business in various countries in Central and South America, Asia, and Western Europe.

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.

Bryan Berry

Bryan Berry is the Assistant Director for Technology and Business Innovation. In this role, Bryan provides oversight of NYSERDA's Technology and Business Innovation department including departmental strategic planning, program execution, and all data management, analytics, and operations efforts. He is also heavily engaged in the development and implementation of strategies

to facilitate the commercialization and market entry of innovative clean energy products. Prior to joining NYSERDA in 2009, Bryan held several private sector positions, including as Project Engineer for a Philadelphia based consulting engineering firm, and more recently as the Director of Business Development for a central New York technology research and development firm. Bryan holds a B.S. in Mechanical Engineering from Lafayette College and an MBA in New Venture Development from the University at Albany.

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.

Dale Bryck

As Deputy Secretary for Energy and Environment, Dale Bryk serves as Governor Cuomo's senior policy advisor. She oversees New York's nation-leading clean energy and environmental agenda and directs the agencies and authorities responsible for developing and implementing the state policies and initiatives needed to build a sustainable clean energy economy and combat climate change, such as the Green New Deal, the Regional Greenhouse Gas Initiative and the New York Green Bank. Prior to this role, Bryk served in a variety of positions at the Natural Resources Defense Council, including Chief Planning Officer, Director of Programs, and Director of the Energy & Transportation Program. Throughout her 21 years at NRDC, she worked to develop and implement climate, energy efficiency, renewable energy and clean transportation policies. From 2002 to 2010, she also taught the Environmental Law Clinic at Yale Law School. Before joining NRDC, she practiced corporate law in New York. She holds a bachelor's degree from Colgate University, a master's from the Fletcher School of Law and

Diplomacy at Tufts University, and a J.D. from Harvard Law School. She is based in New York City.

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.

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.

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.

Peter Costello

Peter Costello is the Managing Director for Legal and Regulatory Affairs for NY Green Bank. Prior to assisting with NY Green Bank, Peter worked in NYSERDA's Counsel's Office for more than 5 years, focusing primarily on supporting NYSERDA's research and development programs, and real estate matters, including the development of the Saratoga Technology + Energy Park (STEP). Peter's current responsibilities include providing legal advice and counsel with respect to strategic initiatives, operations, transactions, regulatory issues, and general corporate affairs of NY Green Bank, as well as managing NY Green Bank's relationships with several outside counsel firms. Prior to working at NYSERDA, Peter worked in a corporate and real estate 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, Peter 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 dealer development operations. Peter has a Bachelor of Arts from McGill University and a Juris Doctor from the University of Colorado School of Law.

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.

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.

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.

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 multiyear 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.

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.

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.

Jonathan A. Gordon

Jon Gordon was appointed as Senior Advisor to the President and CEO of NYSERDA in 2016. Mr. Gordon has over 30 years of diverse leadership experience in electric power and energy markets, and has provided strategic, governmental and regulatory affairs consulting and guidance to a wide range of power market participants. Mr. Gordon has held leadership positions at EnerNOC, NRG Energy and Eversource (Northeast Utilities,) and as the head of northeast external affairs for NRG Energy, Inc., a Fortune 500 company that owns and operates one of the country's largest and most diverse power generation portfolios. Mr. Gordon was responsible for external, governmental, regulatory, public policy and communication issues relative to NRG's operations and development efforts. Mr. Gordon also has extensive retail energy market experience as head of market planning and analysis for Select Energy, Northeast Utilities' competitive marketing affiliate. Prior to Select Energy, Mr. Gordon also worked in strategic planning in the Northeast Utilities' regulated marketing group, where he was responsible for regulatory filings and strategic business plans relating to new opportunities created by electric industry restructuring. Mr. Gordon has provided expert testimony on matters pertaining to electric power and energy markets before various state legislatures, regulators and energy policy agencies, and advised both the Connecticut and Massachusetts State legislatures on electric market deregulation issues. Mr. Gordon was chosen to serve on Connecticut Governor Malloy's energy transition team, and was appointed by the Governor of Connecticut in 2007 to serve on the Connecticut Fuel Oil Conservation Board. He has served on the Board of the Renewable Energy Business Association and the Board of the Connecticut Power and Energy Society, and served as the opinion columnist for the Hartford

Business Journal Green Energy Guide. Mr. Gordon holds a BS degree from Siena College, an MBA degree from SUNY Binghamton, and is a graduate of the Public Affairs Institute.

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.

Karen Hamilton

Karen Hamilton is the Director of One-to-Four Family Existing Homes initiatives, which seeks to permanently change home renovation, equipment purchasing and energy-consuming behaviors in the residential sector of New York State, including in low-to-moderate income households. These market transformation initiatives leverage typical home-related transactions and investments by homeowners to incorporate energy efficiency and renewable energy into the decision-making process. The programs work with contractors, manufacturers, retailers, home inspectors, realtors, community-based organizations, low-income advocates, and other stakeholders in the residential sector. Karen also oversees residential and commercial financing initiatives. She is a member of the Board of Directors of the Consortium for Energy Efficiency and the Home Performance Coalition. Prior to joining NYSERDA, Karen was a Captain in the US Air Force. Karen holds a Bachelor of Science in Aerospace Engineering from the University of Colorado and a Master of Science in Systems Engineering from the Air Force Institute of Technology.

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 ofUnited States for NBC News in Washington the and 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.

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.

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 brokerdealer, 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.

Thomas Lynch

Thomas Lynch is Director of Government Affairs and oversees NYSERDA's outreach to New York's congressional delegation, state agencies, the legislature and municipalities. He was a member of the Governor's Interagency Taskforce on International Affairs, a board member of the National Low-Income Energy Consortium, and served on the Executive Committee of the Clean Energy States Alliance. In 2008, he helped develop and implement the Governor's Heat Smart New York initiative, an interagency program that assisted consumers in coping with high heating fuel prices. Before joining NYSERDA, he was Chief-of-Staff and Legislative Director for Paul Tonko, the former Chairman of the New York State Assembly Energy Committee. Thomas attended Binghamton University and received a Bachelor's degree from Excelsior College.

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.

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.

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.

Houtan Moaveni

Houtan Moaveni is an accomplished and results-driven professional with a proven track record of delivering a wide-range of solar energy programs and projects, supporting the U.S. Department of Energy (DOE), public agencies, utilities, state and local governments. He has over 12 years of experience in all aspects of solar energy, from design, testing, analysis and operation to policy, planning, program design and implementation. He has a Master of Science in Energy Systems and Management from one of the most prestigious and the oldest universities in continental Europe, Ecole des Mines de Paris and a Bachelor of Science in Power System Electrical Engineering. He has demonstrated expertise in a range of solar energy technologies including photovoltaics (PV), solar thermal and concentrated solar power (CSP) as well as extensive knowledge in solar energy technology related codes, standards and policies. He has successfully managed both multi-million dollar solar energy programs and various project teams, which resulted in him receiving several awards over the years.

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.

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.

Jeffrey Peterson

Jeff Peterson is the Senior Advisor for Entrepreneurship in the Technology and Business Innovation program. In that capacity, Jeff will expand NYSERDA's partnership with universities across New York. Previously, Jeff served as the Program Manager for Innovation, Capacity and Business Development. That program focuses on public/private initiatives to overcome market barriers and accelerate the introduction of clean, renewable energy technologies into the marketplace and targeted research to address critical technical barriers to the adoption of renewable technologies. Jeff is a member of the Advisory Board for the RPI Technology Commercialization and Entrepreneurship program. In addition, he performs peer review of manuscripts submitted to Elsevier publication: "Energy Policy – International Journal of the Political, Economic, Planning, Environmental and Social Aspects of Energy". Previously Jeff served for six years as a member of the executive and finance committees for the American Solar Energy Society (ASES) Board and as chairman of the Board of Directors for the U.S. Offshore Wind Collaborative (USOWC). Other activities include authoring chapters on strategies to increase the deployment of renewable energy technologies as part of the National Academy of Engineering *Committee on U.S.-Chinese Cooperation on Electricity from Renewable Resource* and the National Research Council *Panel*

on Electricity from Renewables. He received a BS/MS in Wood Science from the University of Massachusetts and a MS in Industrial Administration from Union Graduate College.

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.

Nicholas Querques

Nicholas Querques is Program Manager and Team Lead for NYSERDA's Technology to Market group. Technology to Market drives NYSERDA's efforts to make New York the best place in the world for entrepreneurs to launch and scale clean energy businesses. The Technology to Market team develops, launches, and manages innovation assets and resources across the state as well as provides business development and commercialization advisement to NYSERDA portfolio companies. Nick is directly responsible for overseeing a growing \$110 million portfolio of innovation and investment initiatives targeted to entrepreneurs, innovators, and early-stage companies. Previously, Nick served as a Project Manager for Technology and Business Innovation at NYSERDA. Prior to joining NYSERDA in 2014, Nick was Assistant Vice President for Clean Energy Programs at SUNY Polytechnic Institute's Colleges of Nanoscale Science and Engineering. Nick holds a BS in finance and management and an MBA in information technology and nanotechnology, both 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.

John Scicchitano

John Scicchitano is the Director of Philanthropic Engagement at NYSERDA. In this capacity, John promotes synergy between the ambitious energy investments of New York State, and the longstanding efforts of philanthropy. John previously served in an appointment at the United States Department of Agriculture, managing global hunger activities in the Office of Food for Peace. He has also served at USAID in the Bureau of Democracy, Conflict, and Humanitarian Assistance, in the Office of U.S. Foreign Disaster Assistance, and with the non-profit organizations World Vision, World Relief and the International Rescue Committee. Over 15 years of his career were spent in Africa in Burkina Faso, Chad, Senegal, Burundi, Rwanda, and Kenya. Prior to his international assignments, John worked as an Environmental Engineer with the global consulting

firm Environ. John has an Executive Masters in Leadership from the Georgetown University McDonough School of Business and a B.S.E. in Civil Engineering and Operations Research from Princeton University. He is also recognized by the United Nations Roster of Experts for the following domains: participatory planning, community development, partnership among stakeholders and policies and strategies.

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.

Mark Torpey

Mark Torpey serves as NYSERDA's Director of Innovation and Business Technologies. In this capacity, Mark is responsible for managing the renewable/DER, smart grid, advanced buildings, innovation & business development and transportation programs within NYSERDA's Research and Development department. Mark joined NYSERDA in 2001 and has been involved in supporting numerous combined heat and power technologies. Mark played a leading role in establishing the New York State Smart Grid Consortium. Previously Mark worked at Plug Power (fuel cell startup company) and Foster Wheeler (large-scale engineering firm) in a variety of technical roles focused on the commercialization of clean energy systems. Mark holds a B.S and M.S. degree in Mechanical Engineering from Brown University and MIT, respectively. Mark was elected a "Fellow" of the American Society of Mechanical Engineers in 2008.

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.

Nicholas Whitcombe

Nicholas Whitcombe is a Managing Director overseeing investments for NY Green Bank and has extensive experience in originating, structuring, underwriting and syndicating corporate, leveraged and project finance loans for a wide range of energy projects. Prior to joining NY Green Bank in 2014, Nicholas was a supervisory senior investment officer in the Loan Programs office at the U.S. Department of Energy (DOE) where he was instrumental in leading the negotiations for several nuclear loan guarantees, including over \$8.3 billion in commitments to finance the construction of the first nuclear power plant to be constructed in the U.S. in 30 years. He also led more than \$1 billion in loan guarantees for distributed solar generation projects and served as program director for the Advanced Technology Vehicle Manufacturing loan program. In addition, he worked with White House officials and DOE leadership to assist in achieving clean energy policy goals, including advocating loan guarantees to induce consumer demand and build out of national energy infrastructure. Prior to joining DOE, Nicholas was vice president at Jefferies Group Inc., a global investment bank and institutional securities firm headquartered in New York City, where he evaluated lending opportunities in the energy sector and expanded the firm's product offerings for the energy industry. He was also director of the Energy Group at CIT Group Inc. and vice president of Loan Syndications and structuring at FleetBoston Corp./Fleet Securities Inc. Nicholas earned his BA from Cornell University and his MBA from Vanderbilt University.

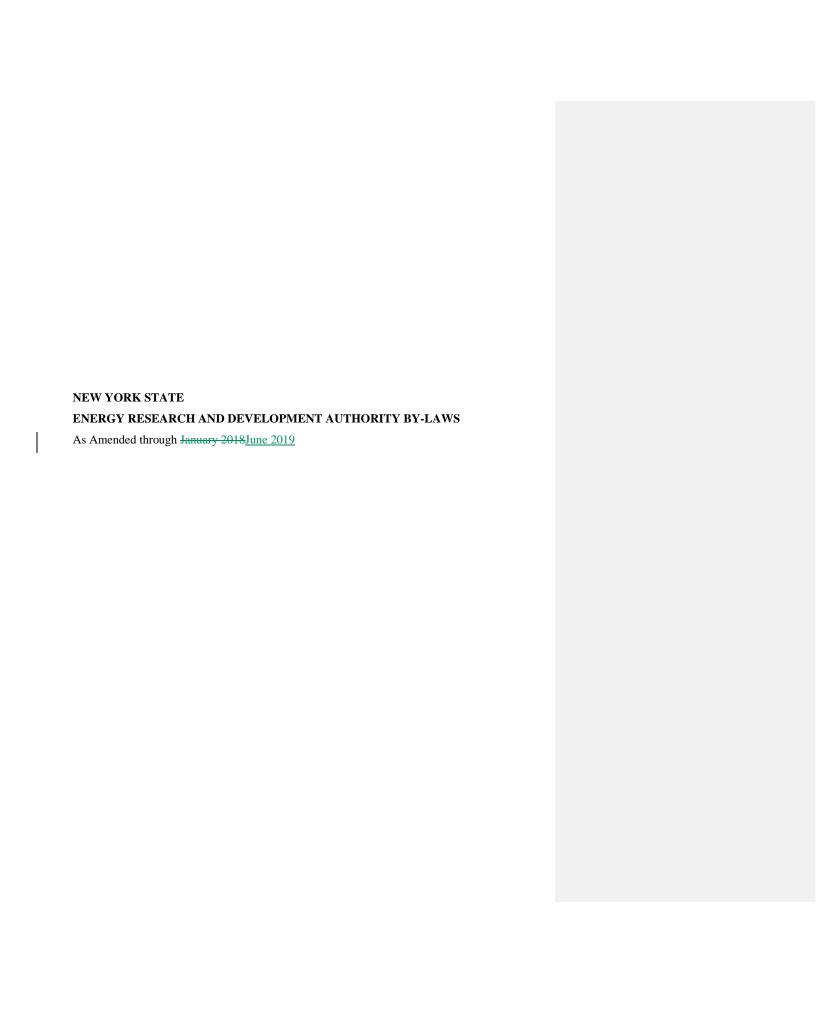
John Williams

John Williams is Director 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.

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RESOLVED, that the Authority's compensation schedule presented at this June 26, 2019 meeting, is adopted and approved 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 approved for submission under Section 2800 of the Public Authorities Law.



NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

BY-LAWS

ARTICLE I

Offices

- SECTION 1. <u>Principal Office</u>. The principal office of the Authority shall be located at such place within the State of New York as the Authority shall designate.
- SECTION 2. <u>Other Offices</u>. The Authority may also have offices at such other place or places within the State of New York as the Authority may from time to time determine to be necessary or appropriate for the conduct of its operations.
- SECTION 3. <u>Books and Records</u>. Except as otherwise directed by the Authority or as the operations of the Authority may require, all the books and records of the Authority shall be kept at the principal office of the Authority.

ARTICLE II

Members and Meetings

- SECTION 1. <u>Members</u>. The powers of the Authority, including, but not limited to Section 2824 of the Public Authorities Law, shall be vested in and exercised by the Members of the Authority who shall be selected as provided in the New York State Energy Research and Development Authority Act and shall hold office subject to the terms and conditions therein set forth.
- SECTION 2. <u>Annual Meetings</u>. The Annual Meeting of the Authority shall be held without notice on the second Monday in June in each year or on such other date in each calendar year as the Chair may designate by notice given to the other Members.
- SECTION 3. <u>Regular Meetings</u>. Regular meetings of the Authority shall be held without notice on the second Monday in January, April, and September of each year or on such other dates as the Chair may designate by notice given to the other Members.

SECTION 4. <u>Special Meetings</u>. Special meetings of the Authority may be called by the Chair and shall be called by the Secretary at the request of the Chair or upon the written request of any three Members.

SECTION 5. <u>Place of Meetings</u>. The Annual Meeting of the Authority shall be held at the principal office of the Authority unless the Chair shall designate a different place or places for attendance in person or through videoconferencing by notice given to the other Members. Other meetings of the Authority may be held either within or without the State of New York at such places for attendance in person or through videoconferencing as may be designated in the respective notice of meeting or waiver thereof or as may be fixed by the Authority in the case of regular meetings of the Authority.

SECTION 6. Notices. Except as otherwise provided by these By-Laws, whenever a meeting is scheduled at least one week in advance, written notice of that meeting of the Authority, specifying the time, place, and purposes thereof, shall be given to each Member by mail, e-mail, telephonic facsimile transmission, or other electronic means at least five days before such meeting. For every other meeting, notice shall be given in person or by email, or telephonic facsimile transmission at least twenty-four hours before such meeting, to the extent practicable. Notices by mail shall be deemed to have been given at the time when mailed to such Member at his or her address on the records of the Authority; notices by email shall be deemed to have been given at the time when transmission of such notice to the Member's email address on the records of the Authority has been completed, with no notice of a failure to deliver being received; notices by telephonic facsimile transmission shall be deemed to have been given at the time when transmission to such Member at his or her telephonic facsimile transmission number on the records of the Authority has been completed. If videoconferencing is used to conduct a meeting, the notice shall state that the public has the right to attend the meeting at any location.

SECTION 7. <u>Waiver of Notice</u>. In lieu of the notice prescribed in Section 6 of this Article II a waiver thereof in writing, signed by the Member or Members entitled to such notice whether before or after the time stated therein, shall be deemed equivalent to such notice for purposes of these By-Laws. No notice to or waiver by any Member with respect to any meeting shall be required if such Member is present at such meeting.

SECTION 8. <u>Quorum and Voting</u>. A majority of the whole number of the Members, gathered together in the presence of each other or through the use of videoconferencing, shall constitute a quorum for the transaction of any business or the exercise of any power or function of the Authority. Any act taken at any meeting by a majority of the whole number of the Members shall be the act of the Authority. For the purposes of these By-Laws, the words "whole number" shall mean the total number of the Members if there were no vacancies and if none of the Members are disqualified from acting.

SECTION 9. <u>Approval of Governor</u>. Except to the extent the Governor of the State of New York has, by order filed with the Authority, relieved the Authority from the duty of procuring his or her approval of any action upon a particular matter or class of matters, no action taken at any meeting of the Authority shall have force or effect until the Governor shall have had an opportunity to approve or veto the same in accordance with the provisions of Section 1853 of the Public Authorities Law.

ARTICLE III

Officers

SECTION 1. <u>In General</u>. The officers of the Authority shall be a Chair, Vice Chair, President and CEO, <u>Chief Operating Officer</u>, Senior Vice President for Strategy and Market Development, the Vice President for <u>InnovationPolicy and Regulatory Affairs</u>, Secretary, and Treasurer, and such additional officers as may be appointed pursuant to Section 2 of this Article III. Except for the Chair and the Vice Chair, who shall each be a Member of the Authority, no officer need be a Member of the Authority. Any two offices, other than those of the Chair and Vice Chair, may be held by the same person.

SECTION 2. <u>Appointment</u>. The Chair shall be the Member of the Authority so designated by the Governor of the State of New York. The Authority shall appoint persons to fill the other offices of the Authority established in Section 1 of this Article III, and may from time to time appoint such additional officers as it may deem advisable and prescribe their respective powers and duties.

SECTION 3. <u>Terms and Compensation</u>. The Chair shall serve as Chair at the pleasure of the Governor of the State of New York. All officers of the Authority other than the Chair shall hold office at the pleasure of the Authority and shall receive such compensation as may be authorized by the Authority, subject to applicable provisions, if any, of the Civil Service Law and the regulations of the Civil Service Commission of the State of New York.

SECTION 4. <u>Removal</u>. The Chair may be removed as Chair, with or without cause, at any time, by the Governor of the State of New York acting at his pleasure. Any officer, other than the Chair, may be removed, with or without cause, at any time, by the Authority at any meeting called for that purpose.

SECTION 5. <u>Resignation</u>. Any officer may resign at any time by giving written notice to the Chair or to the Secretary, except that, in the case of the resignation of the Chair or a Member, such notice shall be given to the Governor of the State of New York. Any such resignation shall take effect upon the receipt of such notice or any later time specified therein,

and, unless otherwise specified therein, the acceptance of resignation of an officer other than the Chair or a Member shall not be a condition to its effectiveness.

SECTION 6. <u>Vacancies</u>. A vacancy in any office shall be filled in the manner prescribed in these By-Laws for appointment to such office.

ARTICLE IV

Duties and Powers of the Officers

SECTION 1. The Chair. The Chair shall preside over meetings of the Authority and shall serve as the primary liaison between the Members and Authority staff. The Chair shall be primarily responsible for overseeing the discharge of the executive and administrative functions of the Authority. The Chair shall be responsible for the management, development, and effective performance of the Members and provide leadership to the Members for all aspects of their work. The Chair shall act in an advisory capacity to the President and CEO and to the other management staff in all matters concerning the interests of the Members and the relationships between management and the Members. The Chair shall have the power to assign any officer to exercise the powers of any other officer during the period of any absence, disability or vacancy in any office. The Chair shall have all such other powers pertaining to the position of Chair or as may be assigned to the Chair by the Members of the Authority.

SECTION 2. The Vice Chair. The Vice Chair shall have the powers and shall perform the duties of the Chair during the period of any absence (including vacancy in office) or disability of the Chair. The Vice Chair shall perform such other duties as may be assigned from time to time by the Authority or the Chair.

SECTION 3. The President and CEO. The President and CEO shall be the chief executive officer of the Authority and shall be primarily responsible for the discharge of the executive and administrative functions of the Authority. The President and CEO shall report to the Chair on the day-to-day executive and administrative functions of the Authority. The President and CEO shall be responsible for the overall supervision of the other Officers, except the Chair and the Vice Chair, and staff and the implementation of policies, procedures, and directions, consistent with the guidance provided by the Members and the Chair. Subject to the provisions of the Authority's Procurement and Program Contracts Guidelines, Operative Policy and Instructions ("Contracting Guidelines"), the President and CEO shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds; power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law; power to certify official rules and regulations of the Authority; and power to assign additional duties to any other Officer of the Authority except the Chair and the Vice Chair, and designate acting officers to perform necessary duties. The President and CEO shall also be authorized to exercise the powers of the Chair during the period of any

absence (including vacancy in office) or disability of the Chair and the Vice Chair. The President and CEO shall have the power to assign any other officer to exercise the powers of any officer, including the President and CEO, during the period of any absence, disability or vacancy in any office. The President and CEO shall have the power to assign the ability to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law to the Controller and Assistant Treasurer, or the Chief Operating Officer of NY Green Bank. The President and CEO shall perform such other duties as may be assigned from time to time by the Authority or the Chair.

SECTION 4. The Chief Operating Officer. The Chief Operating Officer shall be responsible to the President and CEO and shall work with the other officers to develop and implement a strategic approach to operations of the Authority to achieve intended outcomes, to optimize market responsiveness and generally to perform with efficiency and effectiveness. The Chief Operating Officer shall be responsible for performance management and evaluation systems. Subject to the provisions of the Authority's Contracting Guidelines, the Chief Operating Officer shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law. The Chief Operating Officer shall perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

SECTION 54. The Vice Presidents. There shall be a Vice President for Innovation and a Senior Vice President for Strategy and Market Development and a Vice President for Policy and Regulatory Affairs.

(A) The Vice President for Innovation. The Vice President for Innovation shall be responsible to the President and CEO for the discharge of the Authority's energy research and development function. Subject to the provisions of the Authority's Contracting Guidelines, the Vice President for Innovation shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law. The Vice President for Innovation shall perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

(B) The Senior Vice President for Strategy and Market Development. The Senior Vice President for Strategy and Market Development shall be responsible to the President and CEO for the discharge of the Authority's market development programs. The Senior Vice President for Strategy and Market Development also shall be responsible to the President and CEO for providing strategic guidance in program development and ongoing performance management across the Authority. Subject to the provisions of the Authority's Contracting Guidelines, the Senior Vice President for Strategy and Market Development shall have power to

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execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law. The Senior Vice President for Strategy and Market Development shall perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

(B) The Vice President for Policy and Regulatory Affairs. The Vice President for Policy and Regulatory Affairs shall be responsible to the President and CEO for the discharge of the Authority's policy and regulatory affairs function. Subject to the provisions of the Authority's Contracting Guidelines, the Vice President for Policy and Regulatory Affairs shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law. The Vice President for Policy and Regulatory Affairs shall perform such other duties as may be assigned from time to time by the Authority or the President and CEO.

SECTION 65. The Treasurer. Subject to the provisions of the New York State Energy Research and Development Authority Act and the State Finance Law, the Treasurer shall be the chief financial officer and shall have the care and custody of and be responsible for all the funds and securities of the Authority and receive and give receipts for moneys paid to the Authority from any source. The Treasurer shall administer the system of accounts prescribed by the Authority and shall render a statement of the condition of the finances of the Authority as at the end of the first three quarterly periods in each fiscal year, and at such other times as may be required and shall render a full financial report at the Annual Meeting of the Authority held in June of each year. The Treasurer shall be responsible for information technology activities as well as for the disposition of real and personal property. The Treasurer shall perform such other duties as may be assigned from time to time by the Authority or the President and CEO. The Treasurer shall give such bond, if any, for the faithful discharge of his or her duties as may be required by the Authority or by any provision of law. Subject to the provisions of the Authority's Contracting Guidelines, the Treasurer shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law.

SECTION <u>67</u>. The Secretary. The Secretary shall act as recording secretary at all meetings of the Authority and keep the minutes thereof in a book or books to be provided for that purpose; shall see that all notices of meetings required to be given are duly given; and shall see that all reports, statements, and other documents required by law are properly kept and filed. The Secretary shall transmit all rules and regulations adopted by the Authority to the Secretary of

State pursuant to the provisions of Section 102 of the Executive Law. Subject to the provisions of the Authority's Contracting Guidelines, the Secretary shall have power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$1,000,000; and power to requisition disbursements from Authority bank accounts from the State Commissioner of Taxation and Finance, pursuant to Section 1859 of the Public Authorities Law. The Secretary shall have power, when necessary or appropriate, to certify all documents and records of the Authority and to affix and attest to the corporate seal of the Authority on all contracts, agreements, and other instruments of the Authority. The Secretary shall perform such other duties as may be assigned from time to time by the Authority, the Chair, or the President and CEO.

ARTICLE V

Advisory Committees

- SECTION 1. <u>Appointment</u>. The Authority may appoint one or more advisory committees consisting of not more than seven Members each to consider and advise the Authority on matters submitted to them by the Authority.
- SECTION 2. <u>Terms</u>. Upon the appointment of an Advisory Committee, the Authority shall specify the terms, not to exceed four years, of each Member thereof.
- SECTION 3. <u>Salaries</u>. Members of Advisory Committees shall serve without salary, but shall be entitled to reimbursement for their actual and necessary travel expenses incurred in the performance of their official duties.
- SECTION 4. <u>Audit and Finance Committee</u>. The Audit and Finance 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. Members of the Committee shall be familiar with corporate financial and accounting practices.

The Audit and Finance Committee shall recommend the hiring of a certified independent accounting firm, establish the compensation to be paid, and provide direct oversight of the performance of the independent audit performed, shall review the annual financial statements of the Authority prior to submission for approval to the Members of the Authority, shall review proposals for the issuance of debt by the Authority and make recommendations, 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.

SECTION 5. <u>Program Planning Committee</u>. The Program Planning Committee shall be a standing advisory committee of the Authority. The Committee shall have not fewer than three nor more than ten 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 Program Planning Committee shall review the annual updating of the Authority's strategic plan; and preparation of the portions of the Authority's annual budget related to energy research and innovation, market development, clean energy financing, and other related programs and initiatives; shall 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 portfolios as the officers of the Authority may refer to the Committee.

SECTION 6. Waste and Facilities Management Committee. The Waste and Facilities Management 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 Waste and Facilities Management Committee shall 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; shall review the preparation of the Authority's annual West Valley site management program and radioactive waste policy and nuclear coordination budgets; shall provide guidance to the

Authority's officers and employees in the preparation of the plans and in preparation of such annual program budgets; and shall 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 such Committee.

SECTION 7. Governance Committee. The Governance 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 Governance Committee shall keep the Members informed of current best practices, review corporate governance trends, update the Authority's corporate governance principles, as necessary, recommend updates to the corporate governance principles, advise appointing authorities on the skills and experiences required of Members, examine ethical and conflict of interest issues, perform Board self-evaluation, and recommend By-laws which include rules and procedures for conduct of Board business.

ARTICLE VI

Miscellaneous

SECTION 1. <u>Seal</u>. The official seal of the Authority shall consist of a circle within which shall be inscribed the name of the Authority, and in the center of which shall be inscribed the words "Established April 1, 1962," and such seal may include such other insignia as may be approved by the Authority.

SECTION 2. <u>Fiscal Year</u>. The fiscal year of the Authority shall begin on the first day of April and end at the close of business on the thirty-first day of March in each year.

SECTION 3. <u>Annual and Budget Reports</u>. The President and CEO shall prepare or cause to be prepared under the Chair's supervision the Annual Report, Budget Report and other reports required by Sections 1867, 2800, and 2801 of the Public Authorities Law. All such

reports shall be prepared for submission to and action by the Authority, and, after action by the Authority, shall be submitted by the President and CEO within the times provided for and to the persons specified in such sections of the Public Authorities Law.

SECTION 4. <u>Director of Contract Management</u>. Subject to the provisions of the Authority's Contracting Guidelines, the Director of Contract Management shall have the power to execute contracts, agreements, and other instruments in the name and on behalf of the Authority, including instruments encumbering funds in an amount not to exceed \$100,000 and for low variability, low complexity contracts issued as offer letters or similar straightforward standard agreements the amounts of which are based upon a formulaic calculation dictated by program, not to exceed \$1,000,000.

SECTION 5. The President of NY Green Bank. The President of NY Green Bank shall have power to execute contracts, agreements, or other instruments not encumbering Authority funds in excess of \$250,000; the power to execute contracts, agreements, or other instruments related to financial investments for any dollar amount, so long as the terms and conditions of such contracts, agreements, or other instruments are within parameters set by NY Green Bank's Investment and Risk Committee; and the power to execute any modifications to Investment and Risk Committee-approved financial investment documents not encumbering Authority funds in excess of \$50,000. During the period of any absence or disability, the President of NY Green Bank shall have the power to assign his aforementioned powers to the Chief Operating Officer of NY Green Bank or one or more NY Green Bank Managing Directors for Investment and Portfolio Management, provided that such delegee is not the Managing Director assigned to the subject transaction.

SECTION 6. <u>The Managing Directors of NY Green Bank</u>. Each of the Managing Directors of NY Green Bank shall have power to execute contracts, agreements, modifications, or other instruments not encumbering Authority funds in excess of \$50,000.

ARTICLE VII

Amendments

SECTION 1. <u>Amendments</u>. These By-Laws may be amended, supplemented or repealed by the affirmative vote of a majority, but not less than five, of the Members then in office, at any regular or special meeting if either all Members of the Authority then in office are present at such meeting or notice of the proposed amendments, supplement or repeal shall have been included in the notice of such meeting or in the waiver of notice thereof.

RESOLVED, that the amendments to the Authority's By-laws as presented at this June 26, 2019 meeting, are hereby approved and adopted.

Resolution No.	
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RESOLVED, that the proposed 2% salary increase retroactive to April 4, 2019 payable to the President and CEO, the Senior Vice President for Strategy and Market Development, the Treasurer, and the General Counsel and Secretary, and a 2% salary increase for any Authority Officer on or about April 1, 2020 consistent with terms and conditions as may be authorized for State Management/Confidential employees by the New York State Division of the Budget, are hereby approved.

RESOLVED, that the Members do hereby appoint John Williams to serve as the Vice President for Policy and Regulatory Affairs effective June 26, 2019.

BE IT FURTHER RESOLVED, that the Members of the Authority do hereby approve the salary of the Vice President for Policy and Regulatory Affairs, in the amount of \$175,980.00

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

FY 2018-19 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 January 2019 meeting. Three changes to the eligible Money Market Fund criteria, as recommended by the Authority's fiscal agent, were proposed and approved. The first is to require that the fund is rated in the highest rating category by two nationally recognized rating agencies, rather than one. The second is to require that the fund not impose liquidity fees or suspend redemptions. The third is to require that the fund meet the definition of a "Government Money Market Fund" under Rule 2a-7. The fiscal agent advises that with these limitations, there would be little substantive difference between the performance and risks of monies invested in the Money Market Fund as compared to direct Federal Government Obligations, but the use of Money Market Fund would improve the investment portfolio liquidity. But the fiscal agent advises that a 20% limit, other than short term periods, would be prudent to limit portfolio concentration risk.

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

INVESTMENT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS (January 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, 2019

Following is summary and detail of the Authority's investments as of March 31, 2019

NYSERDA **Investment Report Summary** As of March 31, 2019 Summary of Investments by Functions/Programs 3/31/2019 3/31/2018 Increase/ Market Value **Market Value Decrease** NY Green Bank 252,533,979 \$ 172,424,071 80,109,908 Regional Greenhouse Gas Initiative (RGGI) 128,785,529 69,675,428 59,110,100 Clean Energy Standard (CES) 80,605,544 43,599,433 124,204,976 Market Development/Innovation & Research (CEF) 38,700,478 84,162,861 45,462,383 Green Jobs Green New York (GJGNY) 53,535,651 49,615,853 3,919,797 Perpetual Care Funds - Fiduciary Fund 30,081,260 29,546,803 534,457 Low Level Radioactive Waste Account - Fiduciary Fund 2,517,178 4,409,628 (1,892,450)Other/Operating (Individually less than 5% of total) 140,413,644 152,810,611 (12,396,966)

Analysis: NY Green Bank increase was primarily due to an increase in its funded capitalization resulting from additional committed capital not yet deployed, from scheduled and early redemptions of loans and financing receivables, and from a capital redemption. The increase in RGGI was principally due to the return of funds originally used as part of the initial capitalization of NY Green Bank. The increase in CES was principally due to collections of bid/contract security deposits, as well as transfers from legacy funds' uncommitted balances pursuant to PSC Orders. The increase in CEF was the result of receipts versus the expenditure of funds. The decrease in Other is principally due to transfers to other funds, and to a lesser extent due to spending down remaining committed funds.

816,235,078

604,550,321

211,684,757

\$

Total Investments

Summary of Investments by Investment Type				
		<u> </u>		
	<u>3/31/2019</u>		<u>3/31/2018</u>	
US Treasury Obligations	\$ 747,431,300	\$	596,392,081	
Certificates of Deposit	477,206		587,998	
Money Market Deposit	68,326,572		7,570,242	
Total	\$ 816,235,078	_	604,550,321	
Weighted average term of investments	8.6 Months		6.0 months	
Weighted average time to maturity	6.0 Months		2.3 months	

Analysis: The weighted average term of investments increased principally due to longer maturities used for investment for NY Green Bank funds, since these are anticipated to be deployed in later months, as well as in increase in maturity dates of other funds based on cash flow needs.

Investment Income	Ota Fadad	Vaan Faalaal	
investment income	Qtr Ended	Year Ended	
	<u>3/31/2019</u>	<u>3/31/2018</u>	
	(Including adjustments to		
<u>Functions/Programs</u>	fair market value)	to fair market value)	
NY Green Bank	\$ 7,223,226	\$ 1,354,065	
RGGI	1,485,572	838,920	
CES	1,848,437	751,257	
CEF	1,102,732	376,661	
GJGNY	935,204	315,371	
Perpetual Care Funds - Fiduciary Fund	789,179	259,096	
Low Level Radioactive Waste Account - Fiduciary Fund	55,629	36,295	
Other/Operating	3,196,753	3,640,066	
Total	\$ 16,636,733	7,571,731	
Investment Yield (Annualized)	2.3%	1.0%	
Weighted Average Yield to Maturity of Current Investments	2.3%	1.5%	

Analysis: The annualized yield was higher than the prior year, primarily due to higher US Treasury yields as compared to the prior fiscal year and from prior year investment income including a downward adjustment in unrealized fair market value.

NYSERDA Investments 03/31/19

				•	.	\/	
■ NY Green Bank	-Investment Type-	▼ -Purchase Dat ▼	-Maturity Date ▼	-Cost-	-Principal-	-Yield-	-Market Value-
ENT Green Bank	■US Treasury Bill	■ 09/20/18	05/23/19	19,997,744	20,326,000	2 43%	20,257,014
	= 00 Troubary Em	= 00/20/10	07/18/19	5,680,936	5,799,000		5,757,966
			08/15/19	12,427,403	12,715,000		12,600,425
		■10/18/18	09/12/19	11,811,735	12,093,000		11,962,613
	■ Money Market	■ N/A		7,438,694	7,438,694		7,438,694
	■US Treasury Note	■11/15/18	12/15/19	19,882,227	20,177,000		20,111,947
	-		01/31/20	25,429,699	25,895,000	2.77%	25,697,779
		■ 11/29/18	02/15/20	15,932,884	16,198,000		16,079,532
		= 12/06/18	05/15/20	11,789,213	11,993,000	2.71%	11,943,490
		■ 12/27/18	06/15/20	21,988,096	22,338,000	2.59%	22,199,199
			07/15/20	21,850,245	22,220,000	2.60%	22,046,066
		■ 10/18/18	11/30/19	18,923,791	19,290,000	2.74%	19,174,562
		■ 12/03/18	03/31/20	18,502,208	18,846,000	2.79%	18,655,308
			04/15/20	18,510,538	18,835,000		18,793,960
		■ 01/10/19	08/15/20	19,675,683	20,015,000	2.59%	19,815,423
NY Green Bank Total				249,841,096	254,178,694	2.48%	\$252,533,979
■ Regional Greenhouse Gas Initiativ			//-				
	■US Treasury Bill	■ 08/16/18	08/15/19	9,199,122	9,424,000		9,339,184
		■ 12/06/18	05/09/19	8,097,234	8,183,000		8,162,543
		02/07/19	07/11/19	4,998,585	5,050,000		5,016,418
		= 00/04/40	01/02/20	47,920,473	49,018,000		48,143,519
		■ 02/21/19	07/25/19	1,714,107	1,732,000		1,718,923
		■ 02/28/19	04/11/19	625,241	627,000		626,586
		■ 03/07/19 ■ 03/02/49	09/05/19	25,423,482	25,742,000		25,476,857
		■ 03/28/19 ■ 04/47/40	11/07/19	24,823,008	25,185,000		24,827,121
Pagional Granhouse Gas Initiative	Total	■01/17/19	10/10/19	5,444,090	5,543,000 \$120,504,000	2.48%	5,474,378
Regional Greenhouse Gas Initiative	TUlai			\$128,245,342	φ130,304,000		\$128,785,529
⊟ Clean Energy Standard							
	■US Treasury Bill	■12/06/18	04/25/19	9,220,039	9,308,000	2.47%	9,293,480
	- -	■12/13/18	05/09/19	5,034,222	5,085,000	2.49%	5,072,288
		12/20/18	06/06/19	1,032,039	1,044,000	2.51%	1,039,479
		■ 02/07/19	05/02/19	38,914,280	39,127,000	2.32%	39,047,963
		■ 02/14/19	06/06/19	576,698	581,000	2.40%	578,484
			05/02/19	4,945,908	4,971,000	2.34%	4,960,959
		■ 02/21/19	05/02/19	1,588,645	1,596,000		1,592,776
		■ 02/28/19	05/02/19	6,453,950	6,481,000	2.43%	6,467,908

		■ 03/07/19	05/02/19	30,949,236	31,064,000	2.43%	31,001,251
		■ 03/28/19	10/10/19	5,998,597	6,075,000		5,999,792
			05/02/19	12,327,133	12,355,000		12,330,043
			07/11/19	2,724,059	2,743,000		2,724,759
		■ 01/17/19	07/18/19	4,074,324	4,125,000		4,095,795
Clean Energy Standard Total		=01/17/13		\$123,839,130	· · · · · · · · · · · · · · · · · · ·	2.77/0	\$124,204,976
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■ Market Development/Innovation &	Research						
	■US Treasury Bill	■ 02/21/19	05/02/19	28,145,695	28,276,000	2.35%	28,218,882
	-	■ 03/14/19	04/18/19	10,998,518	11,024,000	2.45%	11,011,653
			06/13/19	12,139,139	12,213,000	2.46%	12,154,500
		01/24/19	04/25/19	7,227,900	7,271,000		7,259,657
		■ 03/21/19	07/11/19	25,496,789	25,689,000		25,518,168
Market Development/Innovation & Re	search Total			\$84,008,042	\$84,473,000		\$84,162,861
					. ,,		
■ Green Jobs Green New York							
	■US Treasury Strip	01/30/18	02/15/20	1,226,113	1,279,000	2.08%	1,251,438
		■ 01/31/18	02/15/21	2,131,937	2,281,000	2.24%	2,184,468
	■ Money Market	■ N/A		31,272,735	31,272,735	0.00%	31,272,735
Green Jobs Green New York Total				\$34,630,785	\$34,832,735		\$34,708,641
■ Perpetual Care Funds							
	■US Treasury Note	■ 08/15/18	02/15/21	29,746,123	30,030,000	2.64%	30,081,260
Perpetual Care Funds Total				\$29,746,123	\$30,030,000		\$30,081,260
■ Low Level Radioactive Waste Acco	ount						
	■US Treasury Bill	■ 12/27/18	04/18/19	664,057	669,000	2.41%	668,250.72
		■ 01/17/19	04/18/19	1,839,958	1,851,000	2.37%	1848926.88
Low Level Radioactive Waste Account	nt Total			\$2,504,015	\$2,520,000		\$2,517,178
■ Other/Operating							
	■ Certificate of Deposit	■ 08/02/18	08/02/19	477,206	477,206		477,206
	■US Treasury Bill	■ 09/20/18	08/15/19	7,460,351	7,633,000		7,564,303
		08/16/18	08/15/19	698,915	716,000	2.44%	709,556
		■11/08/18	09/12/19	3,368,401	3,443,000	2.61%	3,405,884
		■ 12/27/18	04/18/19	764,311	770,000	2.41%	769,138
		■ 02/07/19	05/09/19	11,217,679	11,285,000	2.35%	11,256,788
			04/11/19	5,012,390	5,033,000	2.31%	5,029,678
		■ 02/14/19	05/16/19	18,490,323	18,602,000	2.36%	18,547,124
		■ 02/21/19	06/06/19	9,195,855	9,260,000		9,219,904
			05/02/19	4,393,659	4,414,000		4,405,084
			04/11/19	602,056	604,000		603,601
		■ 03/28/19	06/06/19	3,516,787	3,533,000		3,517,702
		_ 50,20,10	30/00/10	0,0.0,707	5,555,550	/ 0	3,317,732

			\$158,697,968	\$159,758,348	\$159,240,654
	■ 09/13/18	09/30/20	, , -	1,854,000 2.76%	1,839,808
■US Treasury Note	■ 09/06/18	09/30/20	5,745,145	5,896,000 2.66%	5,850,866
■ Money Market	■ N/A		29,615,142	29,615,142 0.00%	29,615,142
		05/02/19	16,697,919	16,745,000 2.48%	16,711,175
	■ 03/21/19	06/06/19	12,498,376	12,563,000 2.48%	12,508,602
	■ 01/24/19	04/25/19	10,387,062	10,449,000 2.36%	10,432,700
	■ 01/10/19	04/11/19	2,534,633	2,550,000 2.40%	2,548,317
	■ 01/17/19	04/18/19	1,308,149	1,316,000 2.37%	1,314,526
		07/11/19	12,910,232	13,000,000 2.43%	12,913,550
	_	■ 01/10/19 ■ 01/24/19 ■ 03/21/19 ■ Money Market ■ US Treasury Note	■01/17/19 04/18/19 ■01/10/19 04/11/19 ■01/24/19 04/25/19 ■03/21/19 06/06/19 05/02/19 ■Money Market N/A ■US Treasury Note ■09/06/18 09/30/20	■01/17/19 04/18/19 1,308,149 ■01/10/19 04/11/19 2,534,633 ■01/24/19 04/25/19 10,387,062 ■03/21/19 06/06/19 12,498,376 05/02/19 16,697,919 ■Money Market ■N/A 29,615,142 ■US Treasury Note ■09/06/18 09/30/20 5,745,145 ■09/13/18 09/30/20 1,803,377	□01/17/19

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, 2019. 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, 2019. 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, 2019.

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

\$326,353

Total Fees and Charges

\$326,353

Resol	lution	No	
IXCSU	uuon	TIO.	

RESOLVED, that the "Investment Guidelines, Operative Policy and Instructions (June 2019)," as presented at this June 26, 2019 meeting are hereby approved; and

BE IT FURTHER RESOLVED, that the Authority's "2018-2019 Annual Investment Report," for the year ended March 31, 2019, as presented at this June 26, 2019 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 Value		Market Value
	3/31/2019	Change	3/31/2018
Contributions to date	\$43,149,836	\$4,962,542	\$38,187,294
Benefit payments (retiree health insurance)	(\$8,029,024)	(\$1,303,423)	(\$6,725,601)
Administrative expenses	(\$258,766)	(\$65,998)	(\$192,768)
Net contributions	\$34,862,046	\$3,593,121	\$31,268,925
Investment Income (realized gains)	\$19,447,180	\$6,269,914	\$13,177,266
Investments at costs	\$54,309,226	\$9,863,035	\$44,446,191
Unrealized gains/(losses)	-\$1,192,037	(\$5,512,605)	\$4,320,568
Market value of Investments	\$53,117,188	\$4,350,430	\$48,766,758

	Market Value		Market Value	
Asset Category	3/31/2019	% of total	3/31/2018	% of total
Cash/money market	\$550,966	1.0%	\$447,464	0.9%
Real Estate	\$547,577	1.0%	\$504,511	1.0%
Foreign/Emerging	\$15,820,808	29.8%	\$13,161,849	27.0%
Equities	\$11,560,090	21.8%	\$13,458,959	27.6%
Fixed income (bonds)	\$24,637,747	46.4%	\$21,193,976	43.5%
Total	<u>\$53,117,188</u>	100.0%	\$48,766,758	<u>100.0%</u>
Investment Yield	3/31/2019		3/31/2018	
Annualized	1.5%		8.5%	
Cumulative to Date	52.4%		56.0%	
Average annual yield *	5.8%		7.0%	

Investment Detail

	Investment	Investment		Market		
Asset Class	Policy Target Current Holding		Cost	Value % of Total		
Cash	0%-6%	Cash Balance	\$24,582	\$24,582	0.0%	
Cash	0%-6%	Dreyfus Instit Reserves Treasury Prime Fund	\$526,384	\$526,384	1.0%	
Short Term Bonds	1%-6%	Tributary Short-Intermediate bond Fund	\$1,575,176	\$1,592,935	3.0%	
Intermediate Term Bond	9%-19%	Calvert Bond Fund	\$7,316,346	\$7,494,222	14.1%	
Inflation-Protected Securities	5%-15%	MassMutual Premier Inflation Protected & Income Func	\$5,399,128	\$5,360,824	10.1%	
Long-Term Bond	1%-11%	PIMCO Long Term Credit Bond Fund	\$3,211,996	\$3,299,399	6.2%	
High Yield Bond	7%-17%	Credit Suisse Strategic Income Fund	\$6,356,296	\$6,355,651	12.0%	
Large Blend	5%-26%	First Trust Capital Strength ETF	\$7,846,473	\$7,984,264	15.0%	
Mid-Cap Blend	1%-11%	FMI Common Stock Fund	\$555,389	\$526,859	1.0%	
Small Blend	3%-16%	Principal Smallcap S&P 600 Index Fund	\$3,574,100	\$3,048,967	5.7%	
Foreign Large Cap	10%-20%	T Rowe Price Overseas Stock Fund	\$8,587,874	\$7,917,637	14.9%	
Diversified Emerging Mkts	10%-20%	iShares MSCI Frontier 100 ETF	\$8,280,596	\$7,903,171	14.9%	
Global Real Estate	1%-6%	Schwab Fundamental Global Real Estate Index Fund	\$537,928	\$547,577	1.0%	
Global Bond	1%-6%	Matthews Asia Strategic Income Fund	\$516,958	\$534,716	1.0%	
			\$54,309,226	\$53,117,188	100.0%	

^{*} The targeted long-term expected rate of return of the NYSERDA OPEB TRUST is estimated to be 6.5% per year.

INVESTMENT POLICY STATEMENT

NYSERDA OPEB TRUST (RETIREE HEALTH INSURANCE BENEFITS)

June 2019

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.

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%
	10% - 20%	15%
Foreign Developed Equity		
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.

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.

<u>Investment Guidelines</u>

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.

Resol	lution	No	
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RESOLVED, that the "NYSERDA OPEB Trust Investment Report" for the year ended March 31, 2019, as presented at this June 26, 2019 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 26, 2019 meeting, is hereby approved.

NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances

March 31, 2019

(Amounts in thousands)

	(Altibulità ili tilbusarius)		
	March 31, 2019	March 31, 2018	Change from March 31, 2018
Cash and investments (current and non-current totals):			
NY Green Bank	269,374	189,620	79,754
RGGI	127,231	68,765	58,466
CES	136,597	97,669	38,928
CEF	73,715	39,839	33,876
GJGNY	59,735	54,083	5,652
Other (individually less than 5% of total)	141,179	172,253	(31,074)
	807,831	622,229	185,602

Analysis: NY Green Bank increase was primarily due to an increase in its funded capitalization resulting from additional committed capital not yet deployed, and from scheduled and early redemptions of loans and financing receivables. The increase in RGGI was principally due to the return of funds originally used as part of the initial capitalization of NY Green Bank to provide funding support for the statewide energy storage program. The increase in CES was principally due to collections of bid/contract security deposits, as well as transfers from legacy funds' uncommitted balances pursuant to PSC Orders. The increase in CEF was the result of receipts versus the expenditure of funds. The decrease in Other is principally due to transfers to other funds, and to a lesser extent due to spending down remaining committed funds.

New York State receivable 11,377 16,711 (5,334)

Analysis: variance reflects reductions in receivable balances for certain NY State Congestion Mitigation Air Quality grants and from decreases in state appropriations under the RGGI Cleaner Greener Communities, West Valley, and Fuel NY programs. These decreases were offset in part by increases from NY State for unreimbursed expenses relating to a Brookhaven National Lab project and from Zero-emission credit program amounts due from several NY State component unit governments.

Third-party billings receivable

5,820

2.423

(16,603)

Analysis: Principally reflects an overall decrease in Zero-emission credit (ZEC) program revenues and billings receivable of approximately \$13,444,000 resulting from lower than anticipated generation by the nuclear facilities.

Interest receivable on loans

2,830

2,284

546

Analysis: The variance is predominantly related to NY Green Bank, and is the result of 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:

	498.362	496.293	2.069
NY Green Bank	299,430	295,342	4,088
GJGNY	198,932	200,951	(2,019)

Analysis: The GJGNY balance decreased principally due to principal payments received exceeding new loans issued. As of March 31, 2019, 92.8% of the GJGNY portfolio loan balance is current on payments, \$6.6 million 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 2.5% of original loan principal. The NY Green Bank balance increased slightly due to net loan activity, inclusive of a \$1.2 million write-off.

Prepaid expense 2,713 2,519 194

Analysis: Minor variance from the net of prepaid disbursements less amortization of annual and multi-year software license expenditures.

Other assets 14,236 13,626 610

Analysis: Variance primarily reflects an adjustment in the value of the Downstate Strategic Gasoline Reserve.

NYSERDA

Comparison of Statement of Net Position amounts to Prior Audited Balances

March 31, 2019

(Amounts in thousands)

Change from

March 31, 2019 March 31, 2018 March 31, 2018

Capital assets, net of depreciation

15,918

17,395

(1,477)

Analysis: Decrease due to fixed asset additions of \$1,936,000 less depreciation expense of \$2,863,000 and reclasses of \$550,000.

Total assets 1,359,087 1,193,480 165,607

Deferred outflows of resources 17,063 9,628 7,435

Analysis: Reflects an increase in the amortized balance of actuarially-determined deferred outflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices).

Accounts payable 8,332 7,749 583

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

Accrued liabilities 179,144 161,248 17,896

Analysis: Variance is principally due to an increase in the accrued liability for ZEC program payments due to nuclear generating facilities, an increase in the program expenditure accrual under the CEF and the NY-Sun programs, a net refund due to NYS Load Serving Entities under the ZEC program, and from an increase in the NYS Cost Recovery Assessment. These increases were partially offset by decreases in legacy programs (EEPS and T&MD) which are winding down.

Unearned revenue 3,522 2,202 1,320

Analysis: Variance primarily due to receipt of advance payments from third-parties pursuant to cofunding agreements versus amounts expended; revenue is recognized only upon allowable expenses being incurred.

Deposits 23,246 8,906 14,340

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:

Bonds and notes payable	135,404	133,551	1,853
Compensated absences	8,648	8,409	239
Net pension liability	3,367	10,279	(6,912)
Net OPEB liability	3,942		3,942
	151,361	152,239	(878)

Analysis: The decreases in Net pension liability reflects the change in the actuarially determined amount. The increase in Bonds payable is due to the issuance of Series 2019A, \$15,510,000 Residential Solar and Energy Efficiency Financing Green Revenue Bonds, offset in part by scheduled payments and bond redemptions against various GJGNY programs.

Total liabilities 365,605 332,344 33,261

Deferred inflows of resources 12.893 2.678 10.215

Analysis: Reflects an increase in the amortized balance of actuarially-determined deferred inflows of resources (deferred pension & OPEB expense resulting from actuarial smoothing practices).

Net position:

Net investment in capital assets	15,917	17,394	(1,477)
Restricted for specific programs	977,625	847,219	130,406
Unrestricted	4,110	3,473	637
Total net position	997,652	868,086	129,566

Analysis: Increase in Net position Restricted for specific programs is principally due to additional capitalization of the NY Green Bank. Changes in the other components of Net position were insignificant.

	(Amounts in Thousands))		
	Actual		Over (under) Budget	
	March 31, 2019	Budget		%
REVENUES				
State appropriations:				
Energy & Environmental Programs	594	4,500	(3,906)	-86.8%
West Valley	13,599	17,000	(3,401)	-20.0%
Cleaner Greener Communities capital projects	3,235	5,877	(2,642)	-45.0%
Energy Analysis (Low Level Radioactive Waste)	148	150	(2)	-1.3%
Brookhaven National Lab-X-ray Beam	7,614	2,984	4,630	<u>155.2</u> %
Total State appropriations	25,190	30,511	(5,321)	-17.4%

Analysis: West Valley State appropriations revenue was less than budgeted as a result of a higher Federal share of total expenses than anticipated. Revenues for the Brookhaven National Lab-X-ray Beam were much higher than anticipated due to higher than anticipated program expenditures incurred during the period. Additionally, Energy & Environmental Programs & Cleaner Greener Communities capital projects were lower than budgeted due to lower than anticipated expenditures.

Utility surcharge assessments 556,603 823,233 (266,630) -32.4

Analysis: The variance is the result of lower than expected expenditures across all BAYG funded programs, as well as a reduction in the revenues for NY Green Bank primarily resulting from making a change in funding approach for committed capital to consider existing cash balances.

Renewable energy credit proceeds 1,138 12,510 (11,372) -90.9%

Analysis: The principal reason for the variance is quarterly offerings have generated far less sales than expected.

Zero-emission credit assessments 451,560 484,403 (32,843) -6.8%

Analysis: Variance is primarily due to lower production by the nuclear generating facilities, and from lower receipts than anticipated in the budget.

Allowance auction proceeds 100,839 106,586 (5,747) -5.4%

Analysis: Variance principally due to average actual auction prices being less than budgeted.

Third party reimbursements 38,881 49,231 (10,350) -21.0%

Analysis: Principally due to Con Edison Indian Point Energy Center Reliability Contingency program revenues and Market Development/Innovation & Research cofunding revenues being less than anticipated in the budget.

Federal grants 16,351 17,640 (1,289) -7.3%

Analysis: Principally due to actual expenses under a Congestion Mitigation & Air Quality grant, and Fuel NY grants, being less than anticipated in the budget.

QECB interest subsidy 436 434 2 0.5% Analysis: Insignificant rounding variance.

 Project repayments
 616
 384
 232
 60.4%

Analysis: Reflects large unanticipated recoupment payments received from two projects.

Rentals from leases 978 982 (4) -0.4%

Analysis: Minor variance related to STEP lease income as a result of pass-through cost expectations versus budget.

Fees and other income 6,706 3,526 3,180 90.2% Analysis: Variance principally due to unanticipated CES bid deposits retained pursuant to solicitation terms and from NY Green Bank

Analysis: Variance principally due to unanticipated CES bid deposits retained pursuant to solicitation terms and from NY Green Bank revenues being slightly higher than budget due to timing of deals closed as compared to budgetary assumptions.

Interest on loans

GJGNY	7,562	8,353	(791)	-9.5%
NY Green Bank	14,865	17,805	(2,940)	- <u>16.5</u> %
Total Interest on Loans	22,427	26,158	(3,731)	-14.3%

Analysis: Variance principally due to lower than projected outstanding loan balances. NY Green Bank also recorded a further provision for losses (reduction of revenue) of approximately \$388,000; the budget does not include any provision for losses as the policy of the NY Green Bank is to record probable losses only on a specific identification basis.

Investment income 15,792 2,884 12,908 447.6%

Analysis: Variance is principally due to higher than anticipated balances, largely of NY Green Bank, and from greater than expected vields.

TOTAL REVENUES	1.237.517	1 558 482	(320,965)	-20.6%

	(Finite and Fine and and Fine			
	Actual		Over (under) Budget	
	March 31, 2019	<u>Budget</u>		%
EXPENSES				
Salaries	37,638	36,860	778	2.1%
Fringe benefits	14,403	17,792	(3,389)	- <u>19.0</u> %
Salaries and benefits	52,041	54,652	(2,611)	-4.8%

Analysis: Fluctuation in salary expense versus budget is primarily due to differences in vacancy levels from budgetary assumptions. The Fringe benefits variance is almost entirely due to pension and OPEB expense being much less than anticipated in the budget due to updated actuarial valuations.

Program expenditures:				
Energy Analysis	2,706	1,620	1,086	67.0%
NY Green Bank	1,636	1,500	136	9.1%
West Valley	12,312	15,532	(3,220)	-20.7%
NY-Sun	83,953	106,992	(23,039)	-21.5%
RGGI	97,244	120,727	(23,483)	-19.5%
CES	465,802	503,984	(38,182)	-7.6%
CEF	162,902	216,300	(53,398)	-24.7%
Other	193,715	319,676	(125,961)	- <u>39.4</u> %
	1,020,270	1,286,331	(266,061)	-20.7%

Analysis: The Other variance is generally due to projects taking longer than planned as well as expenses being lower than anticipated. The variance in CEF is generally due to delays in launching program initiatives and slower than anticipated market participation. Variance in the CES is primarily due to REC project delivery dates being later than budget assumptions and the ZEC generation production being lower than budgeted. The NY-Sun variance is principally due to delayed project financing, tax equity and local land use approvals, and the many large construction projects underway which have not yet resulted in expenses being incurred. The RGGI variance is due to the timing of certain municipal solar projects moving slower than anticipated and from lower Electric Vehicle participation rates than originally anticipated.

Investment related expenses	456	500	(44)	-8.8%
Analysis: Minor variance.				
Program operating costs:				
Computer Services and Software	226	182	44	24.2%
Temporary Staffing, Outside Technical Reviewer	420	380	40	10.5%
Office Supplies, Equipment Rental, and Other	191	200	(9)	-4.5%
Rent, Maintenance & Repairs, Utilities, Insurance	318	360	(42)	-11.7%
Training, Recruitment & Relocation	13	57	(44)	-77.2%
Travel and Outreach Costs	435	516	(81)	-15.7%
Professional & Consulting Services	1,130	1,784	(654)	- <u>36.7</u> %
	2,733	3,479	(746)	-21.4%

Analysis: Variance in Temporary Staffing was due to unbudgeted staffing costs incurred for several program areas. The variance in Professional & Consulting Services was primarily due to NY Green Bank financial and technical consulting, legal, and fund administration costs being lower than what was anticipated in the budget. All other cost categories, with the exception of a few insignificant variances, were less than anticipated.

General and administrative expenses:

Professional & Consulting Services	2,085	2,098	(13)	-0.6%
Rent, Maintenance & Repairs, Utilities, Insurance	2,577	2,648	(71)	-2.7%
Travel and Outreach Costs	249	324	(75)	-23.1%
Office Supplies, Equipment Rental, and Other	154	256	(102)	-39.8%
Training, Recruitment & Relocation	118	256	(138)	-53.9%
Temporary Staffing, Outside Technical Reviewer	2,313	2,476	(163)	-6.6%
Computer Services and Software	1,461	1,805	(344)	- <u>19.1</u> %
	8,957	9,863	(906)	-9.2%

Analysis: All cost categories were less than anticipated; the most significant variance was Computer Services and Software which is primarily due to the timing of software and hardware purchases and from lower web-hosting spending than what was anticipated in the budget.

NYSERDA Comparison of Revenues/Expenses to Budget For the year ended March 31, 2019

Information technology upgrades

System development costs
Total Other uses

348

2,724

3,386

127

1,647

1,936

(221)

(1,<u>077</u>)

(1,450)

-63.5%

-39.5%

-42.8%

	(Amounts in Thousand Actual	s)	Over (under) Bud	laet
	March 31, 2019	Budget	\$	%
Depreciation	2,863	3,466	(603)	-17.4%
Analysis: Variance due primarily to the difference	in planned capital asset additions as	compared to bud	get expectations.	
New York State assessments	13,593	12,554	1,039	8.3%
Analysis: Variance represents an unanticipated inc	crease in the annual Cost Recovery F	ee assessment.		
Bond interest	4,146	3,465	681	19.7%
Analysis: Variance over budget is entirely due to to to bonds issuance which was not anticipated in the basel 2015 Solar Loan Revenue bonds.		0,	, ,	
TOTAL EXPENSES	1,105,059	1,374,310	(269,251)	-19.6%
Capital asset purchases:				
Furniture, fixtures and equipment	106	84	22	26.2%
Land Improvements	10	-	10	100.0%
Buildings	46	200	(154)	-77.0%

Analysis: CES capital system development costs were less than anticipated; remaining variances are generally related to timing.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (A Component Unit of the State of New York)

FINANCIAL STATEMENTS

March 31, 2019

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March 31, 2019

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RESPONSIBILITY FOR FINANCIAL REPORTING

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, 2019 were prepared in conformity with U.S. generally accepted accounting principles. The Board of the Authority (the Board) adopted these financial statements and the Annual Report at a meeting on June 26, 2019.

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. generally accepted accounting principles (U.S. GAAP).

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, 2019, 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, 2019, 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 2018 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 26, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended March 31, 2018, 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 page _____ 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 _____, 2019 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 ____, 2019

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, 2019. 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 of the 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 Activities	Business-type <u>Activities</u>	Total March 31, <u>2019</u>	Total March 31, <u>2018</u>	% Change 2019-2018
Cash and investments	\$538,457	269,374	807,831	622,229	29.8%
Capital assets	15,918	-	15,918	17,395	-8.5%
Loans and financing receivables, net	198,932	299,430	498,362	496,293	0.4%
Other assets	34,538	2,438	36,976	57,563	-35.8%
Total assets	787,845	571,242	1,359,087	1,193,480	13.9%
Deferred outflows of resources	15,108	1,955	17,063	9,628	77.2%
Non-current liabilities	150,642	719	151,361	152,239	-0.6%
Other liabilities	211,750	2,494	214,244	180,105	19.0%
Total liabilities	362,392	3,213	365,605	332,344	10.0%
Deferred inflows of resources	11,364	1,529	12,893	2,678	381.4%
Net Position:					
Net investment in capital assets	15,917	-	15,917	17,394	-8.5%
Restricted	409,170	568,455	977,625	847,219	15.4%
Unrestricted	4,110	-	4,110	3,473	18.3%
Total net position	\$429,197	568,455	997,652	868,086	14.9%

Total assets increased \$165.6 million (13.9%). Cash and investments increased \$185.6 million (29.8%) primarily due to "Bill-As-You-Go" (BAYG) receipts related to the funded capitalization of the NY Green Bank, which were not yet deployed, and from scheduled and early redemptions of NY Green Bank loans and financing receivables. Loans and financing receivables increased \$2.1 million (0.4%) due to an increase of \$4.1 million in NY Green Bank Loans and financing receivables outstanding, partially offset by a decrease of \$2.0 million in Green Jobs Green New York (GJGNY) loans and financing receivables outstanding. Other assets decreased \$20.6 million (35.8%) primarily due to the decrease in New York State and Third-party accounts receivable balances outstanding, reflecting most significantly the overall decrease in Zero-Emissions Credit (ZEC) program payments owed resulting from lower than anticipated generation by the nuclear facilities, as well as reductions in receivable balances for certain NY State Congestion Mitigation Air Quality grants and State appropriations.

Deferred outflows of resources increased by \$7.4 million (77.2%) due to an increase in the actuarially-determined deferred outflows related to pension and from the initial recognition of deferred outflows related to Other postemployment benefits (OPEB) upon the adoption of Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75) as of and for the year ended March 31, 2019.

Total liabilities increased \$33.3 million (10.0%). Non-current liabilities decreased \$0.9 million (0.6%) primarily due to a decrease in the net pension liability, partially offset by recognition of the net OPEB liability under GASB 75, and due to a small increase in bonds outstanding in the GJGNY program, representing a new issuance less principal payments made during FY 2018-19 on previous bond issuances. The net pension liability recorded by NYSERDA reflects its proportionate share relative to all participating employers of the actuarially determined net pension liability calculated by the New York State and Local Retirement System. The net OPEB Liability recorded reflects a separate actuarially determined postemployment benefit obligation. Other liabilities increased by \$34.1 million (19.0%); primarily a result of the timing of quarterly

payments due to nuclear energy generation facilities pursuant to the ZEC program and due to bid deposits received in connection with the Renewable Energy Credit program.

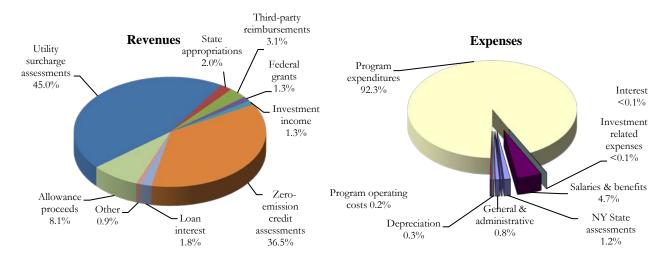
Deferred inflows of resources increased by \$10.2 million (381.4%) due to an increase in the actuarially determined deferred inflows related to pension and from the initial recognition of deferred inflows related to OPEB pursuant to adoption of GASB 75.

The beginning net position as of April 1, 2018 for Governmental Activities was restated and reduced by \$2.9 million for the cumulative effect adoption of GASB 75.

Net position otherwise increased \$132.5 million (15.3%) in FY 2018-19. Restricted net position, inclusive of the GASB 75 reduction, increased \$130.4 million (15.4%) principally due to additional capitalization of the NY Green Bank.

(Amounts in thousands)

	(Amounts in t				
Summary of Changes in Net Position	Governmental <u>Activities</u>	Business-type <u>Activities</u>	Total March 31, <u>2019</u>	Total March 31, <u>2018</u>	% Change 2019-2018
Revenues:	*				
State appropriations	\$25,190	-	25,190	24,640	2.2%
Utility surcharge assessments	436,721	119,882	556,603	77,939	614.2%
Renewable energy credit assessments	1,138	-	1,138	-	100.0%
Zero-emission credit assessments	451,560	-	451,560	469,963	-3.9%
Allowance proceeds	100,839	-	100,839	79,224	27.3%
Third-party reimbursements	38,881	-	38,881	14,844	161.9%
Federal grants	16,351	-	16,351	18,154	-9.9%
Interest subsidy	436	-	436	465	-6.2%
Loans and financing receivables interest	7,562	14,865	22,427	22,823	-1.7%
Investment income	8,569	7,223	15,792	7,276	117.0%
Other program revenue	4,353	3,947	8,300	4,839	71.5%
Total revenues	1,091,600	145,917	1,237,517	720,167	71.8%
Expenses:					
Salaries and benefits	45,620	6,421	52,041	52,565	-1.0%
Program expenditures	1,018,634	1,636	1,020,270	1,005,083	1.5%
Investment related expenses	-	456	456	435	4.8%
Program operating costs	1,968	765	2,733	3,502	-21.9%
General & administrative costs	7,857	1,100	8,957	9,384	-4.6%
Depreciation	2,679	184	2,863	2,456	16.6%
NY State assessments	13,468	125	13,593	12,554	8.3%
Interest	4,146	-	4,146	3,758	10.3%
Total expenses	1,094,372	10,687	1,105,059	1,089,737	1.4%
(Decrease) increase in net position before					
transfers	(2,772)	135,230	132,458	(369,570)	-135.8%
	52,926	(52,926)	.02, .00	(000,0.0)	-
Transfers					
Change in net position	50,154	82,304	132,458	(369,570)	-135.8%
Net position, beginning of year	381,935	486,151	868,086	1,237,656	n/a
Cumulative effect of change in accounting principle (GASB 75)	(2,892)	-	(2,892)	-	n/a
Net position, end of year	\$429,197	568,455	997,652	868,086	14.9%
=					



Total revenue increased \$517.4 million (71.8%). State appropriation revenue increased by \$0.6 million (2.2%) due to an increase in reimbursable expenditures across various program initiatives. Utility surcharge assessments revenue increased by \$478.7 million (614.2%) principally due to the re-commencement of billings to utilities, pursuant to the BAYG funding mechanism. ZEC proceeds decreased by \$18.4 million (3.9%) principally reflecting the effect of lower production by the nuclear generation facilities. Allowance proceeds increased by \$21.6 million (27.3%) due to the average quarterly auction sales prices being higher than in the prior fiscal year. Third-party reimbursements increased by \$24.0 million (161.9%) principally due to an increase in reimbursable funding from Con Edison due to timing of advances versus actual expenditures under the Indian Point Energy Center Reliability Contingency (IPEC) program as well as an increase in Clean Energy Fund (CEF) program co-funding revenues. Federal grants revenue decreased \$1.8 million (9.9%) primarily due to a reduction in reimbursable expenses for several Federal grants. Loans and financing receivables interest income decreased \$0.4 million (1.7%) principally due to an increase in NY Green Bank loan repayments offset in part by a higher average interest rate on the outstanding loan portfolio of the GJGNY program as compared to the prior fiscal year. Total investment income increased \$8.5 million (117.0%) primarily due to an increase in average balances invested, largely relating to NY Green Bank, and from higher yields.

Total expenses increased \$15.3 million (1.4%). Program expenditures increased \$15.2 million (1.5%) primarily due to higher expenditures in the CEF and NY-Sun programs, offset in part by lower expenditures in the Renewable Portfolio Standard and Energy Efficiency Portfolio Standard programs. Salaries and benefits expense decreased \$0.5 million (1.0%) primarily due to large reductions in both the pension and other post-employment benefits actuarially determined expenses, offset to a significant degree by an increase in salary expenses due to an increase in staffing levels compared to the prior year. Program operating and General and administrative expenses decreased based on reduced spending levels as compared to the prior year.

Transfers from business-type activities to governmental activities represent a portion of NY Green Bank's initial capitalization funded from Regional Greenhouse Gas Initiative (RGGI) revenues repurposed to provide funding to support NYSERDA's statewide energy storage initiative.

FINANCIAL ANALYSIS OF FUNDS

Total fund balances for the governmental funds increased from \$510.1 million to \$561.3 million as further described below:

The CEF fund balance increased from \$37.5 million to \$61.9 million principally due to a change in the
estimated two-month working capital to be maintained pursuant to the BAYG funding mechanism.

- The Clean Energy Standard (CES) fund balance increased from (\$11.2) million to (\$2.7) million primarily
 due to transfers into the fund to support administration (including NYS Assessments), maintenance tier
 expenses, and capital purchases for the programs in this fund as ordered by the Public Service
 Commission (PSC), offset to a degree by ZEC assessments revenue, which was less than the
 expenditures made to the nuclear generation facilities.
- The RGGI fund balance increased from \$67.0 million to \$121.7 million principally as a result of a transfer of \$52.9 million from the NY Green Bank, representing a redemption of the RGGI fund's capital contribution to the NY Green Bank's initial capitalization several years prior, to be repurposed to support NYSERDA's statewide energy storage initiative.
- The GJGNY fund balance increased from \$258.0 million to \$261.6 million principally due to a transfer of \$3.0 million from the RGGI fund in support of the GJGNY revolving loan fund program.
- The aggregated Other funds fund balance decreased from \$158.8 million to \$118.8 million principally
 due to transfers of uncommitted program funds to the CES fund as ordered by the PSC and other net
 transfers out pursuant to the BAYG funding mechanism.

Total net position for the proprietary fund was \$568.5 million at March 31, 2019, as described below:

• NY Green Bank's net position increased by \$82.3 million (16.9%) primarily due to additional capitalization of \$119.9 million paid by electric utilities pursuant to BAYG, offset in part by \$52.9 million transferred to RGGI, as well as operating revenues exceeding operating expenses by \$9.8 million. Operating revenues increased by \$0.5 million primarily due to an increase in closing fees earned. Investment income increased \$5.9 million directly reflecting higher average investment balances and yields. Operating expenses increased by \$0.6 million primarily due to an increase in staffing levels, associated fringe benefit costs, and temporary staffing costs, offset in part by a decrease in and professional service costs. Non-operating expenses increased \$1.6 million primarily due to non-recurring project costs of \$1.4 million for outside consulting to assist in the exploration of a national expansion and \$0.2 million in expenses attributable to periodic independent assessments of NY Green Bank's non-financial impact in the marketplace (e.g., energy, environmental and market transformation).

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, 2019 were \$15.9 million, net of accumulated depreciation. Capital asset additions for the fiscal year ended March 31, 2019 were \$1.9 million, primarily for systems development costs.

Total non-current liabilities decreased from \$152.2 million to \$151.4 million primarily due to a decrease in the net pension liability, partially offset by recording the GASB 75 net OPEB liability, and from a small increase in bonds outstanding in the GJGNY program, representing a new issuance less principal payments made during FY 2018-19 on previous bond issuances.

NYSERDA also issues tax-exempt bonds on a conduit basis on behalf of utility companies to finance certain eligible projects. As of March 31, 2019, 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.

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, 2019

(with summarized comparative totals for March 31, 2018)

(Amounts in thousands)

(Amou	nis in inousands)			
			Total	Total
	Governmental	Business-type	March 31,	March 31,
	Activities	Activities	2019	2018
ASSETS:				
Current assets:				
Cash and investments	\$528,582	174,576	703,158	622,229
New York State receivable	11,377	-	11,377	16,711
Third-party billings receivable	5,646	174	5,820	22,423
Interest receivable on loans	566	2,264	2,830	2,284
Loans and financing receivables due within one year, net	16,061	33,310	49,371	63,917
Prepaid expense	2,713	-	2,713	2,519
Other assets	14,236		14,236	13,626
Total current assets	579,181	210,324	789,505	743,709
Non-current assets:				
Investments	9,875	94,798	104,673	-
Loans and financing receivables- long-term, net	182,871	266,120	448,991	432,376
Capital assets, net of depreciation	15,918		15,918	17,395
Total non-current assets	208,664	360,918	569,582	449,771
Total assets	787,845	571,242	1,359,087	1,193,480
DEFERRED OUTFLOWS OF RESOURCES:	15,108	1,955	17,063	9,628
LIABILITIES:				
Current liabilities:				
Non-current liabilities due within one year	10,286	_	10,286	10,147
Accounts payable	8,332	-	8,332	7,749
Accrued liabilities	178,473	671	179,144	161,248
Unearned revenue	3,522	-	3,522	2,202
Deposits	21,423	1,823	23,246	8,906
Total current liabilities	222,036	2,494	224,530	190,252
Non-current liabilities:				·
Bonds and notes payable	128,639	-	128,639	126,782
Other non-current liabilities	11,717	719	12,436	15,310
Total non-current liabilities	140,356	719	141,075	142,092
Total liabilities	362,392	3,213	365,605	332,344
DEFERRED INFLOWS OF RESOURCES:	11,364	1,529	12,893	2,678
NET POSITION:				
Net investment in capital assets	15,917	_	15,917	17,394
Restricted for specific programs	409,170	568,455	977,625	847,219
Unrestricted	4,110	-	4,110	3,473
Total net position	\$429,197	568,455	997,652	868,086
rotal flot position	ψτ23,137	300,433	337,032	000,000

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (A Component Unit of the State of New York) Statement of Activities

For the year ended March 31, 2019

(with summarized comparative totals for March 31, 2018)

(Amounts in thousands)		·		Governmenta	al Activities				Business-type Activities	March 31, 2019	March 31, 2018
			Fund	tions/Prograr	ms						
	CEF	NY-Sun	CES	<u>RGGI</u>	Energy <u>Analysis</u>	West <u>Valley</u>	Other	<u>Total</u>	NY Green <u>Bank</u>		
EXPENSES:											
Salaries and benefits	\$22,919	2,460	1,755	1,901	3,418	2,413	10,754	45,620	6,421	52,041	52,565
Program expenditures	162,902	83,953	465,802	97,244	2,706	12,312	193,715	1,018,634	1,636	1,020,270	1,005,083
Investment related expenses	-	-	-	-	-	-	-	-	456	456	435
Program operating costs	334	143	398	6	409	123	555	1,968	765	2,733	3,502
General & administrative expenses	3,933	423	305	327	586	420	1,863	7,857	1,100	8,957	9,384
Depreciation	1,274	344	246	55	98	78	584	2,679	184	2,863	2,456
NY State assessments	2,076	998	5,538	1,166	84	181	3,425	13,468	125	13,593	12,554
Interest	-	-	-	-	-	-	4,146	4,146	-	4,146	3,758
Total expenses	193,438	88,321	474,044	100,699	7,301	15,527	215,042	1,094,372	10,687	1,105,059	1,089,737
REVENUES:											
Operating grants and contributions											
State appropriations	-	-	-	3,235	148	13,599	8,208	25,190	-	25,190	24,640
Utility surcharge assessments	194,744	76,364	-	-	6,300	-	159,313	436,721	119,882	556,603	77,939
Renewable energy credit proceeds	-	-	1,138	-	-	-	-	1,138	-	1,138	-
Zero-emission credit assessments	-	-	451,560	-	-	-	-	451,560	-	451,560	469,963
Allowance auction proceeds	-	-	-	100,839	-	-	-	100,839	-	100,839	79,224
Third-party reimbursements	11,248	-	-	-	-	2,119	25,514	38,881	-	38,881	14,844
Federal grants	-	-	-	-	2,831	_	13,520	16,351	-	16,351	18,154
Interest subsidy	-	-	-	-	-	-	436	436	-	436	465
Charges for services											
Project repayments	-	-	-	-	-	-	616	616	-	616	281
Rentals from leases	-	-	-	-	-	-	978	978	-	978	1,203
Fees and other income	-	_	2,423	-	-	-	336	2,759	3,947	6,706	3,355
Loans and financing receivables interest	_	_	· _	_	_	_	7,562	7,562	14,865	22,427	22,823
Other							.,002	7,002	,000	,	22,020
Investment income	1,103	453	1,848	1,486	_	7	3,672	8,569	7,223	15,792	7,276
Total revenues	207,095	76,817	456,969	105,560	9,279	15,725	220,155	1,091,600	145,917	1,237,517	720,167
Increase (decrease) in net		-,-	,	,	-,	-,	-,	, , , , , , , , , , , , , , , , , , , ,		, - , -	
position before transfers	13,657	(11,504)	(17,075)	4,861	1,978	198	5,113	(2,772)	135,230	132,458	(369,570)
Transfers	11,918	1,756	25,393	49,926	116	-	(36,183)	52,926	(52,926)		
Change in net position	25,575	(9,748)	8,318	54,787	2,094	198	(31,070)	50,154	82,304	132,458	(369,570)
Net position, beginning of period	37,598	24,022	(9,921)	66,858	933	-	262,445	381,935	486,151	868,086	1,237,656
Cumulative effect of change in accounting principle (GASB 75)		_	-		(116)	(198)	(2,578)	(2,892)		(2,892)	_
Net position, end of period	\$63,173	14,274	(1,603)	121,645	2,911	-	228,797	429,197	568,455	997,652	868,086

Total

Total

(A Component Unit of the State of New York)

Balance Sheet - Governmental Funds

March 31, 2019

(with summarized comparative totals for March 31, 2018) (Amounts in thousands)

Major Funds							
						Total	Total
					Other	March 31,	March 31.
	CEF	CES	<u>RGGI</u>	<u>GJGNY</u>	Funds	2019	2018
ASSETS:			· <u> </u>	<u></u>	·		· · · · · · · · · · · · · · · · · · ·
Cash and investments	\$73,715	136,597	127,231	59,735	141,179	538,457	432,609
Receivables:							
New York State	515	4,343	487	-	6,032	11,377	16,711
Third-party billings	-	-	-	3,107	2,539	5,646	22,211
Interest on loans	-	-	-	566	-	566	413
Loans	-	-	-	198,932	-	198,932	200,951
Prepaid expense	1,000	-	-	-	1,713	2,713	2,519
Other assets	-	-	-	-	14,236	14,236	13,626
Due from other funds	1,388	-	82	1,058	-	2,528	3,054
Total assets	\$76,618	140,940	127,800	263,398	165,699	774,455	692,094
_							
LIABILITIES AND FUND BALANCES:							
Liabilities:							
Accounts payable	\$1,896	18	1,663	715	4,040	8,332	7,749
Accrued liabilities	10,743	123,823	4,204	1,045	38,658	178,473	160,745
Unearned revenue	2,081	-	205	69	1,167	3,522	2,202
Deposits	-	19,102	-	-	2,321	21,423	8,831
Due to other funds	-	700	-	-	745	1,445	2,471
Total liabilities	14,720	143,643	6,072	1,829	46,931	213,195	181,998
Fund Balances:							
Nonspendable-not in spendable form	1,000	-	-	-	1,713	2,713	2,519
Restricted	60,898	-	121,728	261,569	114,660	558,855	516,861
Unassigned	-	(2,703)	-	-	2,395	(308)	(9,284)
Total fund balances	61,898	(2,703)	121,728	261,569	118,768	561,260	510,096
Total liabilities and fund balances	\$76,618	140,940	127,800	263,398	165,699	774,455	692,094
Following is a reconciliation of amounts re	•	tly in the State	ment of Net Po	osition:			
Total fund balances for governmental fur						\$561,260	510,096
Capital assets used in governmental act	ivities are not c	urrent financia	I resources an	nd			
therefore are not reported in the funds						15,987	17,325
Long-term liabilities are not due and pay		ent period					
and therefore are not reported in the fu						(150,867)	(151,209)
Pension & OPEB related deferred outflor	ws and inflows	are not reporte	ed in goverme	ntal funds		3,744	6,341
Accrued interest expense					_	(927)	(618)

See accompanying notes to the basic financial statements.

Net position of governmental activities

\$429,197

381,935

(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, 2019

(with summarized comparative totals for March 31, 2018) (Amounts in thousands)

Part						Other	Total March 31,	Total March 31,		
Second propertiations		CEF	CES	RGGI	GJGNY			,		
Main surcharge assessments 194,744 241,977 436,721 468,410 241,987 446,983 446,98	REVENUES:				· <u></u>					
Pare-washe energy credit proceeds	State appropriations	\$ -	-	3,235	-	21,955	25,190	24,640		
According	Utility surcharge assessments	194,744	-	-	-	241,977	436,721	68,410		
Manamace auction proceeds	Renewable energy credit proceeds	-	1,138	-	-	-	1,138	-		
Product programments	Zero-emission credit assessments	-	451,560	-	-	-	451,560	469,963		
Feederal grants	Allowance auction proceeds	-	-	100,839	-	-	100,839	79,224		
Project repayments	Third-party reimbursements	11,248	-	-	-	27,633	38,881	14,844		
Project repayments	Federal grants	-	-	-	-	16,351	16,351	18,154		
Peach and romine asses 2,423 32 32 32 32 32 32 32	•	-	-	-	436	-				
Part		-	-	-	-					
Properties		-	-	-						
Total revenues 1,103		-	2,423	-						
Part		-	-	-						
EXPENDITURES: Current expenditures 193.417 473.895 100.749 5.558 315,653 1,089,162 1,072,532 Debt service: Principal - - 13.654 - 13,654 12,662 Principal - - - 13,854 - 3,837 3,837 3,837 3,775 Bond issuance costs - - - 862 262 662 665 662 562 662 562 662 562 662 562 662 562 662 562 662 562				•						
Det service: Principal 193,417 473,895 100,749 5,558 315,563 1,089,182 1,072,532	Total revenues	207,095	456,969	105,560	8,965	313,011	1,091,600	690,941		
Perform Per	EXPENDITURES:									
Principal	Current expenditures	193,417	473,895	100,749	5,558	315,563	1,089,182	1,072,532		
Interest	Debt service:									
Danit issuance costs	Principal	-	-	-	13,654	-	13,654	12,662		
Total expenditures	Interest	-	-	-	3,837	-	3,837	3,775		
## Total expenditures 194,614 473,826 100,762 23,914 315,758 1,108,874 1,092,224	Bond issuance costs	-	-	-	862	-	862	625		
## Residential Solar and Energy Efficiency Financing Green Revenue bonds issued 1	Capital outlay	1,197	(69)	13	3	195	1,339	2,630		
Residential Solar and Energy Efficiency Financing Green Revenue bonds issued - - - 15,510 - 15,510 - 18,500 18,500 10,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 140,212 274,665 17,510 17,510 140,212 274,665 17,510	Total expenditures	194,614	473,826	100,762	23,914	315,758	1,108,874	1,092,224		
Part	OTHER FINANCING SOURCES (USES):									
Residential Solar Loan revenue bonds issued 1	Residential Solar and Energy Efficiency Financing									
Transfers in 14,146 25,393 71,154 19,000 10,519 140,212 274,665 Transfers out (2,228) - (21,228) (16,000) (47,830) (87,286) (374,817) Net other financing sources (uses) 11,918 25,393 49,926 18,510 (37,311) 68,436 (81,652) Net change in fund balances 24,399 8,536 54,724 3,561 (40,058) 51,162 (482,935) Fund balances, beginning of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,098 993,031 Net change in fund balances for governmental funds \$51,62 (482,935) (48	Green Revenue bonds issued	-	-	-	15,510	-	15,510	-		
Transfers out (2,228) - (21,228) (16,000) (47,830) (87,286) (374,817) Net other financing sources (uses) 11,918 25,393 49,926 18,510 (37,311) 68,436 (81,652) Net change in fund balances 24,399 8,536 54,724 3,561 (40,058) 51,162 (482,935) Fund balances, beginning of year 37,499 (11,239) 67,004 258,008 158,826 510,098 993,031 Fund balances, end of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,098 Following is a reconciliation of amounts reported differently in the Statement of Activities: Net change in fund balances for govennmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds 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 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 but are not reported as revenues in the Statement of Activities and GASB 75 OPEB expense is not a use of current financial resource in the governmental funds but are not reported as revenues in the Statement of Activities and GASB 68 Repayment of principal is an expenditure in the governmental funds but are not reported as revenues in the Statement of Activities and GASB 68 Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Activities and GASB 68 The statement	Residential Solar Loan revenue bonds issued	-	-	-	-	-	-	18,500		
Net other financing sources (uses) 11,918 25,393 49,926 18,510 (37,311) 68,436 (81,652) Net change in fund balances 24,399 8,536 54,724 3,561 (40,058) 51,162 (482,935) Fund balances, beginning of year 37,499 (11,239) 67,004 258,008 158,826 510,098 993,031 Fund balances, end of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,096 Following is a reconcilitation of amounts reported differently in the Statement of Activities: Net change in fund balances for govenmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure (1,339) 329 Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (207) (523) Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (309) 16 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 (1,546) 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 Activities Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Net Position	Transfers in	14,146	25,393	71,154	19,000	10,519	140,212	274,665		
Net change in fund balances 24,399 8,536 54,724 3,561 (40,058) 51,162 (482,935) Fund balances, beginning of year 37,499 (11,239) 67,004 258,008 158,826 510,098 993,031 Fund balances, end of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,096 Following is a reconcilitation of amounts reported differently in the Statement of Activities: Net change in fund balances for governmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities, and GASB 68 pension expense is not a use of current financial resources in the governmental funds 167 (1,546) 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 Activities (15,510) (18,500) Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Net Position	Transfers out	(2,228)	-	(21,228)	(16,000)	(47,830)	(87,286)	(374,817)		
Fund balances, beginning of year 37,499 (11,239) 67,004 258,008 158,826 510,098 993,031 Fund balances, end of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,096 Following is a reconciliation of amounts reported differently in the Statement of Activities: Net change in fund balances for governmental funds \$51,162 (482,935) Capitalization and depreciation of capital outlays, rather than recording as an expenditure (1,339) 329 Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (207) (523) Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (309) 16 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 (1,546) OPEB expense is not a use of current financial resources in the governmental funds OPEB expense is not a use of current financial resources in the governmental funds but are not reported as revenues in the Statement of Activities (15,510) (18,500) Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Net Position	Net other financing sources (uses)	11,918	25,393	49,926	18,510	(37,311)	68,436	(81,652)		
Fund balances, end of year \$61,898 (2,703) 121,728 261,569 118,768 561,260 510,096 Following is a reconciliation of amounts reported differently in the Statement of Activities: Net change in fund balances for governmental funds \$51,162 (482,935) (2apitalization and depreciation of capital outlays, rather than recording as an expenditure (1,339) 329 Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (207) (523) Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (309) 16 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 (1,546) OPEB expense is not a use of current financial resources in the governmental funds 2,536 - 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 Activities (15,510) (18,500) Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Net Position 13,654 12,674	Net change in fund balances	24,399	8,536	54,724	3,561	(40,058)	51,162	(482,935)		
Following is a reconciliation of amounts reported differently in the Statement of Activities: Net change in fund balances for govenmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds for current financial resources and therefore are not reported as expenditures in governmental funds for current financial resources and therefore are not reported as expenditures in governmental funds for current financial resources in the Statement of Activities, and GASB 68 pension expense is not a use of current financial resources in the governmental funds for current financial resources in the Statement of Activities, and GASB 75 OPEB expense is not a use of current financial resources in the governmental funds for current financial fina	Fund balances, beginning of year	37,499	(11,239)	67,004	258,008	158,826	510,098	993,031		
Net change in fund balances for govenmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Expenses for accrued bond interest in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure of current financial resources and therefore are not reported as expenditures in governmental funds Capitalization and expense in the Statement of Activities, and GASB 68 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 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 Poperated as revenues in the Statement of Activities (15,510) Capitalization and depreciation of Capital outlands but the repayment reduces long-term liabilities in the Statement of Net Position 13,654 12,674	Fund balances, end of year	\$61,898	(2,703)	121,728	261,569	118,768	561,260	510,096		
Change in net position of governmental activities \$50,154 (490,485)	Net change in fund balances for govenmental funds Capitalization and depreciation of capital outlays, rather than recording as an expenditure (1,339) Expenses for compensated absences in the Statement of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds (207) Expenses for accrued bond interest in the Statement of Activities do not require the 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 (309) 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 Activities (15,510) Repayment of principal is an expenditure in the governmental funds but the repayment reduces long-term liabilities in the Statement of Net Position									
	unange in net position of governmental activities					=	\$50,154	(490,485)		

(A Component Unit of the State of New York)
Statement of Net Position

Proprietary Fund March 31, 2019

(with comparative totals for March 31, 2018) (Amounts in thousands)

	March 31, 2019	March 31, 2018
ASSETS:	2010	2010
Current assets:		
Cash and investments	\$174,576	\$189,620
Third-party billings receivable	174	212
Interest receivable on loans	2,264	1,871
Loans and financing receivables due within one year, net	33,310	48,688
Total current assets	210,324	240,391
Non-current assets:		
Investments	94,798	-
Loans and financing receivables - long term, net	266,120	246,654
Total non-current assets	360,918	246,654
Total assets	571,242	487,045
DEFERRED OUTFLOWS OF RESOURCES:	1,955	853
LIABILITIES: Current liabilities:		
Accrued liabilities	671	503
Counterparty deposits	-	50
Escrow deposits	1,823	25
Total current liabilities	2,494	578
Non-current liabilities:		
Net pension liability	234	925
Net OPEB liability	485	-
Total non-current liabilities	719	925
Total liabilities	3,213	1,503
DEFERRED INFLOWS OF RESOURCES:	1,529	244
NET POSITION:		
Net position restricted for specific programs	\$568,455	486,151

(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, 2019

(with comparative totals for March 31, 2018) (Amounts in thousands)

	March 31,	March 31,
ODEDATING DEVENUES.	2019	2018
OPERATING REVENUES: Closing fees	የ 2 002	1,596
Undrawn fees	\$2,993 382	376
Administrative fees	68	576 55
Other fees	504	457
Loans and financing receivables interest	15,253	16,703
Provision for losses on loans and financing receivables	(388)	(844)
Total operating revenues	18,812	18,343
OPERATING EXPENSES:		
Salaries and benefits	6,421	5,716
Investment related expenses	456	435
Program operating costs	765	1,152
General & administrative expenses	1,100	920
Depreciation	184	154
NY State assessments	125	86
Total operating expenses	9,051	8,463
OPERATING INCOME	9,761	9,880
NON-OPERATING REVENUES:		
Capital contributions	119,882	9,529
Investment income	7,223	1,354
Total non-operating revenues	127,105	10,883
NON-OPERATING EXPENSES:		
Capital expansion	1,425	-
Program evaluation	211	
Total non-operating expenses	1,636	- _
INCOME BEFORE TRANSFERS	135,230	20,763
Transfers- capital contributions (redemptions)	(52,926)	100,152
Change in net position	82,304	120,915
Net position, beginning of year	486,151	365,236
Net position, end of year	\$568,455	486,151

(A Component Unit of the State of New York)
Statement of Cash Flows
Proprietary Fund

For the year ended March 31, 2019 (with comparative totals for March 31, 2018)

(Amounts in thousands)

	March 31, 2019	March 31, 2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Closing fees collected	\$2,993	1,596
Undrawn fees collected	450	311
Administrative fees collected	68	55
Other fees collected	475	457
Loans and financing receivables interest collected	14,862	16,243
Receipt (Disbursement) of counterparty deposits	(50)	50
Receipt (Disbursement) of escrow deposits	1,798	(185)
Payments to employees & employee benefit providers	(6,444)	(5,548)
	(. ,	, , ,
Payment for ellegated depresention	(2,367)	(2,187)
Payment for allocated depreciation	(184)	(154)
Payments to NYS	(125)	(85)
Loans and financing receivables deployed	(184,150)	(180,872)
Loans and financing receivables principal repayments	179,674	143,227
Net cash provided by (used in) operating activities	7,000	(27,092)
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Capital contributions	119,882	9,529
Transfers- Capital Contributions (Redemptions)	(52,926)	100,152
Capital expansion Net cash provided by non-capital financing activities	(1,425) 65,531	109,681
Net easi provided by non eapital infahenig activities	00,001	100,001
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(817,720)	(494,866)
Proceeds from sale of investments	739,942	424,641
Investment income	4,891	1,208
Net cash used in investing activities	(72,887)	(69,017)
Net change in cash:	(356)	13,572
Cash and cash equivalents, beginning of period	17,196	3,624
Cash and cash equivalents, end of period	\$16,840	17,196
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES: Operating income Adjustments to reconcile operating income to net cash used in	\$9,761	9,880
operating activities: (Decrease) increase in third party billings receivable	38	(112)
Increase in interest receivable	(393)	(461)
Increase in loans and financing receivables	(4,088)	(36,801)
Increase in accrued liabilities	168	369
(Decrease) increase in counterparty deposits	(50)	50
Increase (decrease) in escrow deposits	1,798	(185)
Net change in pension & OPEB related accounts Non-operating expenses unrelated to financing activities	(23) (211)	168
Net cash provided by (used in) operating activities	\$7,000	(27,092)
		(21,002)

(A Component Unit of the State of New York)
Statement of Fiduciary Net Position
March 31, 2019
(Amounts in thousands)

	OPEB Trust Fund	Agency Fund
ASSETS:		
Cash and investments	\$53,121	\$33,675
LLRW assessment billings receivable		2,198
Total assets	\$53,121	\$35,873
LIABILITIES:		
Accrued expenses	150	-
Payable to New York State	-	1,032
LLRW escrow funds	-	4,416
Perpetual care of nuclear waste	-	30,422
Federal Energy Regulatory Commission	<u> </u>	3
Total liabilities	150	\$35,873
NET POSITION:		
Held in trust for other postemployment		
benefits	\$52,971	
	\$32,011	

(A Component Unit of the State of New York)
Statement of Changes in Fiduciary Net Position
Other Postemployment Benefits Trust Fund
For the year ended March 31, 2019
(Amounts in thousands)

ADDITIONS:

ADDITIONO.	
Employer contributions	\$4,963
Investment income	757
Less investment management expenses	(30)
Net investment income	727
Total additions	5,690
DEDUCTIONS:	
Benefits	1,439
Administrative fees	47
Total deductions	1,486
Change in net position	4,204
NET POSITION:	
Net position, beginning of year	48,767
Net position, end of year	\$52,971

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (A Component Unit of the State of New York)

Notes to Basic Financial Statements March 31, 2019

(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).

The CEF Order established a "Bill-As-You-Go" (BAYG) approach for revenue collection under the CEF effective January 1, 2016. Under this approach, CEF ratepayer collections are held by the electric and gas utilities and used to reimburse NYSERDA for actual CEF program expenses through a monthly reimbursement process, 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.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (A Component Unit of the State of New York)

Notes to Basic Financial Statements March 31, 2019

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 authorizes solicitations by NYSERDA, in consultation with the Long Island Power Authority and New York Power Authority, for a first phase of offshore wind procurements in 2018 and 2019. 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, 2019

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, 2019

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, 2019, total ratepayer funded capitalization provided to NY Green Bank was \$598.1 million, resulting in an unfunded amount of \$401.9 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, 2019

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
- <u>Restricted</u> 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 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, 2019, 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, 2018, from which the summarized information was derived.

Notes to Basic Financial Statements March 31, 2019

(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) <u>Investments</u>

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 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

Notes to Basic Financial Statements March 31, 2019

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) Deferred outflows of resources and deferred inflows of resources

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.

(i) NY State assessments

NY State assessments for the year ended March 31, 2019 consisted of \$12.9 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) Reclassifications

Certain amounts reported as of and for the fiscal year ended March 31, 2018 have been reclassified to conform with the amounts presented as of and for the fiscal year ended March 31, 2019.

(m) Income taxes

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

(n) Adoption of new accounting pronouncement

NYSERDA implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions (GASB 75), for the fiscal year ended March 31, 2019. This statement replaces the requirements of GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions.

Notes to Basic Financial Statements March 31, 2019

NYSERDA, including the Proprietary fund, has recorded a net OPEB liability of the plan and OPEB-related deferred outflows and deferred inflows as a result of adopting this new standard. As shown below, the implementation of GASB 75 has a cumulative effect of \$2.9 million on beginning net position at April 1, 2018.

	(Amounts in thou	sands)	
	Governmental activities	Business-type activities	Total
Net position as previously reported at March 31, 2018 Net OPEB liability (measurement date as of March 31,	\$381,935	486,151	868,086
2017) Deferred outflows of resources – contributions made during fiscal year 2017-18 subsequent to the March 31,	(5,905)	-	(5,905)
2017 measurement date	<u>3,013</u>		<u>3,013</u>
Cumulative effect on net position	(2,892)		(2,892)
Net position, April 1, 2018, as restated	<u>\$379,043</u>	<u>486,151</u>	865,194

This statement requires enhanced notes disclosures (see note 12), and schedules for required supplementary information be presented.

(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 (see note 12) 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, 2019. 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.

Notes to Basic Financial Statements March 31, 2019

	Fair Value (<i>Amounts</i> in <u>thousands)</u>	% of <u>Total</u>	Weighted Average Maturity (months)
Governmental funds Cash and equivalents Money Market fund Certificates of deposit U.S. Treasury Bills U.S. Treasury Notes U.S. Treasury Strips Total Current portion thereof	\$7,354 60,888 477 458,611 7,691 3,436 \$538,457 \$528,582	1.4 11.3 0.1 85.2 1.4 0.6 100.0	n/a n/a 4.1 3.2 18.3 <u>18.5</u> 3.1
Proprietary fund Cash and equivalents Money Market fund U.S. Treasury Bills U.S. Treasury Notes Total Current portion thereof	\$16,840 7,439 50,578 <u>194,517</u> <u>\$269,374</u> <u>\$174,576</u>	6.3 2.7 18.8 <u>72.2</u> 100.0	n/a n/a 0.7 <u>9.5</u> 10.2
Fiduciary funds Cash and equivalents Mutual funds Exchange traded funds U.S. Treasury Bills U.S. Treasury Notes Total	\$1,632 36,679 15,887 2,517 <u>30,081</u> \$86,796	1.9 42.3 18.6 2.9 <u>34.6</u> 100.0	n/a n/a n/a 0.1 <u>21.1</u> <u>21.2</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.

Notes to Basic Financial Statements March 31, 2019

Credit Risk. Money market fund investments consist of non-rated funds whose investments are restricted to U.S. government obligations. As of March 31, 2019, debt instruments other than those of the U.S. government were held only by the OPEB Trust and were as follows:

lavora transit toma	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%	\$1,593	3
Intermediate term bond	9%-19%	\$7,494	4
Inflation protected securities	5%-15%	\$5,361	4
Long term bond	1%-11%	\$3,299	5
High yield bond	7%-17%	\$6,356	5
Global bond	1%-6%	\$535	3

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, 2019, 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.

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, 2019, only the OPEB Trust portfolio (reported within Fiduciary funds) held any foreign investments. Foreign mutual fund holdings at March 31, 2019 were \$8.5 million (comprised of \$7.9 million of equity funds and \$535,000 of fixed income funds), and foreign exchange traded fund holdings were \$7.9 million (entirely comprised of equity funds).

(4) RECEIVABLE FROM NEW YORK STATE

As of March 31, 2019, the amount due from New York State is \$11.4 million, which represents appropriation and grant receivables.

Notes to Basic Financial Statements March 31, 2019

(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, 2019 and March 31, 2018, provision for losses were \$2.1 million and \$1.9 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 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, 2019 and March 31, 2018, provision for losses were \$0.4 million and \$0.8 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, 2019 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	21,117	\$203,444
Small Business/Not-for-Profit	61	1,557
Multifamily Building	<u>11</u>	<u>553</u>
Total governmental activities/funds	<u>21,189</u>	205,554
Allowance for doubtful accounts		<u>(6,622)</u>
Net total governmental activities/ funds		<u>\$198,932</u>

Notes to Basic Financial Statements March 31, 2019

(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	4	\$32,711
Construction Finance & Term Loan	5	25,054
Term Loans & Investments	11	161,672
Warehousing/Aggregation	<u>6</u>	<u>79,993</u>
Total business-type activities/proprietary fund	<u>26</u>	\$ <u>299,430</u>

Loans and financing receivables at March 31, 2019 mature as follows:

Governmental activities/funds

	(Amounts in thousands)				
Fiscal year ending	Residential	Small			
March 31,	Energy	Business/	Multifamily		
	Efficiency	Not-for-Profit	Building	<u>Total</u>	
2020	\$16,058	238	300	16,596	
2021	15,819	220	186	16,225	
2022	15,786	208	65	16,059	
2023	15,920	193	3	16,116	
2024	16,259	185	-	16,444	
2025-2029	84,248	511	-	84,759	
2030-2034	39,322	1	-	39,323	
2035-2039	<u>32</u>	<u>=</u>	<u>=</u>	<u>32</u>	
Total governmental activities/funds	\$203,444	<u>1,556</u>	<u>554</u>	205,554	

Business-type activities/proprietary fund

(Amounts in thousands)

		Construction			
Fiscal year ending	Construction	Finance &	Term Loan &	Warehousing	
March 31,	<u>Finance</u>	Term Loan	<u>Investments</u>	/ Aggregation	<u>Total</u>
2020	\$20,634	1,709	9,445	1,522	33,310
2021	-	1,247	27,730	26,137	55,114
2022	10,693	1,326	2,536	1,567	16,122
2023	-	1,476	14,055	13,050	28,581
2024	-	1,573	30,963	37,717	70,253
2025-2029	1,384	12,964	37,022	-	51,370
2030-2034	-	2,479	4,438	-	6,917
2035-2039	-	2,280	483	-	2,763
2040-2050 Total business-type			<u>35,000</u>		<u>35,000</u>
activities/ proprietary fund	<u>\$32,711</u>	<u>25,054</u>	<u>161,672</u>	<u>79,993</u>	<u>299,430</u>

Notes to Basic Financial Statements March 31, 2019

(6) OTHER ASSETS

As of March 31, 2019, the other assets balance of \$14.2 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, 2019 was as follows:

(Amounts in thousands)

	Beginning		Retirements/	Ending
	Balance	<u>Additions</u>	Reclasses	<u>Balance</u>
Land	\$685	-	-	685
Land improvements	5,834	10	-	5,844
Buildings	8,979	-	-	8,979
Machinery and equipment	18,858	1,880	(1,108)	19,630
Leasehold improvements	2,944	<u>46</u>	<u>-</u>	<u>2,990</u>
	37,300	1,936	(1,108)	38,128
Less accumulated depreciation				
for:				
Land Improvements	(1,780)	(212)	-	(1,992)
Buildings	(5,319)	(273)	-	(5,592)
Machinery and equipment	(11,912)	(2,159)	558	(13,513)
Leasehold improvements	(894)	(219)		(1,113)
	<u>(19,905)</u>	<u>(2,863)</u>	<u>558</u>	<u>(22,210)</u>
Capital assets, net	<u>\$17,395</u>	<u>(927)</u>	<u>(550)</u>	<u>15,918</u>

Notes to Basic Financial Statements March 31, 2019

(8) NON-CURRENT LIABILITIES

Non-current liability activity for the year ended March 31, 2019 was as follows:

	(Amounts in Beginning Balance	thousands) Cumulative effect of GASB 75	Additions	Reductions	Ending <u>Balance</u>	Amounts Due within One Year
Governmental activities Compensated absences	\$ 8,409	_	4,582	(4,343)	8,648	3,521
Bonds payable	133,551	-	15,510	(13,657)	135,404	6,765
Net pension liability	9,354	-	8,448	(14,669)	3,133	-
Net OPEB liability Non-current liabilities	<u>-</u> \$151,314	<u>5,905</u> <u>5,905</u>	4,677 33,217	(7,125) (39,794)	3,457 150,642	<u>-</u> 10,286
Business-type activities/	proprietary fur	<u>nd</u>				
Net pension liability	\$925	-	1,152	(1,843)	234	-
Net OPEB liability			<u>485</u>		<u>485</u>	
Non-current liabilities	<u>\$925</u>		<u>1,637</u>	(1,843)	<u>719</u>	
Non-current liabilities	<u>\$925</u>		<u>1,637</u>	<u>(1,843)</u>	<u>719</u>	<u> </u>

The beginning balance was restated with the implementation of GASB 75, to recognize the net other postemployment liability for governmental activities.

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, 2019:

/ 4 /			
(Amounts	ın	thousands)	

	(Amounts in thousands)				
	Principal	Final			
	Balance	Maturity	Interest		
	<u>Outstanding</u>	<u>Date</u>	<u>Rate</u>		
Residential Energy Efficiency Financing					
Revenue Bonds,					
Series 2013A	\$14,215	July 1, 2028	2.4% to 4.11%		
Series 2015A	37,145	July 1, 2030	1.9% to 3.82%		
Series 2016A	20,550	March 1, 2027	1.2% to 2.77%		
Residential Solar Loan Revenue Bonds,					
Series 2015- Fixed rate	30,504	March 1, 2027	4.55% to 5.24%		
Residential Solar Financing Green					
Revenue Bonds, Series 2018A	17,480	April 1, 2034	3.0% to 4.8%		
Residential Solar and Energy Efficiency					
Financing Green Revenue Bonds, Series	s <u>15,510</u>	April 1, 2035	3.1% to 4.6%		
2019A					
Total	<u>\$135,404</u>				

Notes to Basic Financial Statements March 31, 2019

Each of the bonds were issued under an Indenture of Trust and other financing documents setting forth various obligations of NYSERDA, including requirements for debt service coverage ratios.

As of March 31, 2019, 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>
2020	\$6,765	4,472	11,237
2021	9,490	4,268	13,758
2022	9,420	4,046	13,466
2023	9,015	3,816	12,831
2024	8,620	3,591	12,211
2025-29	68,399	10,436	78,835
2030-34	23,695	3,520	<u>27,215</u>
Total	<u>\$135,404</u>	<u>34,149</u>	<u>169,553</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 2018.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, 2019

As of the fiscal years ended March 31, 2019 and 2018, NYSERDA's proportionate share of the System's net pension liability was approximately 0.10% and 0.11%, 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 88% and the proprietary fund represents approximately 12% 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:

Measurement date

Actuarial valuation date

Net pension liability

(Amount in thousands)
03/31/2018
04/01/2017
\$3,367

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 3.8%, 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 percent. 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, 2019 was \$3.6 million. NYSERDA's contribution to the System for the fiscal year ended March 31, 2019 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 (6.0%)	Rate (7.0%)	1% Increase (8.0%)
Governmental activities Net pension liability/(asset)	\$23,711	\$3,133	(\$14,274)
Business type-activities/proprietary fund Net pension liability/(asset)	\$1,767	\$234	(\$1,064)

Notes to Basic Financial Statements March 31, 2019

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

	(Amoun	ts in thousands)
	Deferred Outflows of	Deferred Inflows of
	Resources	Resources
Differences between expected and actual		
experience	\$1,201	(992)
Changes of assumptions	2,233	` <u>-</u>
Net difference between projected and actual		
investment earnings on pension plan		(2. 2
investments	4,890	(9,654)
Changes in proportion and differences		
between employer contributions and		4
proportionate share of contributions	-	(1,226)
Employer contributions subsequent to the		
measurement date	<u>3,776</u>	
Total	<u>\$12,100</u>	<u>(11,872)</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>
2020	\$201	35	235
2021	\$109	19	128
2022	(\$2,267)	(392)	(2,659)
2023	(\$1,067)	(185)	(1,252)

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%.

Seventy-nine employees have vested in the VDC as of March 31, 2019. NYSERDA's contribution to the VDC for the year ended March 31, 2019 was \$700,660.

Notes to Basic Financial Statements March 31, 2019

(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, 2019, rental expense for all office facilities was \$1.5 million.

The following is a schedule, by year, of future minimum rental payments for NYSERDA's office space as of March 31, 2019:

Fiscal year ending March 31:	
2020	\$1,858
2021	1,863
2022	1,577
2023	1,499
2024	1,504

(Amounts in thousands)

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, 2019-2027.

4,594 \$12,895

(11) CONTINGENCIES

Thereafter

Total

(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, 2019

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 conduct additional scientific studies to reduce uncertainties in the decisions for the Phase 2 portion of the cleanup. 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 2019 Congressional appropriation for the WVDP came in at \$78 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 2022 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, 2019 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, 2019, NYSERDA paid, from the agency fund, a total of \$3.3 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, 2019, 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, 2019

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, 2019, NYSERDA has aggregate outstanding contractual obligations in excess of cash and investments of governmental activities/funds totaling \$5.2 billion, which will be reimbursed 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, 2019, NY Green Bank has entered into two credit enhancement contracts totaling \$5.5 million 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 either agreement is triggered.

(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, 2019 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, 2019, there were 112 retirees and dependent survivors actively receiving benefits and 303 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, 2019 was determined using the January 1, 2018 actuarial valuation, and was then projected forward to the measurement date of March 31, 2018.

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 using direct salary expenses. The governmental activities represent approximately 88% and the proprietary fund represents approximately 12% of the proportionate share of the balances of OPEB-related amounts consistent with NYSERDA's current allocation methodology.

Notes to Basic Financial Statements March 31, 2019

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, 2018 (Measurement date March 31, 2017)	Total OPEB Liability (a) \$49,081	Plan Fiduciary Net Position (b) 43,176	Net OPEB Liability (a) – (b) 5,905
Changes for the year:			
Service cost	1,887		1,887
Interest	3,260		3,260
Differences between expected			
and actual experience	(233)		(233)
Benefit payments	(1,286)	(1,286)	-
Contributions-employer	-	3,013	(3,013)
Net investment income	-	3,879	(3,879)
Administrative expenses	-	(15)	15
Fiscal year ended March 31, 2019	\$52,709	48,767	3,942
(Measurement date March 31, 2018)			

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.

		(Amounts in thousands)	
	1% Decrease (<u>5.5%)</u>	Current Discount Rate (6.5%)	1% Increase (7.5%)
Governmental activities Net OPEB liability (asset)	\$13,134	\$3,457	(\$3,389)
Business type- activities/proprietary fund Net OPEB liability (asset)	\$1,616	\$485	(\$417)

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, 2019

	1% Decrease	(Amounts in thousands) Current Trend Rate	1% Increase
Governmental activities Net OPEB liability (asset)	(\$3,716)	\$3,457	\$12,675
Business type- activities/proprietary fund Net OPEB liability (asset)	(\$521)	\$485	\$1,778

OPEB expense for the fiscal year ended March 31, 2019 was \$2.1 million Balances of OPEB-related deferred outflows of resources and deferred inflows of resources as of March 31, 2019 were as follows:

	(Amounts in thousands)	
	Deferred Outflows of	Deferred Inflows of
	<u>Resources</u>	<u>Resources</u>
Differences between expected and actual experience Net difference between projected and actual investment earnings on Trust investments	\$ -	(207) (814)
Employer contributions subsequent to the measurement date Total	<u>4,963</u> <u>\$4,963</u>	<u>-</u> (1,021)

The 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 the	ousands)
	Business-type	
Governmental	activities/proprietary	
<u>activities</u>	<u>fund</u>	<u>Total</u>
(\$202)	(\$28)	(\$230)
(\$202)	(\$28)	(\$230)
(\$202)	(\$28)	(\$230)
(\$202)	(\$28)	(\$230)
(\$23)	(\$3)	(\$26)
(\$66)	(\$9)	(\$75)
	activities (\$202) (\$202) (\$202) (\$202) (\$23)	Governmental activities activities/proprietary (\$202) (\$28) (\$202) (\$28) (\$202) (\$28) (\$202) (\$28) (\$202) (\$28) (\$202) (\$28) (\$202) (\$28) (\$202) (\$28)

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, 2019

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-2017.

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 6.0% and 3.1% 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 carriers' plans.

Health insurance premiums – Calendar year 2018 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, 2019, 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, 2019

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, 2019 was determined using the January 1, 2018 actuarial valuation, and was then projected forward to the measurement date of March 31, 2019, calculated using the actuarial assumptions changes described below.

	(Amounts in thousands) Plan			
	Total OPEB Liability (a)	Fiduciary Net Position (b)	Net OPEB Liability (a) – (b)	
Fiscal year ended March 31, 2018 (Measurement date March 31, 2018)	\$52,709	48,767	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, 2019 (Measurement date March 31, 2019)	<u>-</u> <u>\$56,953</u>	<u>(47)</u> <u>52,971</u>	<u>47</u> <u>3,982</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 RP-2006 Base Healthy Annuitant/Employee with Projection Scale MP-2018.

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.

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, 2019

Net OPEB liability	1% Decrease (<u>5.5%)</u> \$13,791	(Amounts in thousands) Current Discount Rate (6.5%) \$3,982	1% Increase (7.5%) (\$3,856)
Healthcare cost trend rates		(Amounts in thousands)	
Net OPEB liability	1% Decrease (\$5,213)	Current Trend Rate \$3,982	1% Increase \$15,828

Balances of OPEB-related deferred outflows of resources and deferred inflows of resources as of March 31, 2019 were as follows:

(Amounts in thousands)

(, , , ,	(Fill Gallie III till Gallia)		
	Deferred Outflows of	Deferred Inflows of	
	<u>Resources</u>	Resources	
Differences between expected and actual	<u></u> -		
experience	\$305	(180)	
Changes of assumptions	-	(183)	
Net difference between projected and actual		` ,	
investment earnings on Trust investments	<u>2,043</u>	<u>(611)</u>	
Total	\$ 2,348	(974)	

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)

Fiscal year Ending March 31:	
2020	\$299
2021	\$299
2022	\$299
2023	\$502
2024	(\$8)
Thereafter	(\$17)

Notes to Basic Financial Statements March 31, 2019

Money-Weighted Rate of Return:

For the year ended March 31, 2019, the annual money-weighted rate of return on investments, calculated as the internal rate of return on Plan investments, net of investment expense, was 1.45%. 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-	Long-
		Term	Term
	E	expected E	Expected
	Α	rithmetic G	Seometric
T:	arget R	eal Rate F	Real Rate
<u>Asset Class</u> <u>Index</u> <u>Allo</u>	ocation o	<u>f Return</u>	of Return
US Cash BAML 3-Mon Tbill 1.	.00%	0.39%	0.39%
US Short Bonds Barclays 1-3 Yr Gvt/Credit 3.	.00%	1.62%	1.58%
US Interm Bonds Barclays IT Gvt/Credit 14	1.00%	1.98%	1.89%
US Long Bonds Barclays LT Gvt/Credit 6.	.00%	3.01%	2.61%
US Inflation-Indexed			
Bonds Barclays US TIPs 10	0.00%	1.33%	1.22%
US High Yield Bonds BAML High Yield 12	2.00%	4.16%	3.68%
Non-US Bonds JPM GBI Global xUS 1.	.00%	0.40%	-0.03%
US Large Caps S&P 500 15	5.00%	4.72%	3.62%
US Small Caps S&P SmallCap 600 6.	.00%	5.92%	4.11%
US Mid Caps S&P MidCap 400 1.	.00%	5.19%	3.76%
Foreign Developed			
Equity MSCI EAFE NR 15	5.00%	6.12%	4.59%
Emerging Markets			
Equity MSCI EM NR 15	5.00%	8.19%	5.33%
Global REITs FTSE EPRA/NAREIT Developed 1.	.00%	5.80%	4.06%

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

Notes to Basic Financial Statements March 31, 2019

(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 as well as to fund further capital contributions to NY Green Bank pursuant to the CEF Order's "Bill-As-You-Go" process, as summarized below:

(Amounts in thousands)

	Transfers To						
<u>Transfers</u> <u>From</u>	<u>CEF</u>	<u>GJGNY</u>	<u>RGGI</u>	<u>CES</u>	Other <u>Funds</u>	<u>Total</u>	
CEF	\$ -	-	2,228	-	-	2,228	
GJGNY	-	-	16,000	-	-	16,000	
RGGI	2,228	19,000	-	-	-	21,228	
Other Funds Total	<u>11,918</u>		-	<u>25,393</u>	<u>10,519</u>	<u>47,830</u>	
Governmental Funds	14,146	19,000	18,228	25,393	10,519	87,286	
Proprietary Fund			<u>52,296</u>	-		<u>52,296</u>	
Total	<u>\$14,146</u>	19,000	<u>71,154</u>	<u>25,393</u>	<u>10,519</u>	140,212	

Schedules of Required Supplementary Information (Unaudited) March 31, 2019

NYSERDA's Contributions to the System Pension Plan

(Amounts in thousands)

Fiscal year ended March 31, Actuarially determined contribution	2019 \$3,808	2018 \$3,805	2017 \$3,866	2016 \$3,993
Contributions in relation to the actuarially determined contribution Contribution deficiency (excess)	<u>\$3,808</u> -	\$3,80 <u>5</u>	<u>\$3,866</u> -	<u>\$3,993</u>
Covered- payroll Contributions as a percentage of covered-employee	\$27,349	\$26,088	\$25,854	\$26,153
payroll	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)

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

Schedule of Changes in Net OPEB Liability and Related Ratios

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

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

(Amounts in thousands)

1	
Fiscal year ended March 31,	<u>2019</u>
Actuarially determined contribution	\$2,071
Actual employer contribution	<u>4,963</u>
Contribution deficiency (excess)	<u>(\$2,892)</u>
Covered payroll	\$37,638
Contribution as a % of covered payroll	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	(Measurement Date	Net annual money-weighted
March 31,	March 31,)	rate of return
2019	2019	1.45%
2018	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

consideration of cash balances.

(Amounts in thousands)

Change from

March 31, 2019 March 31, 2018 March 31, 2018

Cash and investments (current and non-current totals):	269,374	189,620	79,754
Analysis: Variance was primarily due to an increase to its funded capitalization re	esulting from additional o	committed capital no	ot yet
leployed, from scheduled and early redemptions of loans and financing receival			
019, committed capital not yet deployed totaled \$174.2 million; the balance of c			
have been received on prior capital committed and deployed, and will be used to			,
	<u> </u>		
Third-party billings receivable	174	212	(38
Analysis: Primarily due to the timing of transactions fees earned but not yet recei	ived by year end.		`
Interest receivable on loans	2,264	1,871	393
Analysis: Variance is the result of the timing of receipt for interest payments.			
Loans and financing receivables - current and non-current totals:	299,430	295,342	4,088
Analysis: Increase due to net loan activity (new loans issued, offset by principal	payments received).		
	•		
Total assets	571,242	487,045	84,197
Total assets	371,242	407,045	04,137
Deferred outflows of resources	4.055	853	1 100
	1,955		1,102
Analysis: Reflects an increase in the amortized balance of actuarially-determined	a deferred outflows of res	sources (deterred p	ension &
OPEB expense resulting from actuarial smoothing practices).			
Accrued Liabilities	671	503	168
Analysis: Reflects an increase due to additional legal and consulting expenses			
			/= 0
Counterparty deposits	<u>-</u>	50	(50
Analysis: Funds were released to pay for transaction execution expenses.			
Escrow deposits	1.823	25	1,798
Analysis: Increase is primarily due to a required deposit amount contingent on N	,		,
Analysis. Increase is primarily due to a required deposit amount contingent on to	13 periornance goals ic	n a specific project.	•
Long-term liabilities:			
Net pension liability	234	925	(691
Net OPEB liability	485	3 2 3	485
Total non-current liabilities	719	925	(206
Analysis: The net pension and OPEB liability variances reflects actuarially deterr	nined accrued pension a	and OPEB expense	and
amortization of deferred inflows and outflows of resources.	2 242	4 500	4 740
Total liabilities	3,213	1,503	1,710
Deferred inflows of resources	1,529	244	1,285
Analysis: Reflects an increase in the amortized balance of actuarially-determined	d deferred inflows of reso	ources (deferred pe	nsion &
OPEB expense resulting from actuarial smoothing practices).			
Net position:			
Funded Capitalization	598,613	478,731	119,882
	(52,926)	-	(52,926
Capital Redemption			
Capital Redemption Cumulative revenues in excess of expenses	22,768	7,420	15,348
	22,768 568,455	7,420 486,151	15,348 82,304

NY Green Bank

Comparison of Revenues/Expenses to Budget

For the year ended March 31, 2019				
Tor the year ended March 31, 2019	(Amounts in Thousands)		(for compari	son only)
	Actual		Over (unde	
	March 31, 2019	<u>Budget</u>	\$	<u>%</u>
REVENUES COLOR	0.047	0.000	7.47	00.00/
Fees (Closing, Undrawn, Administrative & Other)	3,947	3,200	747	23.3%
Analysis: Variance due to timing of deals closed as compared to	budgetary assumptions.			
Languard financian receivables interest	45.050	47.004	(0.554)	11.00/
Loans and financing receivables interest Analysis: Variance due to lower capital deployed and from more	15,253	17,804	(2,551)	-14.3%
Analysis. Variance due to lower capital deployed and from more	ioan repayments made that	i anticipateu	in the budge	
Provision for losses on loans and financing receivables	(388)	-	(388)	100.0%
Analysis: NY Green Bank's accounting policy is to record a provi impaired. As a result, no amount is included in the budget for Pr variances. The provision recorded reflects a loss adjustment to a	ovision for losses and any lo	osses record	led will result	in budget
Investment income	7,223	1,140	6,083	533.6%
Analysis: Increase is primarily due to higher balances and yields	than anticipated in the budg	get.		
Capital contributions (less capital redemptions)	66,956	200,000	(133,044)	-66.5%
Analysis: Variance is primarily due to lower committed capital an	· · · · · · · · · · · · · · · · · · ·		, ,	ſ
under the "Bill-As-You-Go" funding mechanism to consider cash redemption in order to reallocate funds to support NYSERDA's s Total operating and non-operating revenues (less capital			on NYSERDA	
redemptions)	92,991	222,144	(129,153)	-58.1%
EXPENSES				
Salaries	4,652	4,076	576	14.1%
Fringe benefits	1,769	1,968	(199)	-10.1%
Salaries and benefits	6,421	6,044	377	6.2%
Analysis: Variance on Salary expense is generally the result of h The Fringe benefits variance was primarily due to actuarially dete allocations being less than anticipated.				•
Investment related expenses	456	500	(44)	-8.8%
Analysis: Variance due to lower costs than anticipated in the bud			\ /	
	-			
Other operating costs				
Computer Services and Software	4	-	4	100.0%
Travel and Outreach Costs	25	24	1	4.2%
Office Supplies, Equipment Rental, and Other	22	36	(14)	-38.9%
Training, Recruitment & Relocation	-	43	(43)	-100.0%
Temporary Staffing, Outside Technical Reviewer	-	262	(262)	-100.0%
Professional & Consulting Services	714	1,690	(976)	- <u>57.8</u> %
	765	2,055	(1,290)	-62.8%

Analysis: Professional Service costs were less than what was anticipated in the budget. The variance in Temporary staffing is reflective of vacancies filled by permanent employees. Other variances are relatively minor.

NY Green Bank

Comparison of Revenues/Expenses to Budget For the year ended March 31, 2019

For the year ended March 31, 2019				
	(Amounts in Thousands)		(for comparis	son only)
	Actual		Over (under	• ,
	March 31, 2019	Budget	\$	/ _ uugu. %
	<u> </u>	Buager	<u> </u>	
General and administrative expenses	1,100	1,111	(11)	-1.0%
Analysis: Minor variance due to difference in actual allocation vs.	what was anticipated in the	e budget.		
Depreciation	184	189	(5)	-2.6%
Analysis: Minor variance due to lower allocable cost from NYSER	RDA resulting primarily from	the differen	ce in planned	capital
asset additions as compared to budget expectations.				-
				,
Non-operating expenses				
Capital expansion	1,425	-	1,425	100.0%
Program evaluation	211	1,500	(1,289)	<u>-85.9%</u>
	1,636	1,500	136	14.1%
Analysis: Variance in capital expansion is from Third Party Capital	al Advisory costs incurred the	nat were not	included in the	e budget.
The budget represents anticipated expenses for evaluation activi	ties, but the timing of evalu	ation activitie	es has resulted	d in lower
than anticipated expenses than assumed in the budget.				
<u> </u>				
New York State assessments	125	100	25	25.0%
Analysis: Minor variance due to difference in actual allocation vs.	what was anticipated in the	e budget.		
Total expenses	10,687	11,499	(812)	-7.1%

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

FINANCIAL STATEMENTS

March 31, 2019

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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, 2019, 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, 2019, 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, 2019, 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 2018 financial statements of NY Green Bank, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 26, 2018. In our opinion, the comparative information presented herein as of and for the year ended March 31, 2018, 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 _____, 2019 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 ____, 2019



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

Management's Discussion and Analysis

For the Year Ended March 31, 2019

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, 2019. 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 are reported in the Statement for some items that 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)		
	March 31,	March 31,	% Change
Summary of Net Position	<u>2019</u>	<u>2018</u>	<u>2019-2018</u>
Cash and investments	\$269,374	\$189,620	42.1%
Loans and financing receivables, net	299,430	295,342	1.4%
Other assets	2,438	2,083	17.0%
Total assets	571,242	487,045	17.3%
Deferred outflows of resources	1,955	853	129.2%
Net pension liability	234	925	(74.7)%
Net OPEB liability	485	-	100.0%
Other liabilities	2,494	578	331.5%
Total liabilities	3,213	1,503	113.8%
Deferred inflows of resources	1,529	244	526.6%
Net position - restricted	\$568,455	\$486,151	16.9%

For the year ended March 31, 2019, 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

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

Management's Discussion and Analysis

For the Year Ended March 31, 2019

Unaudited

transaction execution activity in the period, increasing NY Green Bank's Loans and Financing 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 \$3.4 billion in Portfolio Investment proposals from inception through March 31, 2019. Its active pipeline of potential Portfolio Investments proceeding towards closing was \$702.7 million as of March 31, 2019, 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 \$280.1 million, facilitating clean energy development in New York State with an aggregate estimated total project cost in the range of \$1.74 billion to \$1.96 billion. Through March 31, 2019, NY Green Bank's overall sustainable infrastructure investments since inception totaled \$737.6 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 \$471.3 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 \$139.2 million (i.e., does not include paydowns against revolving facilities that remain available for redraw, which aggregated \$41.5 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 42.1% increase in Cash and Investments reflects that NY Green Bank's portfolio is more established with an increasing volume of investments starting to pay down, and such returned capital being available for recycling into new Portfolio Investment transactions, in addition to funds received on account of further capitalization. NY Green Bank's cash and invested capital balances reflect \$598.6 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 \$401.9 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 standards (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 increased 331.5% during the fiscal year, primarily from an increase in accrued operating liabilities.

(A Division of the New York State Energy Research and Development Authority) Management's Discussion and Analysis For the Year Ended March 31, 2019 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 increased by \$84.2 million and \$82.3 million, respectively. NY Green Bank's Net Position as of March 31, 2019 was \$569.7 million, reflecting the total capitalization of \$598.6 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 \$22.8 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, % Chan		
Summary of Changes in Net Position	2019	2018	2019-2018
Operating revenues:			
Fees	\$3,947	\$2,484	58.9%
Loans and financing receivables interest	15,253	16,703	(8.7)%
Provisions for losses on loans and financing receivables	(388)	(844)	(54.0)%
Total operating revenues:	18,812	18,343	2.6%
Operating expenses:			
Salaries and benefits	6,421	5,716	12.3%
Investment related expenses	456	435	4.8%
Other operating costs	765	1,152	(33.6)%
General and administrative expenses	1,100	920	19.6%
Depreciation	184	154	19.5%
NY State assessments	125	86	45.3%
Total operating expenses	9,051	8,463	6.9%
Operating income	9,761	9,880	(1.2)%
Non-operating revenues:			
Capital contributions	119,882	9,529	1,158.1%
Investment income	7,223	1,354	433.5%
Total non-operating revenues	127,105	10,883	1,067.9%
Non-operating expenses:			
Capital expansion	1,425	-	100.0%
Program evaluation	211	-	100.0%
Total non-operating expenses	1,636	-	100.0%
Income before transfers	135,230	20,763	551.3%
Transfers - capital contributions (redemptions)	(52,926)	100,152	(152.8)%
Change in net position	82,304	120,915	(31.9)%
Net position, beginning of year	486,151	365,236	n/a
Net position, end of year	\$568,455	\$486,151	16.9%

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

Management's Discussion and Analysis

For the Year Ended March 31, 2019

Unaudited

Total Operating Revenues increased \$0.5 million (2.6%) from the prior year. A 58.9% increase in fees is primarily attributable to NY Green Bank closing a larger number of transactions during the fiscal year. A decrease in loans and financing receivables interest of 8.7% is due to an increase in loan repayments, which are central to NY Green Bank's capital preservation and recycling.

A Provision for losses on Loans and financing receivables in the amount of \$387,898 has been recorded for the year ending March 31, 2019. This represents 0.13% of the total Loans and financing receivables balance at March 31, 2019.

Total Operating Expenses increased \$0.6 million (6.9%), 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 (\$3.0 million), NYSERDA allocated administrative salary expenses (\$1.6 million), and allocated fringe benefit expenses (\$1.8 million), increased \$0.7 million (12.3%) 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 4.8% more than the previous year, which generally reflects transaction volumes and counterparty reimbursement rates. Program Operating Costs decreased \$0.4 million (33.6%) due to a decrease 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 \$0.2 million (19.6%) 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. Both of these dollar amounts have increased from the prior year.

Investment Income increased \$5.9 million (433.5%), directly reflecting NY Green Bank's higher average investment, resulting from contributed capital received but not immediately deployed, as well as operating income generated and principal payments received less capital redemptions.

Non-operating expenses increased \$1.6 million primarily due to capital advisory costs of \$1.4 million. In October 2017, Governor Cuomo announced that NYGB would explore options to raise at least an additional \$1.0 billion in private sector funds to invest at a portfolio level (Capital Initiative) and would take steps toward exploring a national expansion. In January 2019, Governor Cuomo released the 2019 State of the State Book¹ and called for the development of terms for a public-private partnership to effectuate NYGB's third-party capital raise and expansion across North America. NY Green Bank engaged an outside consultant to assist in the exploration of the Capital Initiative. Separately, program evaluation costs increased \$0.2 million; these expenses are attributable to periodic independent assessments of NY Green Bank's non-financial impact in the marketplace (e.g., energy, environmental and market transformation).

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See www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf.

NY Green Bank
(A Division of the New York State Energy Research and Development Authority)
Management's Discussion and Analysis

For the Year Ended March 31, 2019 Unaudited

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.

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, 2019

(with comparative totals for March 31, 2018)
(Amounts in thousands)

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Current assets: Cash and investments \$174,576 189,620 Third-party billings receivable 174 212 Interest receivable on loans 2,264 1,871 Loans and financing receivables due within one year, net 33,310 48,688 Total current assets 210,324 240,391 Non-current assets: 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Counterparty deposits 671 503 Counterparty deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities 2494 578 Non-current liabilities 719 925 Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION: Net position restricted for specific programs \$568,455 486,151		March 31, 2019	March 31, 2018
Cash and investments \$174,576 189,620 Third-party billings receivable 174 212 Interest receivable on loans 2,264 1,871 Loans and financing receivables due within one year, net 33,310 48,688 Total current assets 210,324 240,391 Non-current assets: 94,798 - Investments 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities: 2,494 578 Non-current liabilities: 2,494 578 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities <td>ASSETS:</td> <td></td> <td></td>	ASSETS:		
Third-party billings receivable Interest receivable on loans 174 212 Interest receivable on loans 2,264 1,871 Loans and financing receivables due within one year, net Total current assets 33,310 48,688 Total current assets 210,324 240,391 Non-current assets: 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244	Current assets:		
Interest receivable on loans 2,264 1,871 Loans and financing receivables due within one year, net 33,310 48,688 Total current assets 210,324 240,391 Non-current assets: 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities: 2,494 578 Non-current liabilities: 2,494 578 Net OPEB liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Cash and investments	\$174,576	189,620
Loans and financing receivables due within one year, net 33,310 48,688 Total current assets 210,324 240,391 Non-current assets: 1 240,391 Investments 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Third-party billings receivable	174	212
Total current assets 210,324 240,391 Non-current assets: 94,798 - Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 2,494 578 Net oPEB liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Interest receivable on loans	2,264	1,871
Non-current assets:	Loans and financing receivables due within one year, net	33,310	48,688
Investments	Total current assets	210,324	240,391
Loans and financing receivables - long term, net 266,120 246,654 Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: LIABILITIES: Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244	Non-current assets:		
Total non-current assets 360,918 246,654 Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Investments	94,798	-
Total assets 571,242 487,045 DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Loans and financing receivables - long term, net	266,120	246,654
DEFERRED OUTFLOWS OF RESOURCES: 1,955 853 LIABILITIES: Current liabilities: 671 503 Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Total non-current assets	360,918	246,654
LIABILITIES: Current liabilities: 671 503 Accrued liabilities - 50 Escrow deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Total assets	571,242	487,045
LIABILITIES: Current liabilities: 671 503 Accrued liabilities - 50 Escrow deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	•		
Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: - Net pension liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	DEFERRED OUTFLOWS OF RESOURCES:	1,955	853
Current liabilities: Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: - Net pension liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	•		
Accrued liabilities 671 503 Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	LIABILITIES:		
Counterparty deposits - 50 Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Current liabilities:		
Escrow deposits 1,823 25 Total current liabilities 2,494 578 Non-current liabilities: 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Accrued liabilities	671	503
Total current liabilities 2,494 578 Non-current liabilities: - Net pension liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Counterparty deposits	-	50
Non-current liabilities: Net pension liability Net OPEB liability Total non-current liabilities Total liabilities Total liabilities DEFERRED INFLOWS OF RESOURCES: NET POSITION:	Escrow deposits	1,823	25
Net pension liability 234 925 Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Total current liabilities	2,494	578
Net OPEB liability 485 - Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Non-current liabilities:		
Total non-current liabilities 719 925 Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Net pension liability	234	925
Total liabilities 3,213 1,503 DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Net OPEB liability	485	-
DEFERRED INFLOWS OF RESOURCES: 1,529 244 NET POSITION:	Total non-current liabilities	719	925
NET POSITION:	Total liabilities	3,213	1,503
NET POSITION:	•		
	DEFERRED INFLOWS OF RESOURCES:	1,529	244
	•		
Net position restricted for specific programs \$568,455 486,151	NET POSITION:		
	Net position restricted for specific programs	\$568,455	486,151

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, 2019

(with comparative totals for March 31, 2018) (Amounts in thousands)

	March 31, 2019	March 31, 2018
OPERATING REVENUES:		
Closing fees	\$2,993	1,596
Undrawn fees	382	376
Administrative fees	68	55
Other fees	504	457
Loans and financing receivables interest	15,253	16,703
Provision for losses on loans and financing receivables	(388)	(844)
Total operating revenues	18,812	18,343
OPERATING EXPENSES:		
Salaries and benefits	6,421	5,716
Investment related expenses	456	435
Other operating costs	765	1,152
General & administrative expenses	1,100	920
Depreciation	184	154
NY State assessments	125	86
Total operating expenses	9,051	8,463
OPERATING INCOME	9,761	9,880
NON-OPERATING REVENUES:		
Capital contributions	119,882	9,529
Investment income	7,223	1,354
Total non-operating revenues	127,105	10,883
NON-OPERATING EXPENSES:		
Capital expansion	1,425	-
Program evaluation	211	-
Total non-operating expenses	1,636	-
INCOME BEFORE TRANSFERS	135,230	20,763
Transfers- capital contributions (redemptions)	(52,926)	100,152
Change in net position	82,304	120,915
Net position, beginning of year	486,151	365,236
Net position, end of year	\$568,455	486,151

See accompanying notes to the basic financial statements.

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

For the year ended March 31, 2019

(with comparative totals for March 31, 2018) (Amounts in thousands)

	March 31,	March 31,
CACLLELOWS FROM ORFRATING ACTIVITIES.	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES: Closing fees collected	\$2,993	1 506
Undrawn fees collected	φ2,993 450	1,596 311
Administrative fees collected	68	55
Other fees collected	475	457
Loans and financing receivables interest collected	14,862	16,243
Receipt (Disbursement) of counterparty deposits	(50)	50
Receipt (Disbursement) of escrow deposits	1,798	(185)
Payments to employees & employee benefit providers	(6,444)	(5,548)
Payments to suppliers	(2,367)	(2,187)
Payment for allocated depreciation	(184)	(154)
Payments to NYS	(125)	(85)
Loans and financing receivables deployed	(184,150)	(180,872)
Loans and financing receivables principal repayments	179,674	143,227
Net cash provided by (used in) operating activities	7,000	(27,092)
, , , , , ,		
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:		
Capital contributions	119,882	9,529
Transfers- Capital Contributions (Redemptions)	(52,926)	100,152
Capital expansion	(1,425)	
Net cash provided by non-capital financing activities	65,531	109,681
CASH FLOWS FROM INVESTING ACTIVITIES:	(-	,, <u>,</u> ,,,,,
Purchase of investments	(817,720)	(494,866)
Proceeds from sale of investments	739,942	424,641
Investment income	4,891	1,208
Net cash used in investing activities	(72,887)	(69,017)
NET CHANGE IN CASH	(356)	13,572
Cash and cash equivalents, beginning of period	17,196	3,624
Cash and cash equivalents, end of period	\$16,840	17,196
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES: Operating income	\$9,761	9,880
Adjustments to reconcile operating income to net cash used in operating activities:	ψ3,701	9,000
(Decrease) increase in third party billings receivable	38	(112)
Increase in interest receivable	(393)	(461)
Increase in loans and financing receivables	(4,088)	(36,801)
Increase in accrued liabilities	168	369
(Decrease) increase in counterparty deposits	(50)	50
Increase (decrease) in escrow deposits	1,798	(185)
Net change in pension & OPEB related accounts	(23)	168
Non-operating expenses unrelated to financing activities	(211)	-
Net cash provided by (used in) operating activities	\$7,000	(27,092)
Francisco (accounty specialing accounts		

See accompanying notes to the basic financial statements.

Notes to Basic Financial Statements March 31, 2019

(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. As of March 31, 2019, total ratepayer funded capitalization provided to NY Green Bank was \$598.1 million, resulting in an unfunded amount of \$401.9 million that will be subsequently provided through the "Bill As You Go" approach.

Pursuant to BAYG, 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. As part of U.S. generally accepted accounting standards (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, 2019

(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 GAAP. Accordingly, such information should be read in conjunction with NY Green Bank's financial statements for the year ended March 31, 2019 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, 2019

(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.

(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 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) Adoption of new accounting pronouncement

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. This statement replaces the requirements of GASB Statement No. 45, Financial Reporting for Post-employment Benefits Other Than Pension Plans and requires employers and nonemployer contributing entities to report their net OPEB liability on their financial statements. NY Green Bank has recorded a participating proportion of the net OPEB liability of the plan and OPEB-related deferred outflows and inflows of resources as a result of adopting this pronouncement.

(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

Notes to Basic Financial Statements March 31, 2019

certain limitations, and money market funds subject to certain limitations.

The following schedule presents NY Green Bank's cash and investments as of March 31, 2019. 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
		% of	Average Maturity
	Fair Value	Total	(months)
Cash and equivalents	16,840	6.3	n/a
Money Market Fund	7,439	2.7	n/a
U.S. Treasury Bills	50,578	18.8	0.7
U.S. Treasury Strips	<u>194,517</u>	<u>72.2</u>	<u>9.5</u>
Total	<u>\$269,374</u>	<u>100.0</u>	<u>10.2</u>
Current portion thereof	<u>\$174,576</u>		

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, 2019, 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.

Notes to Basic Financial Statements March 31, 2019

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. 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, 2019:

(Amounts in thousands)

Cash and	Committed
Investments	<u>Capital</u>
\$269,374	\$171,681

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, 2019, NY Green Bank committed capital was \$171.7 million and deployed capital was \$299.7 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.

For the fiscal years ended March 31, 2019 and March 31, 2018, provision for losses were \$0.4 million and \$0.8 million, respectively, and are reflected as a reduction of Loans and financing receivables interest on the Statement of Revenues, Expenses and Changes in Fund Net Position.

Notes to Basic Financial Statements March 31, 2019

Loans and financing receivables at March 31, 2019 include the following:

		(Amounts in thousands)
		Loans and Financing
	Number of	Receivables
	Transactions	<u>Outstanding</u>
Construction Finance	4	\$32,711
Construction Finance & Term Loan	5	25,054
Term Loan & Investments	11	161,672
Warehousing /Aggregation	<u>6</u>	<u>79,993</u>
Total	<u>26</u>	<u>299,430</u>

Loans and financing receivables at March 31, 2019 mature as follows:

(Amounts in thousands)

Fiscal					
year		Construction			
ending	Construction	Finance & Term	Term Loan &	Warehousing	
March 31,	<u>Finance</u>	<u>Loan</u>	<u>Investments</u>	/Aggregation	<u>Total</u>
2020	\$20,634	1,709	9,445	1,522	33,310
2021	-	1,247	27,730	26,137	55,114
2022	10,693	1,326	2,536	1,567	16,122
2023	-	1,476	14,055	13,050	28,581
2024	-	1,573	30,963	37,717	70,253
2024-2029	1,384	12,964	37,022	-	51,370
2029-2034	-	2,479	4,438	-	6,917
2034-2039	-	2,280	483	-	2,763
2039-2050	<u>=</u>	<u>-</u>	<u>35,000</u>	<u>=</u>	<u>35,000</u>
Total	<u>32,711</u>	<u>25,054</u>	<u>161,672</u>	<u>79,993</u>	<u>299,430</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.

As stated in Note 2, NYSERDA and NY Green Bank have adopted GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions (OPEB), as of and for the 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.

Notes to Basic Financial Statements March 31, 2019

Non-current liability activity for the year ended March 31, 2019 was as follows:

(Amounts in thousands)

Е	eginning			Ending
	<u>Balance</u>	<u>Additions</u>	Reductions	<u>Balance</u>
Net pension liability	\$925	1,152	(1,843)	234
Net OPEB liability		<u>485</u>	<u>=</u>	<u>485</u>
Total non-current liabilities	<u>\$925</u>	<u>1,637</u>	(1,843)	<u>719</u>

(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, 2019, NY Green Bank has entered into four 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, 2019 totaled approximately \$4.3 million.

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

(7) 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.

RESOLVED, that the Authority's Financial Statements and the Financial Statements of NY Green Bank as of March 31, 2019, as presented at this June 26, 2019 meeting are hereby approved and adopted as the financial reports required by Sections 1867(1) and 2800 of the Public Authorities Law.

Resolu	ution	No.	
ICOOT	auon	1 10.	

RESOLVED, that the President and CEO is authorized 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, 2020.

ANNUAL BOND SALES REPORT

Fiscal Year Ended March 31, 2019

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

TABLE OF CONTENTS

List of issuances, refundings, and conversions

List of outstanding bonds as of March 31, 2019 (See separate attachment)

ISSUANCES

Company/Series	Date Issued	Date of Maturity	Amount Issued (\$000s)	Savings (\$000s)	Initial Interest Rate Mode	Initial Interest Rate	M/WBE Participation
Green Johs Residential Solar and Energy Efficiency Revenue Bonds, Series 2019A	03/21/2019	04/01/2028	\$15,510	NA	Fixed	3.152 - 4.577%	Yes

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		Wiode		

							Amount	Amount
Company	Project description	Series 4000 P		Date Closed		Maturity 7/4/2024	Issued (000's)	Outstanding (000's)
Central Hudson Gas & Electric Co. Central Hudson Gas & Electric Co. Total	Pollution Control Refunding Revenue Bonds	1999 B	649845 EW 0	8/3/1999	7/27/1999	7/1/2034	\$33,700 \$33,700	\$33,700 \$33,700
Consolidated Edison Company Consolidated Edison Company	Facilties Revenue Bonds Facilties Revenue Bonds	2004C-1 2004C-2	64984E DF9 64984E DE2	11/12/2004 11/12/2004	11/5/2004 11/5/2004	11/1/2039 11/1/2039	\$33,000 \$33,000	\$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 Consolidated Edison Company	Facilities Revenue Bonds Facilities Revenue Bonds	2010A	64984E DN2 649848E DJ1	11/16/2010 5/26/2005	11/9/2010 5/26/2005	6/1/2036 5/1/2039	\$224,600	\$224,600
Consolidated Edison Company	Facilities Revenue Bonds	2005 A-1 2005 A-2	649848E DG7	5/26/2005	5/26/2005	5/1/2039	\$42,100 \$42,100	\$42,100 \$42,100
Consolidated Edison Company	Facilities Revenue Bonds	2005 A-3	649848E DH5	5/26/2005	5/26/2005	5/1/2039	\$42,100	\$42,100
Consolidated Edison Company Total							\$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 Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds Pollution Control Revenue Bonds	1985 C 1986 A	649845 FU3 649845 FS8		12/26/1985 12/18/1986	12/1/2025 12/1/2026	\$37,500 \$50,000	\$37,500 \$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 Niagara Mohawk Power Corporation	Pollution Control Revenue Bonds Pollution Control Revenue Bonds	1987 B-2 2004 A	649845 FM1 649845 GA6	7/16/1987 5/27/2004	7/16/1987 5/19/2004	7/1/2027 7/1/2029	\$25,000 \$115,705	\$25,000 \$115,705
Niagara Mohawk Power Corporation Total	r olidaon Control Neverlue Bonus	2004 A	049045 GA0	3/2//2004	3/19/2004	77172029	\$429,465	\$429,465
NYS Electric & Gas Corporation NYS Electric & Gas Corporation	Pollution Control Revenue Bonds Pollution Control Revenue Bonds	2005 A 2004A	649845 GJ7 649845 GDO	5/27/2005 8/26/2004	5/18/2005 8/26/2004	7/1/2026 12/1/2027	\$65,000 \$34,000	\$65,000 \$34,000
1410 Electric & Gas Gorporation	Adj./Fixed Rate Pollution Control Refunding Revenue	2004A	049043 GDO	0/20/2004	0/20/2004	12/1/2021	ψ34,000	\$34,000
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	1994 C	649845 DK 7	6/15/1994	6/15/1994	6/1/2029	\$63,500	\$63,500
	Adj./Fixed Rate Pollution Control Refunding Revenue							
NYS Electric & Gas Corporation NYS Electric & Gas Corporation	Bonds Pollution Control Revenue Rende	1994 D 2004C	649845 DP 6		10/25/1994	10/1/2029 4/1/2034	\$74,000	\$74,000
NYS Electric & Gas Corporation NYS Electric & Gas Corporation Total	Pollution Control Revenue Bonds	2004C	649845 GF5	8/26/2004	8/26/2004	4/1/2034	\$100,000 \$374,000	\$100,000 \$374,000
•								
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	2004A	649845 GB4	8/26/2004		5/15/2032	\$10,500	\$10,500
Rochester Gas & Electric Company Rochester Gas & Electric Company	Pollution Control Revenue Bonds Pollution Control Revenue Bonds	2004B 1997A	649845 GC2 649845DWI 34	8/26/2004 8/19/1997	8/26/2004 8/1/1997	5/15/2032 8/1/2032	\$50,000 \$34,000	\$50,000 \$34,000
Rochester Gas & Electric Company	Pollution Control Revenue Bonds	1997B	649845DX9 34	8/19/1997	8/1/1997	8/1/2032	\$34,000	\$34,000
Rochester Gas & Electric Company Rochester Gas & Electric Company Total	Pollution Control Revenue Bonds	1997C	649845DY733	8/19/1997	8/1/1997	8/1/2032	\$29,350 \$157,850	\$29,350 \$157,850
Rochester das & Electric Company Total							\$157,050	\$157,030
Subtotal - Conduit Utility Bonds							\$1,510,920	\$1,510,920
Green - Jobs Green New York Program Finar	acing:							
Green - Jobs Green New York Program Final	icing.							
Residential Energy Efficiency Financing Rev	enue Bonds, Series 2013A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		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	7/1/2015	\$2,080	\$0
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		64985LAC2 64985LAD0	8/1/2013 8/1/2013	8/1/2013 8/1/2013	7/1/2016 7/1/2017	\$2,105 \$1,930	\$0 \$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	\$1,755	\$1,755
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. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		64985LAH1 64985LAJ7	8/1/2013 8/1/2013	8/1/2013 8/1/2013	7/1/2021 7/1/2022	\$1,780 \$1,590	\$1,780 \$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		64985LAL2	8/1/2013	8/1/2013	7/1/2024	\$1,385	\$1,385
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds		64985LAL2 64985LAL2	8/1/2013 8/1/2013	8/1/2013 8/1/2013	7/1/2025 7/1/2026	\$1,350 \$1,375	\$1,350 \$1,375
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013A	64985LAL2	8/1/2013	8/1/2013	7/1/2027	\$1,075	\$1,075
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2013A	64985LAL2	8/1/2013	8/1/2013	7/1/2028	\$660 \$24.200	\$660 \$14,215
NYS Energy Res. & Development Auth. Total							\$24,300	\$14,215
Residential Energy Efficiency Financing Rev								
NYS Energy Res. & Development Auth. 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 8/20/2015	7/1/2016 7/1/2017	\$2,420	\$0 \$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2015A 2015A	not applicable not applicable	8/6/2015 8/6/2015	8/20/2015	7/1/2017	\$3,385 \$3,408	\$0
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2015A	not applicable	8/6/2015	8/20/2015	7/1/2019	\$3,410	\$3,410
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015 8/20/2015	7/1/2020	\$3,305	\$3,305
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	7/1/2021 7/1/2022	\$3,120 \$3,100	\$3,120 \$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. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds	2015A 2015A	not applicable not applicable	8/6/2015 8/6/2015	8/20/2015 8/20/2015	7/1/2024 7/1/2025	\$3,200 \$3,200	\$3,200 \$3,200
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	8/6/2015	8/20/2015	7/1/2026	\$3,155	\$3,155
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2015A	not applicable	8/6/2015	8/20/2015	7/1/2027	\$3,180	\$3,180
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds	2015A 2015A	not applicable	8/6/2015	8/20/2015 8/20/2015	7/1/2028 7/1/2029	\$3,250 \$3,040	\$3,250 \$3,040
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2015A 2015A	not applicable not applicable	8/6/2015 8/6/2015	8/20/2015	7/1/2029	\$2,025	\$2,025
NYS Energy Res. & Development Auth. Total	3, , ,						\$46,358	\$37,145
Residential Solar Loan Revenue Bonds, Seri	es 2015							
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	10/23/2015	10/23/2015	6/1/2025	\$12,812	\$11,838
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. NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds Residential Solar Loan Revenue Bonds	2015A 2015A	not applicable not applicable	2/10/2016 4/8/2016	2/10/2016 4/8/2016	6/1/2026 9/1/2023	\$6,058 \$1,592	\$5,626 \$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	\$5,705
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	7/11/2016	7/11/2016	12/1/2023	\$1,788	\$702
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds Residential Solar Loan Revenue Bonds	2015A 2015A	not applicable not applicable	7/11/2016 9/28/2016	7/11/2016 9/28/2016	12/1/2026 3/1/2024	\$7,017 \$1,256	\$6,554 \$1,256
NYS Energy Res. & Development Auth.	Residential Solar Loan Revenue Bonds	2015A	not applicable	9/28/2016	9/28/2016	3/1/2027	\$5,011	\$4,691
NYS Energy Res. & Development Auth. Total							\$42,675	\$36,372
Residential Energy Efficiency Financing Rev	enue Bonds, Series 2016A							
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds		not applicable	9/22/2016	9/22/2016	7/1/2017	\$1,045	\$0
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds Residential Energy Efficiency Financing Revenue Bonds	2016A 2016A	not applicable not applicable	9/22/2016 9/22/2016	9/22/2016 9/22/2016	7/1/2018 7/1/2019	\$1,585 \$1,600	\$0 \$1,600
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	not applicable	9/22/2016	9/22/2016	7/1/2019	\$1,620	\$1,620
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds	2016A	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	2016A	not applicable	9/22/2016	9/22/2016	7/1/2022	\$1,505	\$1,505

						Amount	Amount
Company	Project description Ser	ries CUSIP	Date Closed I	Date Issued	Maturity	Issued (000's)	Outstanding (000's)
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds 201		9/22/2016	9/22/2016	7/1/2023	\$1,460	\$1,460
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds 201	16A 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 201	16A 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 201	16A 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 201	16A 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 201			9/22/2016	7/1/2028	\$1,595	\$1,595
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds 201			9/22/2016	7/1/2029	\$1,635	\$1,635
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds 201			9/22/2016	7/1/2030	\$1,680	\$1,680
NYS Energy Res. & Development Auth.	Residential Energy Efficiency Financing Revenue Bonds 201	16A not applicable	9/22/2016	9/22/2016	7/1/2031	\$1,690	\$1,690
NYS Energy Res. & Development Auth. Total						\$23,180	\$20,550
B. 11. 11.10.1. 1	0.1						
Residential Solar Loan Green Revenue Bond		404	0/04/0040	0/04/0040	4/4/0000	04.000	44.000
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018	3/21/2018	4/1/2020	\$1,600	\$1,600
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018 3/21/2018	3/21/2018 3/21/2018	4/1/2021 4/1/2022	\$1,500	\$1,500
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201					\$1,500	\$1,500
NYS Energy Res. & Development Auth. NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018 3/21/2018	3/21/2018 3/21/2018	4/1/2023 4/1/2024	\$9,400	\$9,400 \$1,300
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201 NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018	3/21/2018	4/1/2024	\$1,300 \$1,100	\$1,300 \$1.100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018	3/21/2018	4/1/2025	\$1,100	\$1,100
NYS Energy Res. & Development Auth.	NYSERDA Residential Financing Green Revenue Bonds 201 NYSERDA Residential Financing Green Revenue Bonds 201		3/21/2018	3/21/2018		\$1,100	\$1,100 \$1,000
NYS Energy Res. & Development Auth. Total		IOA	3/2 1/20 10	3/2 1/2010	10/1/2027	\$1,000 \$18,500	\$1,000 \$18,500
N 13 Ellergy Res. & Development Auth. Total						\$10,500	\$10,500
Residential Solar and Energy Efficiency Loan	Green Revenue Bonds, Series 2019A						
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ 201	19A 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 Enerc 201		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 Energ 201	19A 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 Energ 201	19A 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 201	19A 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 201	19A 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 Energ 201	19A 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 Energ 201	19A 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 201		31/21/19	3/21/2019	4/1/2028	\$820	\$820
NYS Energy Res. & Development Auth.	NYSERDA Green Jobs Residential Solar Level and Energ 201	19A 64986RAK0	31/21/19	3/21/2019	4/1/1935	\$5,245	\$5,245
NYS Energy Res. & Development Auth. Total						\$15,510	\$15,510
Subtota - Green Jobs - Green New York Pro	ogram Financing					\$170,522	\$142,292
Grand Total						\$1,681,442	\$1,653,212

June	, 2019
June	, 2019

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, 2019, and expect to issue our reports thereon dated June ____, 2019. 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.

Members of the Authority New York State Energy Research and Development Authority Page 2 of 4

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. In fiscal year 2019, the Authority adopted Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75), which modifies financial reporting requirements related to postretirement benefits other than pensions (OPEB) provided by governmental employers. As a result of adopting this new accounting standard, the Authority has presented its net OPEB liability on the statement of net position and enhanced its note disclosures and schedules for required supplementary information. Additionally, the Authority has restated the beginning net position as of April 1, 2018 to reflect the cumulative effective of adopting the new accounting standard. Notes 2(m) and 12 to the basic financial statements describe the impact of implementation of this standard on the Authority's 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, 2019 financial statements.

Members of the Authority New York State Energy Research and Development Authority Page 3 of 4

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, 2019.

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 ____, 2019, 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.

Members of the Authority New York State Energy Research and Development Authority Page 4 of 4

Very truly yours,

KPMG LLP



June ____, 2019

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, 2019, 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



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, 2019, 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 _____, 2019.

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 ____, 2019



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, 2019, 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 ____, 2019.

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 ____, 2019



Reso	lution	No.	

RESOLVED, that the Authority's Annual Bond Sales Report for the fiscal year April 1, 2018 through March 31, 2019, and the information contained therein, as presented at this June 26, 2019 meeting, is adopted and approved for submission pursuant to Section 2800 of the Public Authorities Law.

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.

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.

Reso	lution	No	
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RESOLVED, that the 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, are approved by the Board.

New York State Energy Research and Development Authority

Operations, Accomplishments, Mission Statement, and Performance Measurement Annual Report

Fiscal Year Ended March 31, 2018

Pursuant to Public Authorities Law Section 2800(1)

Final Report | June 2019



NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

Advance innovative energy solutions in ways that improve New York's economy and environment.

Vision Statement:

Serve as a catalyst – 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.

New York State Energy Research and Development Authority

Operations, Accomplishments, Mission Statement, and Performance Measurement

Annual Report

Fiscal Year Ended March 31, 2019

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 includes a description 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 Clean Energy Fund

During 2018, 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 2018.

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 will employ innovative solutions that remove barriers, solve customer needs, and provide value. 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 use. 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.

3.1.1 Information Products

Information Products and Brokering was approved in 2018 with \$8.5 million in CEF funding. It provides a platform to develop information tools and resources needed to increase customer demand and adoption of energy efficiency and clean energy solutions. This initiative will increase customer demand for energy efficiency and reduce acquisition costs by enabling solution providers.

3.1.2 Energy Storage

New York is at the beginning stages of deploying storage to meet aggressive storage targets of 1,500 MW of advanced energy storage by 2025 and 3,000 MW by 2030. In June 2018, Department of Public Service (DPS) and NYSERDA staff released the New York State Energy Storage Roadmap which includes a series of recommended actions intended to achieve these targets. On December 13, 2018 the New York Public Service Commission (PSC) issued an Energy Storage Order that adopted many of the Roadmap recommendations and authorized incentive funding, bring total available market acceleration bridge incentives to \$400 million including Regional Greenhouse Gas Initiative funds authorized by the NYSERDA Board. The first initiative described in this CEF Energy Storage chapter entitled Reducing Barriers to Deploying Distributed Energy Storage, was approved in 2016 and is comprised of \$24.5 million in CEF funding. It will primarily target building owners and operators, permitting agencies, and vendors to address stall points confronting energy storage and increasing soft costs. The goal is to reduce total soft costs by up to \$50 per kWh for a distribution/bulk storage system and up to \$150 per kWh for a customer sited system by 2025 compared to 2017-18 costs. The second initiative of the Energy Storage chapter, Solar Plus Energy Storage, was approved in 2018 and is a first step in NYSERDA's solar plus energy storage market development strategy and includes \$40 million to incentivize paired solar + storage projects. This initiative works in conjunction with the first initiative to address soft cost barriers, as well as enabling industry and utilities to address interconnection, metering and compensation mechanisms associated with paired combination systems sooner than otherwise would have occurred. Both initiatives are part of NYSERDA's coordinated intervention strategies to develop and deploy energy storage products and remove market barriers to their adoption.

3.1.3 Workforce Development and Training

Thus far, NYSERDA has committed over \$68 million of CEF funds towards two initiatives. Workforce Development Industry Partnerships was approved in 2016 but added \$10 million in funding in 2018 to allow for additional projects. The Clean Technology and Energy Efficiency Talent Pipeline initiative was approved in 2018 with \$47 million in CEF funding. Its purpose is to ensure that NYS clean technology and energy efficiency businesses have a robust supply of new and existing workers with the required occupational skills. This initiative focuses on expanding training infrastructure which will ultimately lead to soft cost reductions by decreasing the efforts required to getting a worker to full productivity.

3.1.4 Resource Acquisition Transition

The Resource Acquisition Transition initiatives began in 2016 to continue operation and transitioning of programs from legacy portfolios. In 2018, \$9 million was added to the Combined Heating and Power initiative and \$2.3 million was added to the Single-Family Market Rate program to extend the initiatives through 2019. In addition, \$8 million was added to the Anaerobic Digester initiative in 2018 to support refurbishment of previously installed digester systems.

3.1.5 Clean Energy Products

Underutilized Product Support was approved in 2017 and aims to address the barriers in the market and work to bolster availability of advanced products in the supply chain, expand demand for more advanced HVAC technologies among end-users, and support successful business models in the market to increase sales. In 2018, \$17.6 million was added to the budget to support activities related to product and appliance standards in New York for product categories that are not currently covered by federal standards, for a total approved budget of \$46.4 million.

3.1.6 Multisector Solutions

NYSERDA has approved \$106.9 million toward five initiatives aimed at supporting the development and deployment of clean and renewable sources of energy, a more efficient and responsive grid, and more energy-efficient buildings. These multisector solutions will address cross-cutting barriers and opportunities that are not specific to one market sector, including reducing soft costs, providing technical assistance, and increasing confidence in clean energy solutions. Four of these initiatives, The Energy Efficiency Soft-Cost Challenge, Aggregated Technical Services, Commercial and Industrial Carbon Challenge, and Clean Energy Siting and Soft Cost Reduction were approved in 2017. The Pay for Performance (P4P) was approved in

2018 with a budget of \$55.76 in CEF funding. P4P structures have not been successfully employed with smaller customers. This initiative aims to solve this issue by working to improve accuracy in savings and estimates. P4P is designed to respond to the energy service contract that guarantees lower cost of energy with the risk of underperforming.

3.1.7 New Construction

The New Construction initiative was approved in 2017 and initially funded at \$96.6 million. A modification to the initiative in 2018 added over \$52 million to add a Net Zero Energy Commercial/ Industrial Competition. The competition will provide a unique program model in which technical assistance and incentives for all net zero energy technologies (efficiency, renewables, energy storage, electric vehicle charging, etc.) are provided through a single program to align with economic development project timelines.

3.1.8 Innovation Capacity and Business Development

NYSERDA supports a vibrant, self-sustaining, clean energy technology innovation ecosystem to accelerate the growth and scale of new cleantech enterprises in the State. To achieve this goal, NYSERDA has approved \$86.3 million of CEF funds through 2021 toward three initiatives to increase the number and success rate of clean energy startups, encourage private investment in startups, facilitate strategic partnerships with corporations, and accelerate scaling. Manufacturing Corps and Novel Business Models and Offerings were approved in 2017. The Cleantech Startup Growth initiative was approved in 2016 but added \$9 million in 2018 to support two new activities; 76West and Innovation Advisors. 76West is and accelerator program and business competition to build clean energy businesses and jobs in New York States Southern Tier region. Innovation Advisors continues to seek ways to better serve the entrepreneurs and companies it supports through various initiatives.

3.1.9 Renewable Optimization

NYSERDA has approved \$55.5 for two initiatives aimed at optimizing the energy output and uptime of renewable resources. The Energy Storage Technology and Product Development initiative was approved in 2017. The National Offshore Wind Research and Development Consortium was approved in 2018 with a budget of \$22.5 million in CEF Funding. The consortium will address US-specific technology issues and accelerate cost reductions in the United States offshore wind sector. It will focus on supporting innovations in wind plant design, developing methods to reduce installation costs, and exploring advanced technological solutions for operations.

3.2 New Efficiency, New York

On April 20, 2018, Governor Cuomo announced the most aggressive energy efficiency strategy in New York State's history, to set the State on a path to accelerate energy efficiency and reduce greenhouse gas (GHG) emissions, decrease consumer energy costs, and create job opportunities. This initiative, known as New Efficiency: New York, will support the growth of energy efficiency businesses and further Reforming the Energy Vision opportunities for market innovation.

Recommendations in the comprehensive energy efficiency initiative white paper were issued by the New York State Department of Public Service (DPS) and NYSERDA on April 26, 2018. The white paper—guided by a new 2025 energy efficiency target of 185 trillion British thermal units (TBtu) of cumulative annual site energy savings—will accelerate progress towards the State's ambitious clean energy goals, including meeting one third of the emissions necessary to achieve 40% reduction of GHG emissions by 2030 (commonly referred to as "40 by 30") from 1990 levels.¹

In addition, on January 15, 2019. Governor Cuomo's State of the State address announced New York State's nation-leading clean energy and jobs agenda will put the State on a path to carbon neutrality. The Governor proposed the following goals:

- 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

With these goals, New York 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.

NYSERDA and DPS. 2018. "New Efficiency: New York". NYSERDA. https://www.nyserda.ny.gov/About/Publications/New-Efficiency.

3.3 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. This solicitation will 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.

3.4 Solar

On June 18, 2018, NYSERDA announced improvements to NY-Sun's highly successful Megawatt Block incentive program for non-residential and large commercial and industrial solar projects. The redesign, made in response to a rapidly changing market, includes expanding the incentives, supporting larger solar projects and encouraging development in a greater variety of locations, including brownfields, landfills and at affordable housing locations. The NY-Sun program supports Governor Andrew M. Cuomo's mandate for 50 percent of the state's electricity from renewable resources by 2030. Additionally, in the annual State of the State address, Governor Cuomo announced plans to double the distributed solar target to 6 GW by 2025.

3.5 Energy Storage

In 2018, Governor Andrew M. Cuomo announced a nation-leading goal of 1,500 Megawatts (MW) of energy storage by 2025. NYSERDA and the New York State Department of Public Service (DPS), together with stakeholders, developed the New York State Energy Storage Roadmap. The Roadmap identified the most promising near-term policies, regulations, and initiatives needed to realize the Governor's ambitious 2025 target on a path to a 2030 storage target.

In December 2018, the New York Public Service Commission (PSC) issued a landmark energy storage order, based upon the Roadmap recommendations. The order established a 3,000 MW by 2030 energy storage goal and deployment mechanisms to achieve both the 2025 and 2030 energy storage targets and focuses on:

- Improving the overall efficiency of the system by stimulating third-party investment
- Uncovering and rewarding locational and time-of-day values
- Spurring the pace of cost-reduction and efficiencies by seeking markets at scale and promoting competition
- Removing impediments to accessing finance as well as data that highlights areas of the grid with the greatest need for the benefits of storage
- Authorizing a total \$350 million in bridge incentives to accelerate the energy storage market, including funding for solar-plus-storage projects within the NY-Sun initiative, plus another \$53 million RGGI funds
- Directing the New York's six investor-owned utilities to hold competitive procurements for a minimum of 350 MW of bulk-sited energy storage
- Regulatory changes to customer rates and utility solicitations that reflect the environmental benefits and resiliency energy storage brings to the grid
- Recommendations to improve wholesale market design and enable distributed energy resources to meet distribution system and wholesale system needs more cost effectively for ratepayers
- Continued efforts to streamline permitting and siting challenges, reduce the non-hardware costs of energy storage, and ensure straightforward access to market rules and opportunities

3.6 Clean Energy Action Plan

The Clean Energy Action Plan provides relief for businesses and residents affected by a utility company natural gas moratorium. As part of this plan, the State will offer new clean energy incentives and investments to lower energy costs for consumers, promote economic development in effected areas and deliver additional resources for new construction projects, energy efficiency awareness, and community support. The Clean Energy Action Plan includes the following incentives and programs offered by the NYSERDA:

- New Construction: \$28 million in incentives and services will be available to new customers, including low- to moderate-income residential developments and waitlisted natural gas customers, to access alternative heating and cooling systems and energy efficiency services.
- Energy Efficiency: \$25 million in investments to implement energy efficiency measures for existing customers to reduce overall peak demand constraints.
- Additional Incentives for residential and commercial customers in the moratorium areas to install clean heating and cooling systems.
- Community Outreach: A consumer awareness campaign will help communities, businesses, and individuals access the available programs and incentives to help them heat their homes with clean resources and reduce energy waste. Beginning in April, NYSERDA will sponsor sustainable and clean energy community workshops.

NYSERDA is also increasing its support for the Sustainable Westchester Clean Heating Campaign. The campaign will expand the scope of HeatSmart Westchester—a community level initiative designed to facilitate adoption of fossil-free heating and cooling solutions, such as ground source and air source heat pumps, as well as high-efficiency building envelope measures.

Additionally, Con Edison is deploying \$165 million toward heat pumps and increasing gas efficiency in the Westchester area to support residential, multifamily, and commercial and industrial customers. The New York Power Authority (NYPA) is offering an additional \$32 million in low-cost financing services to its Westchester customers.

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 2018 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	NYSERDA's vision is to serve as a catalyst for advancing energy innovation and technology, transforming New York State's economy, and empowering people to choose clean and efficient energy as part of their everyday lives.					
Stakeholders	New York State er economy.	nergy users, busine	sses, and institution	ns engaged in the c	lean energy	
Core Value	NYSERDA will ser	ve as a source of o	bjective, credible ir	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 6 provide performance information for each of the five outcomes, including data that describes NYSERDA's annual incremental commitment performance for calendar year 2018 and the total cumulative acquired progress achieved through December 2018.

Targets for calendar year 2019 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 more appropriately aligns 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 the move to 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 2018 Commitments Addition** represents the expected target NYSERDA set in the prior year for additional commitments made during this calendar year.
- The column **Achieved CY 2018 Commitments Addition** represents the commitments NYSERDA achieved during this calendar year.
- The column Target CY 2019 Commitments Addition represents NYSERDA's expected target for additional commitments made during the calendar year, representing work to build the project pipeline.
- The column Cumulative Acquired Benefits at end of CY 2018 represents the total benefits NYSERDA achieved from projects that have been completed through 2018.

The quantitative performance measurement data are supplemented with contextual information, as needed and when available, and highlights of additional 2018 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.

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 2018, 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) was mixed, as the MMBtu target was exceeded while 81% of the MWh target

was achieved. The underperformance on electricity saved can be attributed to slower than expected market uptake of certain new initiatives. NYSERDA continues to develop and implement new approaches under the CEF, while rigorously monitoring the progress of existing market activities and complementary utility programs. The goal is to build out portfolio diversity in a way that can deliver investment goals while monitoring the performance of every element to keep the portfolio on track for the long-term. NYSERDA commonly refers to this approach with the CEF, in the spirit of "market transformation," as the Test-Measure-Adjust model.

Table 2. Performance Measures—Efficient Use of Energy

	Commitment Pipeline			Acquired Benefits
Performance Measures	TARGET CY 2018 Commitments Addition	Achieved CY 2018 Commitments Addition	TARGET CY 2019 Commitments Addition	Cumulative Acquired Benefits at end of CY 2018
Electricity ^a (GWh) saved due to improved energy efficiency in New York's buildings and facilities.	675.8	544.4	792.7	8,242
Fossil Fuels ^a (MMBtu) saved (in millions) due to improved energy efficiency in New York's buildings and facilities.	4.0	4.2	4.1	18.3
Energy Bill Savings Annual direct energy bill savings realized by participating customers (all programs).	**C	\$101	\$158	\$1,342

- 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 292-GWh and 1.6- million MMBtu installations will be "retired" in 2018. These amounts and the associated emission reduction and customer bill savings have been netted out of the Total Acquired Benefits at End of CY 2018 values reported.
- The measure will be monitored and reported but a target has not been set. NYSERDA has 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 2a. Comparison Points—Efficient Use of Energy

Comparison Points				
Electricity (GWh) 2017 statewide sales of electricity—144,992 GWh ^a				
Fossil Fuels (MMBtu)	2016 statewide (R,C,I) natural gas and petroleum usage—1,003 million MMBtu ^a			
Number of New York households served	2017 occupied housing units in NYS—7,304,332 ^b			
Number of commercial and industrial customers served	2016 business establishments in NYS—544,073°			

- ^a NYSERDA, Patterns and Trends, Energy Information Administration (EIA), 2018
- 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 1.25 million homes each year and enough natural gas, propane, oil, and other heating fuels to heat 268,340 homes each year.
- More than 890,000 households and 38,800 commercial, industrial, and institutional customers reduced their energy use and annual energy bills by participating in NYSERDA programs since 1998.

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. Statewide procurement of new Tier 1 large-scale renewable resources (facilities that came into operation on or after January 1, 2015) during the period 2017 to 2021 is expected to total at least 9,347,020 MWh, or approximately 1,869,400 MWh per year.

The contribution from renewable energy resources to meet New York's electric load rose to 28.1% in 2017 from the 2014 baseline of 25.9%, an increase of 2.2%. In addition, as a result of several procurement programs, including annual solicitations for new large-scale renewables, solar incentive programs, and other State procurements, New York has a contracted pipeline of more than 10,000 GWh of renewable generation projects. Once operational, these projects are expected to deliver significant progress towards the achievement of the CES.

On solar PV capacity installed, in 2018, NY-Sun saw fewer new commitments than initially expected due primarily to regulatory uncertainty, and adjusted program requirements. NY's Department of Public Service signaled that it was making changes to the Value of Distributed Energy Resources (VDER) Order, and published whitepapers in July and December 2018 with proposed revisions. Many developers delayed project development until the new VDER Order was released in April 2019. Additionally, as part of NY-Sun's program redesign in February 2018, NYSERDA increased the project maturity milestones requirement for developers to submit project applications to NY-Sun. A large number of projects are still under development but are not appearing in NYSERDA's commitment queue until a later date. Finally, NYSERDA's new bridge incentives for PV projects paired with storage are causing many developers to redesign their systems with batteries, which requires additional time and permitting.

Table 3. Performance Measures—Renewable and Diverse Energy

	Commitment Pipeline			Acquired Benefits
Performance Measures	TARGET CY 2018 Commitments Addition	Achieved CY 2018 Commitment Addition	TARGET CY 2019 Commitments Addition	Cumulative Acquired Benefits at end of CY 2018
Renewable resources electricity produced 1) Electricity Production (GWh) delivered to wholesale power market from incentivized installations ^b	1,483	2,979	1,524	3,075ª
Electricity Production (GWh) from on-site installations ^b	570	372	863	1,683
Solar PV capacity (GW) from all NYSERDA funded solar PV programs, including NY-Sun 3 GW goal ^b	0.402	.296	.6	1.254

a 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.

b 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	2017 Renewable Energy Serving Load – 28.1%		

a CES Annual Progress Report – 2017 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 110 large-scale renewable generation projects representing 4,449 MW of renewable generation capacity. There are 62 facilities operating with the remainder of the projects under design and construction.
- 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 work on these plans is anticipated to be completed in mid-2019.

Table 4 presents NYSERDA's progress toward the clean energy economy performance measures. Procurement activities by NYSERDA include the issuance of the second RES solicitations in 2018. Combined with the renewable energy projects previously announced under Governor Cuomo's Clean Energy Standard, New York has now awarded 46 projects worth more than \$2.9 billion

As noted earlier, the pipeline of projects in development is robust. In fact, NYSERDA's awards resulting from the 2018 CES solicitation and the 26 projects awarded in the first solicitation account for 20 percent more new renewable capacity than was awarded under the decade-long Renewable Portfolio Standard, the predecessor to Governor Cuomo's Clean Energy Standard.

In the first quarter of 2019, additional large-scale renewable contracts have been executed which are expected to leverage nearly \$1 billion of private investment.²

See https://www.nyserda.ny.gov/About/Newsroom/2019-Announcements/2019-01-18-NYSERDA-Announces-Details-for-20-Large-Scale-Renewable-Energy-Projects

Table 4. Performance Measures—Clean Energy Economy

	Commitment Pipeline			
Performance Measures	TARGET CY 2018 Commitment Addition	Achieved CY 2018 Commitment Addition	TARGET CY 2019 Commitments Addition	,
Total funding leveraged from all NYSERDA investments (\$million) ^{a,b}	\$3,241	\$3,847	\$3,101	

Acquired Benefits	
Cumulative Acquired Benefi end of CY 201	
\$12,243	

- 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.

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 \$144 million in 2018 for a total of \$1,428 million through the end of calendar year 2018.
- As a result of NYSERDA's technology and business development investments, there are more than 467 new and improved clean energy products in the market (including 33 new products added in 2018) in all end-use energy sectors from high-efficiency furnaces to advanced lighting controls and hybrid electric buses.
- As of the end of 2018, there are currently 91 new clean energy products in development with support from NYSERDA's technology and business development programs.
- As of the end of 2018, annual sales of products developed with NYSERDA support have reached \$2,480 million.³
- As of the end of 2018, there are currently 81 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 271 clients and helped these startups raise more than \$378 million in private capital as well as almost \$105 million of non-NYSERDA grant funding, while generating 1,590 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 2018 target for carbon reductions was exceeded (achieving 140%) and can be attributed to the increased overall procurement amount in excess of the anticipated target from the 2018 CES solicitation.

Sales data for both 2017 and 2018 have been added to the cumulative total as there is no longer a lag in the collection of annual product sales. Sales were \$40 million and \$25 million for 2017 and 2018, respectively.

Table 5. Performance Measures—A Cleaner Environment

	Co	mmitment Pipelir	пе	
Performance Measures	TARGET CY 2018 Commitment Addition	Achieved CY 2018 Commitment Addition	TARGET CY 2019 Commitments Addition	
CO ₂ equivalent emission reductions due to NYSERDA's energy efficiency, renewable and diverse energy programs (annual metric tons) (All programs)	1,648,887ª	2,302,786	2,049,015	

Acquired Benefits	
Cumulative Acquired Benefits at end of CY 2018	
8,272,905	

Table 5a: Comparison Points—A Cleaner Environment

Comparison Points			
CO ₂ equivalent emission reductions	2016 annual NYS power sector emissions—31.5 million metric tons CO ₂		

Energy-related environmental policies in 2018 informed by NYSERDA reports/studies:

- The New York State Offshore Wind Master Plan⁴ was released early in Q1 2018 and includes 20 supporting studies, including many focused on wildlife and environmental topics. The Environmental Research Program played a key role in conducting research, analysis, and outreach to evaluate the potential for offshore wind energy development to proceed in a way that is both responsible and cost effective. This Master Plan sets forth New York's comprehensive strategy to reach the 2,400MW goal by 2030.
- Program staff are coordinating with the Department of Homeland Security and Emergency Services' "State Hazard Mitigation Plan" update, which is intended to integrate climate change more fully into the new Plan.
- Program staff worked with Dr. Richard Moss, who is leading the Independent Advisory
 Committee (IAC) on the National Climate Assessment (NCA). This group was recently
 disbanded by the Federal administration and reinstated by Governor Cuomo under the
 auspices of the US Climate Alliance. The IAC is developing recommendations for states
 and future NCAs.
- Program staff presented on the ClimAID Assessment at a two-day workshop on sub-national climate assessments, held in August 2018 in Washington, D.C., and sponsored by the National Academies. The workshop brought together organizations from across the country to discuss different approaches to climate assessments.

^a The target has been updated from the prior year report.

^{4 &}lt;u>https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Offshore-Wind-in-New-York-State-Overview/NYS-Offshore-Wind-Master-Plan</u>

- The Program organized a symposium, "Climate Change & Buildings: Adaptation Research Planning," that drew nearly 100 attendees from across the buildings industry to learn about climate impacts and adaptation strategies for the sector.
- The Program sponsored the Wood Stove Design Challenge that was held at the National Mall in Washington, D.C. on November 9–13, 2018. NYSERDA supported this event to demonstrate and evaluate wood stoves for energy efficiency and emissions performance. The Northeast States for Coordinated Air Use Management (NESCAUM) and Hearth Lab Solutions demonstrated an integrated duty-cycle test protocol developed with NYSERDA support to provide a more representative test of wood stove performance, leading to more realistic efficiency and emissions evaluations.
- In October 2018 the Program hosted an Offshore Wind <u>State of the Science Workshop</u>. The two-day workshop was divided into separate sessions that started with a description of the stressors imparted by offshore wind development and proceeded to discuss those stressors by wildlife groups. The event featured speakers from the US and Europe and was attended by more than 180 attendees.

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 42% improvement in direct contracts / contract modification and maintenance of improvements for open enrollment / task work orders at < 1 week. These results are part of a four-year trend in year over year improvements for contracting cycle time.

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 2016	CY 2017	TARGET CY 2017	CY 2018	TARGET CY 2019
Invoice payment: 1) Number of invoices paid within 30 days	86,138 invoices	65,210 invoices	**a	72,053 invoices	**27
Percent of payments made within 30 days	99.99%	99.99%	100%	99.99%	100%

^a 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.

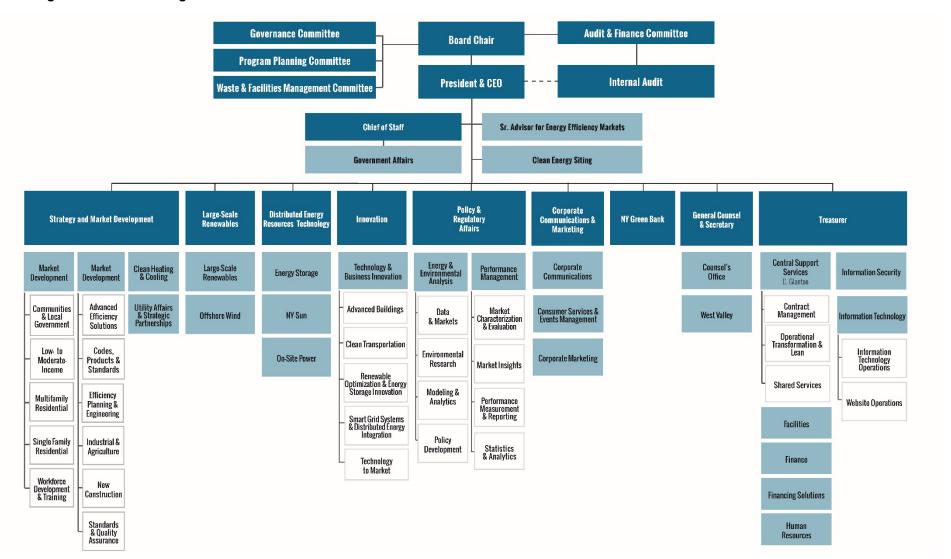
Table 7. Performance Measures—Contract and Cycle Time (Solicitations)

CONTRACT AND CYCLE TIME—SOLICITATIONS NYSERDA is responsive to customer needs—delivering accurate and timely information, services and programs. CY 2017 CY 2018 **Median Total Target CY** Median **Target CY Performance Measures** 2018 Total No. of 2019 No. of Weeks Weeks Contract Processing Time—Median time to Process (Weeks): 1) Due Date Solicitations 32 32 30.86 32 Open Enrollment and Task Work Orders 3 2 2 2.14 Open Enrollment (Automated)^a 1 1 0.71 .85 4) All Other Actions (Direct Contracts and **Contract Modifications**) 3 2 1.71 1

^a 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

Figure 1. NYSERDA Organizational Structure



5.1 Commercial

The Commercial unit works to spur innovation, investment, and demand in clean energy and energy efficiency in the State's commercial existing building stock. Commercial will address overcoming market barriers to develop a well-functioning market for clean energy in the buildings sector, increasing energy service companies (ESCO) that provide for this market; customers positioned to invest in clean-energy projects via market-rate, long-term, self-sustaining financing options; the use of cost-effective, technology-enabled tools, real-time energy management, energy services, and clean energy marketplaces; and deep, comprehensive efficiency projects occurring in all significant market segments.

5.2 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.

5.3 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.

5.4 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.

5.5 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.

5.6 Low- to Moderate-Income

The Low- to Moderate-Income 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 LMI households. The LMI unit also manages single-family residential energy efficiency incentive programs.

5.7 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.

5.8 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.

5.9 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 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

5.11 Code, 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

5.12 Standards and Quality Assurance

The Standards and Quality Assurance unit provides effective and efficient infield quality assurance to support NYSERDA investment in clean energy technologies and foster market-based strategies to increase consumer and investor confidence in clean energy technology and solutions. This includes working to deploy professional certifications and technical/work standards to support quality assurance within the clean energy market.

5.13 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.

5.14 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.

5.15 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 \$3 billion in agreements awarded over the past two years, and execute on its offshore wind procurement responsibilities as assigned by the New York Public Service Commission.

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 On-Site Power

The On-Site Power unit will direct its major focus on individual buildings and their adoption of natural gas-fueled Combined Heat and Power systems that run daily as well as during a grid outage. The team will also assist the Anaerobic Digester Gas marketplace and the fuel cell marketplace with identifying business models that can lead to self-sustaining markets. On-site Power will also seek to advance the market for hybrid on-site power systems.

5.18 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.

5.19 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.

5.20 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.

5.21 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.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit nyserda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

New York State Energy Research and Development Authority

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info@nyserda.ny.gov nyserda.ny.gov



State of New York

Andrew M. Cuomo, Governor

New York State Energy Research and Development Authority

Richard L. Kauffman, Chair | Alicia Barton, President and CEO

RESOLVED, that the Authority's Operations and Accomplishments and Mission Statement and Measurements Annual Report as presented at this June 26, 2019 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 DISPOSITION OF REAL AND PERSONAL PROPERTY

For the Fiscal Year Ended March 31, 2019

Section 1. Real Property Held In the Name Of NYSERDA as of March 31, 2019

- 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 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 2. 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 no dispositions of real property or dispositions of personal property with a value in excess of \$5,000.

Resolution	No.
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RESOLVED, that the "Guidelines, Operative Policy and Instructions for the Disposal of Real and Personal Property (June 2019)," 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 2019), 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.

2018-19 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, 2018 through March 31, 2019.

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

There are no changes to the Procurement Contract Guidelines from those the Members approved in June 2018.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

PROCUREMENT AND PROGRAM CONTRACT GUIDELINES, OPERATIVE POLICY AND INSTRUCTIONS

June 2018

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.

Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Dat
	Discretionary	N	136006	Alberto Aceves Comejo	Agbotic - Tech. Due Diligence	01/11/2019	\$10,000	\$10,000	\$10,000	\$10,000
	Discretionary	N	136007	New Venture Advisors LLC	Agbotic - Market DD	01/11/2019	\$35,000	\$35,000	\$17,500	\$17,500
	Discretionary	N	136119	NRG Energy Inc	Reimbursement to Clearway for	01/15/2019	\$5,000	\$5,000	\$5,000	\$5,00
	Non-Competitive	Υ	138090	General Electric International Inc	GE MAPS Software	03/15/2019	\$391,500	\$391,500	\$130,500	\$130,50
>200KW PV	Competitive	Y	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$270,000	\$280,000	\$49,513	\$49,5
	Competitive	Υ	104266	Couch White, LLP	RFP 3300 Outside Counsel Servi	09/27/2016	\$100,000	\$111,313		\$7,2
	Discretionary	Υ	112974	CHA Consulting Inc.	SEQR Services	04/21/2017		\$50,000		\$11,40
ADVANCED BUILDINGS	Discretionary	N	91066	Taitem Engineering, P.C.	Deep Energy Retrofits	02/19/2016		\$49,986	\$2,535	\$49,8
	Non-Competitive	Υ	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$240,000		\$240,0
ADVANCED ENERGY CODES	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$973,510		\$698,7
00020	Competitive	Υ	38888	Institute for Building Technology and Sa	Energy Code Training: EPros	01/10/2014		\$897,133	\$79,931	\$752,3
	Competitive	Υ	49730	T.Y. Lin International	Energy Code Support Services	10/15/2014		\$2,405,876	\$183,463	\$2,191,3
	Competitive	Υ	49731	New Buildings Institute, Inc.	NYStretch	10/15/2014		\$249,926	\$47,753	\$249,9
	Competitive	Υ	49732	Vidaris, Inc.	Code Manual for Design Pros	10/15/2014		\$149,962	\$145,862	\$149,9
	Competitive	Υ	49736	Karpman Consulting, LLC	Ecode Performance Enforcement	10/15/2014		\$74,816	\$10,262	\$74,8
	Competitive	Υ	62667	Building Media, Inc.	Energy Code Training and Suppo	04/16/2015		\$349,921	\$39,562	\$87,6
	Competitive	Υ	64597	ICF Resources, LLC	ECode Microsite	05/13/2015		\$249,961	\$54,440	\$154,3
	Non-Competitive	Υ	37589	International Code Council, Inc.	ECCCNYS Commentary IECC2015	11/21/2013		\$256,730		\$206,0
Affordable Housing Build & Dev	Discretionary	N	131739	Apprise, Incorporated	Research and analytic support	09/26/2018	\$50,000	\$50,000	\$50,000	\$50,0
AGRICULTURE ENERGY EFFICIENCY	Competitive	Υ	35743	Ensave, Inc.	AEEP Implementation Contractor	09/26/2013	\$1,092,660	\$4,217,605	\$484,197	\$3,124,9
Air Source Heat Pumps	Discretionary	N	124422	Bruce Harley Energy Consulting LLC	ASHP Consultant	03/15/2018	\$22,500	\$22,500	\$22,500	\$22,5
	Discretionary	N	127608	Rocky Mountain Institute	ELab Session	06/05/2018	\$10,000	\$10,000	\$10,000	\$10,0
	Discretionary	N	130549	The Cadmus Group, LLC	NYC ASHP Supply Chain Research	08/27/2018	\$50,000	\$50,000	\$50,000	\$50,0
ANAEROBIC DIGESTER	Competitive	Υ	29200	CDH Energy Corporation	RPS-CST Quality Assurance/Qual	09/17/2012		\$240,000		\$85,2
	Competitive	Y	29200A	Frontier Energy, Inc.	RPS CST QA/QC Support	03/30/2018	\$154,787	\$154,787	\$5,000	\$5,0
	Competitive	Y	29202	L&S Energy Services, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$5,000	\$41,0
	Competitive	Y	29203	Arcadis of New York, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$9,650	\$67,5
	Competitive	Υ	29204	Wendel WD Architecture, Engineering,	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$2,275	\$60,1
Behavior Support for Pilots	Discretionary	Υ	127000	Action Research Inc.	Behavior Support for Pilots	05/17/2018	\$50,000	\$50,000		
Campus/Technical Assistance	Non-Competitive	N	111668	Yale University	Campus/Technical Assistance	03/17/2017	\$270,000	\$300,000	\$82,120	\$97,1
CI Engy Siting & Soft Cost Red	Competitive	Υ	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016	\$521,200	\$632,727	\$32,554	\$120,5
Clean Energy Communities	Competitive	Υ	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016		\$541,000	\$158,396	\$226,2
	Discretionary	N	127094	First Colonie Company	2018 CEEP Training	05/21/2018	\$7,156	\$7,156	\$7,156	\$7,1
	Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019	\$5,000	\$5,000		
	Discretionary	Υ	113765	iPROMOTEu.com Inc.	Branded Marketing	05/12/2017		\$12,000		\$11,6
CLEAN TRANSPORTATION	Competitive	Υ	22942	Poseidon Systems, LLC	Renewable, Clean Energy and En	06/01/2011		\$1,500,000	\$473,493	\$1,481,4
IRANSPURTATION	Competitive	Y	27045	EV Connect Inc.	EV Connect, Inc. PON 2301 EVSE	03/05/2012		\$249,814		\$211,9

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MT (CLEAN TRANSPORTATION	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		\$10,000	\$546	\$546
		Non-Competitive	Υ	27553	Calstart	Implementation contractor for	04/17/2012		\$711,643	\$219,033	\$604,447
		Non-Competitive	Υ	107657	New York Battery and Energy Storage	NYS Energy Storage Outreach	12/05/2016		\$150,000		
(CLEANER GREENER COMMUNITIES	Competitive	Υ	30425	NYS Economic Development Council	EDGE Program Support Services	11/26/2012		\$574,823		\$574,821
		Competitive	Υ	30426-1	CEC Stuyvesant Cove, Inc.	EDGE Territory 3	06/05/2013		\$2,707,506		\$2,702,068
		Competitive	Υ	30427	NYS Economic Development Council	EDGE Territory 2	11/26/2012		\$2,133,125		\$1,994,659
		Competitive	Υ	30428	NYS Economic Development Council	EDGE Territory 1	11/26/2012		\$2,482,375		\$2,351,798
		Competitive	Υ	33867	Ecology and Environment Engineering, PC	C CGC Implementation Contractor	07/16/2013		\$4,500,000	\$569,123	\$3,654,332
		Competitive	Υ	119375	Erdman Anthony & Associates, Inc.	RFP3628FlexTechConsultUmbrella	10/17/2017	\$56,408	\$56,408	\$9,892	\$9,892
		Competitive	Υ	120837-1	L&S Energy Services, Inc.	RFP3628FlexTechConsultUmbrella	01/30/2018	\$28,204	\$28,204	\$6,835	\$6,835
		Competitive	Υ	123212	Steven Winter Associates, Inc.	RFP3628FlexTechConsultUmbrella	02/07/2018	\$169,224	\$169,224	\$6,304	\$6,304
		Competitive	Υ	124442	Leidos Engineering of New York, P.C.	RFP3628FlexTechConsultUmbrella	03/20/2018	\$42,306	\$42,306		
(Cleantech Geo Coverage	Discretionary	N	130448	Cornell University	2019 Entrepreneurship at Corne	08/23/2018	\$30,000	\$30,000	\$30,000	\$30,000
(Cleantech ICC Engage	Discretionary	N	126652	NECEC Institute	2018 NECEC Sponsorship	05/09/2018	\$150,000	\$150,000	\$150,000	\$150,000
		Discretionary	N	132285	New York Academy of Sciences	2018 NY Green Innovation Showc	10/09/2018	\$35,000	\$35,000	\$31,089	\$31,089
		Discretionary	N	136656	New York Academy of Sciences	2019 NY Green Innovation Showc	01/30/2019	\$35,000	\$35,000	\$6,914	\$6,914
		Discretionary	N	137130	Global Change Associates Inc.	18th Annual WSGS Sponsorship	02/13/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	137883	National Renewable Energy Laboratory	NREL's Industry Growth Forum	03/08/2019	\$20,000	\$20,000	\$20,000	\$20,000
(Code to Zero	Competitive	N	136436	Resource Refocus LLC	TWO#1 Res Rulemaking Support	01/24/2019	\$42,232	\$42,232		
		Competitive	N	136611	Kelliher Samets Volk	TWO 26 Codes Marketing	01/29/2019	\$225,000	\$225,000		
		Competitive	N	137172	Harris Beach PLLC	Code to Zero	02/14/2019	\$20,000	\$20,000		
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016	\$580,261	\$1,577,229	\$330,060	\$825,326
		Discretionary	Υ	123125	Laurie D Kerr	Code to Zero	02/05/2018		\$200,000	\$132,791	\$132,791
		Non-Competitive	N	126537	Battelle Memorial Institute	NYStretch Code (2018) support	05/07/2018	\$59,525	\$59,525	\$59,514	\$59,514
(COMBINED HEAT AND POWER	Competitive	N	73679	Rafferty Enterprises, Inc.	Temp Employment Services	09/30/2015		\$21,528		\$3,444
		Competitive	Υ	55508	Energy & Resource Solutions, Inc.	Technical and Logistic Support	12/23/2014		\$3,800,000	\$114,279	\$3,744,740
		Competitive	Υ	55511	CDH Energy Corporation	Technical and Logistic Support	12/23/2014		\$300,000		\$74,156
		Competitive	Υ	55511A	Frontier Energy, Inc.	Technical Advisors to CHP	03/30/2018	\$225,844	\$225,844	\$8,436	\$8,436
		Competitive	Υ	68174	CDH Energy Corporation	CHP System Inspection	07/01/2015		\$3,500,000		\$334,893
		Competitive	Υ	68174A	Frontier Energy, Inc.	CHP System Inspection and ReCo	03/29/2018	\$3,165,108	\$3,165,108	\$105,580	\$105,580
		Competitive	Υ	122632	Energy & Resource Solutions, Inc.	RFP 3643 Tech To Market	01/16/2018	\$2,000,000	\$2,000,000	\$855,886	\$855,886
		Discretionary	N	45865	Wichcraft Operating, LLC	Catering Manhattan CHP Expo	08/19/2014		\$6,497		\$6,497
		Discretionary	N	136267	Marriott Hotel Services	Onsite Resilient Power Conf	01/18/2019	\$85,000	\$85,000	\$10,000	\$10,000
(Commercial HVAC	Discretionary	N	121306	Rocky Mountain Institute	Digital Solutions Research	12/05/2017		\$50,000	\$25,000	\$50,000
(Commercial Market Mapping	Competitive	Υ	136264	Meister Consultants Group, Inc.	NYSERDA-Utility Collaboration	01/18/2019	\$200,000	\$200,000		

	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	Commercial Real Estate Ten	Competitive	N	123052	NYC Climate Action Alliance Inc.	NYC Climate Alliance - CT	02/01/2018		\$50,000	\$35,925	\$40,000
		Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$252,552	\$252,552		
		Competitive	Y	104539	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	10/05/2016		\$1,285,871	\$287,711	\$424,673
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$269,178	\$269,178		
		Discretionary	N	134422	The Real Estate Board of New York, Inc.	2018 PropTech Challenge	11/27/2018	\$12,500	\$12,500	\$12,500	\$12,500
	Electric Vehicles - Innovation	Discretionary	N	123285	The Initiatives Group	HEVO Executive Training	02/09/2018		\$50,000		
		Discretionary	N	134855	Clean Power Research	PO for 2019 WattPlan EV	12/06/2018	\$18,000	\$18,000	\$9,000	\$9,000
		Discretionary	N	136354	Electrification Coalition Foundation	EV Awareness Campaign Design	01/23/2019	\$50,000	\$50,000		
		Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019	\$5,000	\$5,000		
		Non-Competitive	N	120914	NESCAUM	ZEV Marketing Campaign	11/21/2017		\$525,000	\$350,000	\$525,000
		Non-Competitive	N	132467	Unique Electric Solutions LLC	Electric Vehicles - Innovation	10/12/2018	\$400,000	\$400,000		
		Non-Competitive	Υ	132467-1	Unique Electric Solutions of NYS LLC	Electric Vehicles - Innovation	11/29/2018	\$400,000	\$400,000	\$116,121	\$116,121
	Electric Vehicles - Rebate	Competitive	Υ	137992	Center for Sustainable Energy	TWO #3 - Drive Clean Program	03/12/2019	\$1,331,278	\$1,331,278		
	EMERGING TECHNOLOGY /	Competitive	Υ	37379	Taitem Engineering, P.C.	Technical Review and Program S	11/15/2013		\$323,819	\$9,069	\$162,044
	ACCELERATED COMMERCIALIZATION	Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	11/15/2013		\$911,255		\$458,624
		Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$374,841	\$374,841	\$35,471	\$35,471
		Competitive	Υ	37391	LaBella Associates, P.C.	Technical Review and Program S	11/15/2013		\$270,220	\$73,968	\$162,145
		Competitive	Υ	37404	Applied Energy Group, Inc.	Technical Review and Program S	11/15/2013		\$144,863		\$107,483
	EMPOWER NY	Competitive	Υ	35659	Tech Valley Talent, LLC	RES QACSS Development	09/24/2013		\$300,000		\$297,750
	ENERGY ANALYSIS	Competitive	N	136796	Energy and Environmental Economics Inc.	TWO#15 Solar PV Adoption Forec	02/04/2019	\$75,000	\$75,000		
		Competitive	N	137219	Energy and Environmental Economics Inc.	101127 TWO#14	02/15/2019	\$800,000	\$800,000		
		Competitive	Υ	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$1,245,129	\$153,505	\$1,192,380
		Competitive	Υ	96266	Energy & Resource Solutions, Inc.	Renewable Heating Cooling TA	04/19/2016		\$149,150	\$142,819	\$149,150
		Competitive	Υ	96268	Meister Consultants Group, Inc.	Renewable Heating Cooling TA	04/19/2016	\$50,000	\$50,000	\$49,998	\$49,998
		Competitive	Υ	101128	ICF Resources, LLC	Tech Assist, REV Pool	07/15/2016	\$275,000	\$681,977	\$247,422	\$427,074
		Competitive	Υ	123055	ICF Resources, LLC	RFQL 3685 - Flexergy 3.0	02/01/2018	\$249,883	\$249,883		
		Competitive	Υ	123450	General Electric International, Inc.	RFQL3685 Round 1	02/15/2018	\$175,000	\$175,000	\$160,000	\$160,000
		Competitive	Υ	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$29,550	\$29,550	\$20,398	\$20,398
		Competitive	Υ	127158	The Cadmus Group, LLC	RFQL 3685 R2 Umbrella	05/22/2018	\$120,332	\$120,332	\$51,854	\$51,854
		Competitive	Υ	135251	Industrial Economics, Incorporated	EE Supply Curve Analysis	12/17/2018	\$249,668	\$249,668	\$20,782	\$20,782
		Competitive	Υ	137234	The Cadmus Group, LLC	TWO#3 -Supply Curve Analysis	02/19/2019	\$45,000	\$45,000		
		Competitive	Υ	138055	Four Points Group, Inc.	TWO #2 - NPP 60+	03/13/2019	\$75,000	\$75,000		
		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		\$44,192
		Discretionary	N	104461	Interaction Associates	ENERGY ANALYSIS	10/03/2016		\$19,000		\$17,914
		Discretionary	N	108968	Interaction Associates	ENERGY ANALYSIS	01/13/2017		\$19,000		\$18,601
		Discretionary	N	112765	Evolved Energy Research	ENERGY ANALYSIS	04/13/2017		\$45,000		\$44,235

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	ENERGY ANALYSIS	Discretionary	N	119091	Varun Sivaram	ENERGY ANALYSIS	10/05/2017		\$49,025		\$4,950
		Discretionary	N	124433	IHS Global Inc.	IHS Forecasting Service	03/19/2018	\$31,060	\$31,060	\$31,060	\$31,060
		Discretionary	N	124448	Max Wei	Technical Assistance for EEA	03/21/2018	\$10,000	\$10,000	\$600	\$600
		Discretionary	N	128474	Bloomberg, L.P.	Bloomberg Datafeed Access	06/28/2018	\$22,500	\$22,500		
		Discretionary	N	128474-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$22,500	\$22,500		
		Discretionary	N	130286	Regional Economic Models, Inc	ENERGY ANALYSIS	08/17/2018	\$6,000	\$6,000	\$6,000	\$6,000
		Discretionary	N	137639	IHS Global Inc.	IHS/CERA Subscription	03/01/2019	\$32,750	\$32,750		
		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		
		Discretionary	Υ	124423	Jeffery B. Greenblatt	EEA Project Review	03/16/2018		\$24,000	\$900	\$900
		Non-Competitive	N	108297	Regional Greenhouse Gas Initiative, Inc.	ENERGY ANALYSIS	12/20/2016		\$902,790		\$865,709
		Non-Competitive	N	135181	Regional Greenhouse Gas Initiative, Inc.	RGGI Funding Agreement 2019	12/14/2018	\$829,256	\$829,256	\$829,256	\$829,256
		Non-Competitive	Υ	96262	Energy and Environmental Economics Inc.	Renewable Heating Cooling TA	04/19/2016		\$100,000	\$100,000	\$100,000
		Non-Competitive	Υ	115215	Resources for the Future Inc	Macroeconomic Methods	06/27/2017		\$50,000	\$31,454	\$31,454
	ENVIRONMENTAL RESEARCH	Competitive	Υ	30191	Abt Associates Inc.	Flex Energy Tech Analysis 2	11/09/2012	\$200,000	\$870,943	\$258,849	\$659,694
		Competitive	Υ	31648A	Cornell University	NY climate clearinghouse	06/03/2013		\$354,752	\$66,698	\$351,698
		Competitive	Υ	34356	U.S. Geological Survey (Troy).	ALTM Stream Monitoring	08/07/2013		\$600,215		\$265,985
		Competitive	Υ	40322	Cornell University	optimize LED for greenhouses	03/18/2014		\$249,081	\$2,142	\$249,081
		Competitive	Υ	40325	Cornell University	improve EE of crop production	03/18/2014		\$83,765	\$1,933	\$49,640
		Competitive	Υ	60444	Warren Pinnacle Consulting, Inc.	SLAMM adaptation	03/10/2015		\$364,318	\$0	\$364,295
		Competitive	Υ	100415	Research Foundation of CUNY	Integrated Air Quality Monitor	06/29/2016		\$199,730	\$74,803	\$97,397
		Competitive	Υ	100416	Research Foundation of SUNY	Combining Measurements and Mod	06/29/2016		\$382,848	\$97,839	\$177,041
		Competitive	Υ	100417	Research Foundation of SUNY	IDEA-NYS air quality forecast	06/29/2016		\$358,781	\$147,798	\$275,004
		Competitive	Υ	103851	SUNY - ESF	Biofiltration drainage media	09/20/2016		\$292,911	\$75,761	\$128,708
		Competitive	Υ	103852	Electric Power Research Institute	Climate & future electric syst	09/20/2016		\$299,652	\$135,529	\$211,218
		Competitive	Υ	103853	DNV GL Energy Services USA Inc.	Building-Resiliency Assessment	09/20/2016		\$177,965	\$53,250	\$128,739
		Competitive	Υ	103862	The Trustees of Columbia University	Tropical Cyclone Risk Model	09/20/2016		\$299,873	\$112,967	\$163,716
		Competitive	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016		\$292,829	\$139,472	\$139,472
		Discretionary	N	102959-1	Research Foundation of SUNY	Forest Biomass	05/15/2017		\$49,982	\$20,811	\$20,811
		Discretionary	N	119410	Clarkson Univ., Research Div.	MAP-AQ mobile platform	10/20/2017		\$45,000	\$9,765	\$9,765
		Discretionary	N	123696	Kearns & West, Inc.	ETWG meeting prep & support	02/21/2018		\$49,940	\$49,625	\$49,625
		Discretionary	N	128724	BuildingGreen, Inc.	Malin: meeting facilitator	07/06/2018	\$8,000	\$8,000	\$8,000	\$8,000
		Discretionary	N	129934	Scotto Brothers Woodbury Restaurant, LLC	2018 State of the Science Wksp	08/09/2018	\$23,812	\$23,812	\$23,642	\$23,642
		Discretionary	N	130230	Evoworld	KEBA Analysis; TRNSYS Modeling	08/16/2018	\$24,500	\$24,500		
		Discretionary	N	131747	First Colonie Company	2018 Adapting Buildings Symp	09/28/2018	\$14,000	\$14,000	\$12,831	\$12,831
		Discretionary	N	135322	Boecker Consulting Services	Facilitate Devlpmt Proces	12/19/2018	\$12,400	\$12,400		
		Discretionary	Y	31577	Richard E. Gibbs, Ph.D., P.E.	env program science advisor	03/15/2013		\$35,000		\$9,811

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
ENVIRONMENTAL RESEARCH	Discretionary	Υ	31663	John E. Batey	science advisor support env	03/21/2013		\$35,000		\$11,475
	Discretionary	Υ	103081	Praveen Amar	Environmental Research Science	09/13/2016		\$40,000	\$16,634	\$24,150
	Discretionary	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016	\$47,487	\$47,487		
	Discretionary	Υ	104107	Watershed Assessment Associates, LLC	Aquatic Macroinvertebrate ID	09/22/2016		\$24,000	\$3,854	\$7,200
	Discretionary	Υ	127262	Research Foundation of SUNY	LISTOS	05/24/2018	\$46,048	\$46,048		
	Discretionary	Υ	134909	Praveen Amar	Amar ENV Rsch Science Advisor	12/07/2018	\$45,000	\$45,000	\$16,718	\$16,718
Eval MCDC EE Master Sof Cost	^t Competitive	Υ	137083	The Cadmus Group, LLC	TWO#4 Soft Cost study	02/12/2019	\$614,886	\$614,886		
EVALUATION	Competitive	N	131730	Carahsoft Technology Corporation	EVALUATION	09/25/2018	\$52,650	\$52,650	\$52,650	\$52,650
	Competitive	N	136171	The Cadmus Group, LLC	TWO#2-Top_Down_Analysis	01/16/2019	\$238,508	\$238,508		
	Competitive	Υ	43672	Opinion Dynamics Corporation	Commercial Statewide Baseline	07/02/2014		\$5,741,667	\$3,091,385	\$3,864,53
	Competitive	Υ	104531	ADM Associates, Inc.,	RFQ3183 Umbrella Agreement	10/05/2016		\$230,000	\$67,864	\$173,94
	Competitive	Υ	104535	NMR Group, Inc.	RFQ 3183 NMR Group, Inc.	10/05/2016	\$196,098	\$196,098	\$87,613	\$87,613
	Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$2,382,061	\$2,682,061	\$253,898	\$466,133
	Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$2,637,211	\$2,637,211	\$289,548	\$289,548
	Competitive	Υ	104543	Energy & Resource Solutions, Inc.	Energy & Resource Sol. TWO	10/05/2016		\$920,000	\$301,809	\$693,27
	Competitive	Υ	104559	West Hill Energy & Computing, Inc.	RFQ3183 Umbrella Agreement	10/06/2016	\$67,150	\$267,150	\$49,273	\$59,699
	Competitive	Υ	123365	Energetics, Incorporated	RFQL3685 Round 1	02/13/2018	\$65,281	\$65,281	\$50,309	\$50,30
	Competitive	Υ	129931	The Cadmus Group, LLC	RFP3916 Res Bldg Stock Assessm	08/09/2018	\$2,035,881	\$2,035,881	\$1,716,471	\$1,716,471
	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	\$18,550	\$17,345	\$17,34
	Discretionary	Υ	107298	Dodge Data & Analytics	Dodge Data	11/28/2016		\$41,425	\$13,808	\$41,425
	Discretionary	Υ	124424	Northeast Energy Efficiency Partnerships	NEEP CT EMV Project	03/16/2018	\$45,900	\$45,900	\$11,900	\$11,900
	Discretionary	Υ	132702	EC Infosystems, Inc.	EC Infosystems for EDI	10/17/2018	\$185,850	\$185,850	\$31,450	\$31,450
	Discretionary	Υ	136265	The Cadmus Group, LLC	EVALUATION	01/18/2019	\$50,000	\$50,000		
	Non-Competitive	N	104270	D & R International Ltd	EVALUATION	09/28/2016		\$84,400	\$20,600	\$84,400
	Non-Competitive	Υ	102013	Infogroup Government Division	Infogroup	08/05/2016		\$500,000	\$100,000	\$300,000
EXISTING FACILITIES	Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013	\$46,000	\$2,641,149	\$196,503	\$2,538,996
	Competitive	Υ	37373	EME Consulting Engineering Group, LLC	Tech Review and Program Staff	11/15/2013		\$493,580		\$454,07
	Competitive	Υ	37381	Vermont Energy Investment Corporation	Umbrella Contract	11/15/2013		\$94,180	\$8,185	\$76,11
	Competitive	Υ	37385	Versar, Inc	Technical Review and Program S	11/15/2013		\$21,299		\$13,248
	Competitive	Υ	37393	ICF Resources, LLC	Technical Review and Program S	11/15/2013		\$149,072	\$16,473	\$123,630
	Competitive	Υ	37403	C.T. Male Associates Engineering,	Technical Review and Program S	11/15/2013		\$64,335	\$2,208	\$59,77
	Competitive	Υ	135071	Bergmann Associates	TWO_EFP/DMP_QA/QC	12/12/2018	\$17,600	\$17,600		
	Discretionary	N	34225	Emacx Systems, Inc.	EXISTING FACILITIES	07/30/2013		\$30,000		\$3,00
Financing Solutions	Discretionary	N	126709	The Cadmus Group, LLC	Financing Solutions	05/10/2018	\$50,000	\$50,000	\$49,989	\$49,98
FLEXIBLE TECHNICAL ASSISTANCE	Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013	\$9,658	\$1,326,767	\$6,814	\$1,296,777
	Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$1,841,872	\$56,921	\$1,832,055

Category I	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
	FLEXIBLE TECHNICAL ASSISTANCE	Competitive	Υ	37398	Nexant, Incorporated	Technical Review and Program S	11/15/2013		\$1,424,111	\$15,073	\$1,267,982
		Competitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$784,096	\$51,555	\$779,851
		Competitive	Y	37402	Steven Winter Associates, Inc.	Technical Review and Program S	11/15/2013		\$228,574		
F	FUEL NY	Competitive	N	48593	Buckeye Terminals, LLC	Upstate NY Strategic Fuels Res	09/25/2014	\$1,343,000	\$6,745,000	\$1,315,821	\$5,824,234
		Competitive	Y	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$12,524,930	\$1,560,265	\$9,383,559
		Competitive	Υ	39731	Garner Environmental Services, Inc.	Fuel NY Portable Emergency Gen	02/25/2014		\$51,000,000	\$25,087	\$932,854
		Discretionary	N	125065	IHS Global Inc.	OPIS Rack Price Subscription	03/30/2018	\$8,232	\$8,232	\$8,232	\$8,232
		Discretionary	N	138345	IHS Global Inc.	OPIS Rack Price Subscription	03/21/2019	\$8,736	\$8,736		
	Geothermal Incentive	Competitive	Υ	127557	Frontier Energy, Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$400,000	\$400,000	\$70,430	\$70,430
		Competitive	Υ	127559	L&S Energy Services, Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$400,000	\$400,000	\$3,281	\$3,281
		Discretionary	N	124414	New York Geothermal Energy Organization	2018 NY GEO	03/14/2018	\$5,100	\$5,100	\$5,100	\$5,100
		Discretionary	N	136372	New York Geothermal Energy Organization	2019 NY-Geo Conference	01/23/2019	\$8,900	\$8,900	\$8,900	\$8,900
-	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	\$3,513	\$37,925
		Competitive	Υ	36976	Adirondack North Country Association	Green Jobs Green New York Outr	11/06/2013		\$313,383		\$307,523
		Competitive	Υ	36986	Long Island Progressive Coalition	GJGNY Outreach CBO	11/06/2013		\$1,389,985		\$1,336,541
	•	Competitive	Υ	60713	Hawkins Delafield & Wood LLC	Bond Counsel Services	03/13/2015		\$60,000		\$57,301
		Competitive	Υ	60714A	Dentons US LLP	Bond Counsel Services	09/29/2015		\$26,000		\$25,834
		Competitive	Υ	105451	Omnicap Group, LLC	Financial Advisory Services	10/21/2016		\$500,000	\$38,298	\$185,876
		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	\$61,838	\$232,962
		Non-Competitive	Υ	68533	Bank of New York	\$3000 annual fee for 14 yrs	07/08/2015		\$57,000	\$4,000	\$20,000
		Non-Competitive	Υ	71389	Bank of New York	EFC REEF 2015 FEE 2015	08/19/2015		\$62,000	\$3,000	\$14,000
		Non-Competitive	Υ	104094	Bank of New York	GJGNY 2016 Bonds Trustee	09/21/2016		\$62,000	\$3,050	\$14,050
0	GREENING THE BRONX	Competitive	N	120837-2	L&S Energy Services, Inc.	Greening the Bronx	05/16/2018	\$99,934	\$99,934	\$72,525	\$72,525
		Discretionary	N	100963	L&S Energy Services, Inc.	GtB- Evaluation	07/13/2016		\$42,814		
H	Home Perf w Energy Star	Competitive	N	123698	Randstad North America, Inc.	Home Perf w Energy Star	02/21/2018		\$100,000	\$63,824	\$68,598
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$4,199,191	\$6,259,169	\$2,221,131	\$3,222,079
		Competitive	Υ	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017	\$305,525	\$5,366,137	\$2,589,650	\$3,372,704
		Competitive	Υ	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017	\$1,077,432	\$1,077,432	\$495,090	\$495,090
		Competitive	Y	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$945,000	\$945,000	\$246,823	\$246,823
		Competitive	Υ	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$500,000	\$500,000	\$115,272	\$115,272
		Discretionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$50,000	\$0	\$50,000
		Discretionary	N	128727	BPCA NYS Inc.	Tech Consulting for RES	07/06/2018	\$35,075	\$35,075	\$32,294	\$32,294
		Discretionary	N	129724	MCCK Syracuse Hotel No 2 LP	2018 RES Training - Central	08/03/2018	\$5,460	\$5,460	\$5,460	\$5,460
	•	Non-Competitive	Υ	53820	EnergySavvy Inc	HPWES Program Mgmt Portal	12/03/2014		\$2,695,824	\$65,248	\$2,695,637

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
	Housing Analysis/Segmentation	Discretionary	N	125624	Apprise, Incorporated	Local coordination research	04/12/2018	\$50,000	\$50,000	\$50,000	\$50,000
_	Industrial Process Effic	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$1,000,000	\$1,000,000	\$401,398	\$401,398
		Competitive	Υ	37378	Antares Group, Inc.	Technical Review and Program S	11/15/2013		\$22,380		\$21,049
		Competitive	Υ	104557	Michaels Energy, Inc.	RFQ 3183 Michaels Energy	10/06/2016		\$300,000	\$57,237	\$202,554
		Competitive	Υ	120138	Wendel Energy Services, LLC	RFP3628FlexTechConsultUmbrella	11/03/2017	\$150,000	\$150,000	\$105,318	\$105,318
		Competitive	Υ	120915	Arcadis of New York, Inc.	RFP3628FlexTechConsultUmbrella	11/21/2017	\$248,500	\$248,500	\$122,406	\$122,406
		Competitive	Y	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$1,211,500	\$1,211,500	\$769,100	\$769,100
		Competitive	Υ	121439	O'Brien & Gere Engineers, Inc.	RFP3628FlexTechConsultUmbrella	12/07/2017	\$150,000	\$150,000	\$40,498	\$40,498
		Discretionary	Υ	116434	Lawrence Berkeley National Laboratory	Industrial Process Efficiency	07/27/2017	\$30,000	\$30,000	\$30,000	\$30,000
	INDUSTRIAL PROCESS EFFICIENCY	Competitive	Υ	30237	CHA Consulting Inc.	Commercial & Industrial Outrea	11/09/2012		\$4,024,437	\$233	\$3,942,584
	ETT IOIENO	Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013	\$165,947	\$1,913,895	\$309,099	\$1,406,888
		Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$3,119,158	\$10,681	\$2,886,205
		Competitive	Υ	37387	M/E Engineering, P.C.	Technical Review and Program S	11/15/2013		\$112,320		\$101,813
		Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$953,246	\$953,246	\$122,121	\$122,121
-	INNOVATION CAPACITY & BUSINESS	Competitive	Υ	27592	Frank Communications	Copywriting and Technical Edit	04/23/2012		\$101,501		\$98,080
	DEVELOPMENT	Competitive	Υ	57387	Research Foundation of SUNY	EFRC co-funding	01/21/2015		\$391,000	\$2,700	\$197,240
		Competitive	Υ	59723	The Research Foundation of SUNY at Bin	g EFRC co-funding	02/26/2015		\$199,250		\$199,250
		Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$50,000		\$49,012
		Discretionary	N	125315	Stony Brook Foundation - Advanced Energy	2018 AEC Cleantech Corral	04/05/2018	\$18,000	\$18,000	\$18,000	\$18,000
	Intervention Effectiv Training	Competitive	N	132045	Kelliher Samets Volk	TWO 22 Building Labeling Mkt	10/03/2018	\$98,190	\$98,190	\$65,881	\$65,881
	Training	Discretionary	N	123845	American Council for an Energy Efficient	2018 ACEEE Finance Forum	02/27/2018	\$50,000	\$50,000	\$45,000	\$45,000
		Discretionary	N	130594	Institute for Market Transformation	Intervention Effectiv Training	08/28/2018	\$50,000	\$50,000	\$50,000	\$50,000
-	K-12 SCHOOLS	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$4,654,605	\$4,819,057	\$1,171,509	\$1,171,509
	LARGE SCALE RENEWABLES	Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$391,125	\$21,656	\$290,739
	KENEWABEE	Competitive	Υ	104541	Industrial Economics, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$179,750	\$179,750	\$87,586	\$87,586
	Low Rise New Construction	Discretionary	N	124959	The Research Foundation for the State	2018 NYS Green Building Conf.	03/28/2018	\$5,250	\$5,250	\$5,250	\$5,250
	Constituction	Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$8,500	\$8,500	\$8,500	\$8,500
		Non-Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$650,000	\$50,221	\$638,906
	Low-Income Forum on Energy	Competitive	Υ	116343	TRC Energy Services	LIFE Implementation Services	07/26/2017		\$173,089	\$56,243	\$88,205
	Lincipy	Discretionary	N	111879	DNC Parks & Resorts at Gideon Putnam LLC	2017 LIFE Reg. Mtg Saratoga	03/22/2017		\$7,000		\$5,607
		Discretionary	N	120836	SMG Partners	LIFE 2018 Statewide Conference	11/20/2017		\$5,850	\$5,850	\$5,850
		Discretionary	N	120908	RAC Holdings Corp.	Mazzone Hospitality- LIFE 2018	11/21/2017	\$30,000	\$30,000	\$30,000	\$30,000
		Discretionary	N	120913	Color Methods	LIFE 2018 Conference - CMI AV	11/21/2017	\$1,080	\$11,080	\$11,080	\$11,080
		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		
		Discretionary	N	138143	AFP 108 Corp	Life 2019 Reg Mtg - Western NY	03/20/2019	\$6,000	\$6,000		
		Non-Competitive	N	120908	RAC Holdings Corp.	Mazzone Hospitality- LIFE 2018	11/21/2017	\$5,964	\$5,964	\$5,964	\$5,964

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
MARKET PATHWAYS	Competitive	Υ	27892A	Lockheed Martin Corporation	Products Program	02/17/2016		\$622,782		\$225,976
	Discretionary	N	86068	CoStar Realty Information, Inc.	Research Subscription	12/30/2015		\$21,740		\$16,800
	Discretionary	Υ	40415	Rensselaer Polytechnic Institute-LRC	Outdoor Lighting Clearinghouse	03/21/2014		\$50,000		\$29,213
	Non-Competitive	Υ	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$240,000		\$240,000
	Non-Competitive	Υ	40553	Energy Improvement Corporation	Enabling CPACE in NYS	03/28/2014		\$1,082,494	\$3,850	\$975,000
Mkt Char: Tech Assist	Competitive	N	135615	Energy and Environmental Economics Inc.	TWO 13 - VDER Phase 2	12/28/2018	\$350,000	\$350,000	\$45,662	\$45,662
	Competitive	N	135945	Energy and Environmental Economics Inc.	TWO# 14 - Grid Value Model	01/09/2019	\$100,000	\$100,000	\$37,343	\$37,343
	Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016	\$803,777	\$3,308,918	\$1,528,509	\$3,164,243
	Competitive	Υ	101133	Industrial Economics, Incorporated	Tech Assist, REV Pool	07/15/2016	\$192,691	\$192,691	\$106,841	\$106,841
	Competitive	Υ	101159	Navigant Consulting Inc.	Tech Assist, REV Pool	07/15/2016	\$500,000	\$500,000		
	Competitive	Υ	101161	National Economic Research	Tech Assist, REV Pool	07/15/2016		\$487,000	\$63,073	\$334,540
	Discretionary	N	122097	Van Nostrand Energy & Environmental	Policy Development Services	12/27/2017		\$200,000	\$69,618	\$92,514
	Discretionary	N	133820	Grid Strategies, LLC	Bulk Power System Resource Ad.	11/09/2018	\$200,000	\$200,000	\$20,000	\$20,000
	Discretionary	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016		\$50,000		\$6,737
	Discretionary	Υ	119092	Analysis Group, Inc.	Market Functions of DSP	10/05/2017		\$50,000	\$23,000	\$40,000
Multifam New Construction	Discretionary	N	124959	The Research Foundation for the State	2018 NYS Green Building Conf.	03/28/2018	\$5,250	\$5,250	\$5,250	\$5,250
	Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$8,500	\$8,500	\$8,500	\$8,500
Multifam Performance Pgm	Competitive	N	123698	Randstad North America, Inc.	Multifam Performance Pgm	02/21/2018		\$100,000	\$63,824	\$68,598
	Competitive	Υ	113498	Taitem Engineering, P.C.	RFQL3434 Cat1 Biomass Boilers	05/05/2017	\$430,000	\$430,000	\$223,059	\$223,059
	Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$315,833	\$457,559	\$217,691	\$217,691
	Discretionary	N	123506	Syracuse University	2018 Multifamily Summit	02/16/2018		\$50,000	\$27,049	\$27,049
	Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$8,500	\$8,500	\$8,500	\$8,500
	Discretionary	Υ	129937	TRC Energy Services	Program Tool Services for MPP	08/10/2018	\$50,000	\$50,000	\$5,422	\$5,422
MULTIFAMILY PERFORMANCE	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$21,604,668		\$20,416,768
PROGRAM	Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$11,730,970		\$11,730,970
	Competitive	Υ	29226	Taitem Engineering, P.C.	MEPP Quality Assurance Contrac	09/17/2012		\$2,539,539	\$113,777	\$2,539,539
	Competitive	Υ	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$22,124		\$19,454
	Competitive	Υ	ST9628	TRC Engineers, Inc.	MULTIFAMILY PERFORMANCE PROGRAM	11/24/2009		\$10,890,225		\$10,835,623
	Competitive	Υ	ST9941	Taitem Engineering, P.C.	MULTIFAMILY PERFORMANCE PROGRAM	06/02/2009		\$1,218,445		\$821,499
	Discretionary	Υ	91807	Robison Energy LLC	Oil Monitoring Pilot	02/29/2016		\$50,000	\$8,689	\$48,655
	Non-Competitive	Υ	28551	Documentation Strategies, Inc.	Multifamily IT Support	07/18/2012		\$438,000		\$435,804
	Non-Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$2,694,017	\$628,129	\$2,635,243
Nat'l OffShWind R&D Consortium	Competitive	N	131173	Alliance for Sustainable Energy, LLC	NREL for OSW Consortium	09/12/2018	\$120,000	\$120,000	\$80,000	\$80,000
Concordant	Competitive	N	131325	Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	09/17/2018	\$60,000	\$60,000	\$30,000	\$30,000
	Competitive	Υ	131674	The Renewables Consulting Group, LLC	RCG work for OSW Consortium	09/24/2018	\$240,000	\$240,000	\$177,600	\$177,600
NEW CONSTRUCTION PROGRAM	Competitive	Υ	79701	Erdman Anthony & Associates, Inc.	EAA - EMP	11/02/2015		\$39,462		\$39,462
I NOOIVAN	Competitive	Υ	80550	C.J. Brown Energy, P.C.	CJ Brown - EMP	11/11/2015		\$23,571		\$18,700

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	NEW CONSTRUCTION PROGRAM	Competitive	Υ	83741	Atelier Ten	ATEN - EMP	12/14/2015		\$53,145		\$44,890
	-	Competitive	Υ	96883	Thornton Tomasetti, Inc.	Thornton Tomasetti-EMP	04/22/2016		\$13,995		\$13,995
	-	Competitive	Υ	ST10130	EME Consulting Engineering Group, LLC	NCP TA Contract - ST10130	04/04/2009		\$2,728,395	\$0	\$2,434,295
	-	Competitive	Υ	ST10140	Novus Engineering, P.C.	NCP TA Contract - ST10140	04/04/2009		\$449,300		\$295,368
	New Construction- Commercial	Competitive	Υ	123329	New Buildings Institute, Inc.	New Construction- Commercial	02/12/2018		\$250,000	\$196,316	\$196,316
	New Construction- Housing	Competitive	Υ	128210	Newport Ventures, Inc.	New Construction- Housing	06/21/2018	\$200,000	\$200,000	\$112,273	\$112,273
	-	Competitive	Υ	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	02/19/2019	\$268,500	\$268,500		
	-	Discretionary	N	136115	NESEA	2019 NESEA ProTour Series	01/15/2019	\$12,000	\$12,000	\$12,000	\$12,000
	-	Discretionary	N	138285	The Research Foundation for the State	2019 NYS Green Buildings Conf	03/20/2019	\$5,250	\$5,250		
	NEW YORK ENERGY STAR HOMES	Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$1,726,782		\$1,726,782
		Non-Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$650,000	\$50,221	\$638,906
	NEW YORK GREEN BANK	Competitive	N	99720	DealCloud Inc.	DealCloud Implementation	06/13/2016		\$12,500		\$9,200
		Competitive	N	112666	Randstad North America, Inc.	Temp Services	04/11/2017		\$182,689	\$3,500	\$145,777
	-	Competitive	N	114696	Randstad North America, Inc.	Temporary Services	06/09/2017		\$186,000		\$135,881
	-	Competitive	N	128483	Randstad North America, Inc.	NEW YORK GREEN BANK	06/29/2018	\$6,500	\$6,500	\$5,515	\$5,515
	-	Competitive	Υ	39066	Nixon Peabody LLP	Green Bank Outside Legal Serv.	01/21/2014	\$224,559	\$771,880	\$224,559	\$490,603
	-	Competitive	Υ	39067	Holland & Knight LLP	Green Bank Outside Legal Serv.	01/21/2014	\$495,884	\$1,024,149	\$495,884	\$988,919
	-	Competitive	Υ	39068	Skadden, Arps, Slate, Meagher & Flom LL	Green Bank Outside Legal Couns	01/21/2014	\$22,288	\$328,138	\$22,288	\$318,504
	-	Competitive	Υ	39069	Loeb & Loeb LLP	Green Bank Outside Legal Couns	01/21/2014	\$239,240	\$583,634	\$239,240	\$583,634
		Competitive	Υ	39072	Clifford Chance US LLP	Green Bank Outside Legal Serv.	01/21/2014		\$36,000		\$26,038
	-	Competitive	Υ	46963	Navigant Consulting Inc.	Outside Technical and Eng. Srv	09/05/2014	\$175,774	\$376,587	\$92,207	\$181,514
		Competitive	Υ	98838	DealCloud Inc.	DealCloud Licensing	05/24/2016		\$212,500	\$61,120	\$172,825
		Competitive	Υ	98839	SS&C Technologies, Inc.	Fund Administration/Loan Inves	05/24/2016		\$3,000,000	\$373,076	\$800,099
		Competitive	Υ	109917	BDO USA LLP	Background Investigation Servi	02/07/2017	\$2,500	\$11,850	\$2,500	\$11,850
		Competitive	Υ	126362	Moelis & Company Group LP	3PC raise advisory Services	05/01/2018	\$750,000	\$750,000	\$526,321	\$526,321
		Discretionary	N	93592	James McCrea & Associates, LLC	NYGB Solar Energy RFP consulti	03/23/2016		\$50,000		\$34,576
	-	Discretionary	N	94004	Stewart Energy Consultants, LLC	NYGB Solar Energy RFP consulti	03/28/2016		\$50,000		\$48,774
	-	Discretionary	N	94360	Anne Compton Savage	Metrics, Reporting & Evaluatio	03/30/2016		\$50,000		\$6,994
		Discretionary	N	102573	Chadbourne & Parke LLP	Investec/Sunrun Legal Fees	08/17/2016		\$16,566		\$16,566
	-	Discretionary	N	106599	William J Dombrowski	Revision of NYGB's RFP	11/10/2016		\$50,000		\$19,625
		Discretionary	N	108973	Robert O Gurman	Gurman Contract Consulting	01/17/2017		\$50,000		\$27,500
	-	Discretionary	N	115878	Pedro Barretto Leite de Barros	Pedro Barros - Strategy	07/14/2017		\$50,000		\$17,900
	_	Discretionary	N	117771	JCRA Financial LLC	JRCA Hedging Strategy	08/31/2017	\$25,000	\$25,000	\$3,497	\$3,497
		Discretionary	N	120012	Sunset Green Home LLC	Third-Party Capital Consulting	11/01/2017		\$200,000	\$88,493	\$123,274
	-	Discretionary	N	122814	Caroprese & Company	Forecast Model Development	01/23/2018		\$50,000	\$26,938	\$40,438
	-	Discretionary	N	125569	Albright Solutions LLC	3rd Party Capital Support	04/11/2018	\$25,000	\$25,000	\$6,456	\$6,456
		Discretionary	N	127480	Margaret R Cayten	NEW YORK GREEN BANK	06/01/2018	\$50,000	\$50,000		

Part	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	NEW YORK GREEN BANK	Discretionary	N	128157	Latham & Watkins LLP	NEW YORK GREEN BANK	06/20/2018	\$25,000	\$25,000	\$7,417	\$7,417
			Discretionary	N	132478	Bloomberg, L.P.	Bloomberg Datafeed Access	10/15/2018	\$22,500	\$22,500	\$7,276	\$7,276
Properties Pro			Discretionary	N	132478-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$15,224	\$15,224	\$6,420	\$6,420
Part			Discretionary	N	132773	Michael Farrell	Due Diligence Assistance	10/18/2018	\$50,000	\$50,000	\$20,396	\$20,396
Part			Discretionary	N	135908	Johnson Associates, Inc	JAI NYSERDA Consulting Cnt,	01/08/2019	\$50,000	\$50,000	\$42,000	\$42,000
Part			Discretionary	Υ	87399	James McCrea & Associates, LLC	James McCrea & Associates LLC	01/20/2016		\$50,000		\$450
Number N			Discretionary	Υ	115075	Essense Partners Inc.	Material development for NYGB	06/21/2017		\$150,000		\$21,828
Maritime			Discretionary	Y	118457	Adviser Compliance Associates, LLC	ACA Compliance Assessment	09/26/2017		\$49,000	\$24,500	\$49,000
Procedure			Non-Competitive	N	123577	Proenergy Consulting LLC	Consulting NY Prize/Greenbank	02/20/2018	\$171,760	\$194,350	\$159,180	\$159,180
Part Competition 1		NextGen HVAC	Discretionary	N	110961	Evoworld	NextGen HVAC	03/02/2017		\$48,089	\$18,689	\$18,689
Competition No. 1,000 Competition			Discretionary	N	125319	Syracuse University	sponsor 2017 symposium	04/06/2018	\$10,000	\$10,000	\$10,000	\$10,000
Compatible V 2019		NY-SUN	Competitive	N	79049	Rafferty Enterprises, Inc.	Temp Services	10/28/2015		\$38,304		\$37,737
Competition V 10522 Mether Semest Vol. Me			Competitive	N	110029	Employee Leasing of Greater NY	Temporary Services	02/10/2017		\$59,543		\$53,075
Districtionary N 36400 Clean Power Research Control on NY SQN Block Program 1024/0713 \$50,000 \$50,00			Competitive	Y	29199	The Cadmus Group, LLC	RPS-CST Quality Assurance/Qual	09/17/2012		\$499,625		\$180,750
Decretionary N 124416 Sour Phonodoin International Crimit 2918 Searce 291442918 \$20,000 \$20,000 \$20,000 \$1			Competitive	Y	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$4,359,640	\$11,974,772	\$2,475,599	\$4,053,110
Discretionary N 127932 Sustainable CLAFV CUNY/RF 2018 Solar Storage Summit 06/00/2018 \$10,000 \$10,00			Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$50,000		\$49,012
Discretionary N 13746 General Media Inc. GTM State Subscription 16550718 \$25,000			Discretionary	N	124416	Solar Promotion International GmbH	2018 Intersolar	03/14/2018		\$20,000	\$20,000	\$20,000
Discriptionary N			Discretionary	N	127352	Sustainable CUNY CUNY/RF	2018 Solar Storage Summit	05/30/2018	\$10,000	\$10,000	\$10,000	\$10,000
NYSERDA ADMINISTRATION ADMINISTRATION Competitive N 22675 NYS Office For Technology NYSERDA ADMINISTRATION OS11/2011 S182,700 \$20,400 \$179,505 Competitive N 30984 mindSHPT Technologies, Inc. Hosting Cloud Solutions 01/24/2013 Competitive N 31421A Lockhead Martin Corporation Hotine & Fulliment 2016 01/27/201			Discretionary	N	132146	Greentech Media Inc.	GTM Solar Subscription	10/05/2018	\$25,000	\$25,000	\$25,000	\$25,000
ADMINISTRATION Competitive N 22875 NYS Office For Technology NYSERDA ADMINISTRATION 05/11/2011 \$182,700 \$20.430 \$179,555 \$129,529 \$123,556 \$123,556 \$123,556 \$123,529 \$123,556 \$123,556 \$123,556 \$123,529 \$123,556 \$123,556 \$123,529 \$123,556 \$123,556 \$123,529 \$123,556 \$123,55			Discretionary	N	132628	Marriott Hotel Services	Solar + Storage Tech Conf	10/17/2018	\$50,372	\$50,372	\$50,372	\$50,372
Competitive N 30984 mindSHFT Technologies, Inc. Hosting Cloud Solutions 01/24/2013 \$1,29,929 \$1,29,929 \$1,29,526 Competitive N 31421A Lockheed Martin Corporation Holline & Fulfilment 2016 01/27/2016 \$189,999 \$171,196 Competitive N 3548 Gardner & Theobald Inc NYSERDA ADMINISTRATION 0912/2013 \$138,000 \$79,138 Competitive N 3096 Time Warner Cable NYC WAN and Internet Circuits 11,06/2013 \$317,086 \$56,472 \$211,285 Competitive N 43051 Xerox Corp NYSERDA ADMINISTRATION 06117/2014 \$19,071 \$19,071 \$19,067 Competitive N 50809 Sierra Cedar, Inc. Consulting Services for 9.2 10/28/2014 \$1,492,080 \$1,492,080 \$1,492,080 Competitive N 61008 Ralferly Enterprises, Inc. NYSERDA ADMINISTRATION 30324/2015 \$33,764 \$10,880 \$10,880 Competitive N 6111 Ralferly Enterprises, Inc. Temp Services		NYSERDA ADMINISTRATION	Competitive		98193	Xerox Corp	NYSERDA ADMINISTRATION	05/11/2016		\$14,674		\$14,022
Competitive N 31421A Lockheed Martin Corporation Hollie & Fulfillment 2016 0127/2016 \$189,699 \$171,190 Competitive N 35348 Gardner & Theobald Inc NYSERDA ADMINISTRATION 08/12/2013 \$130,000 \$79,138 Competitive N 38968 Time Warner Cable NYC WAN and Internet Circuits 11,05/2013 \$317,086 \$58,472 \$211,285 Competitive N 4051 Xerox Corp NYSERDA ADMINISTRATION 08/17/2014 \$19,071 <t< td=""><td></td><td></td><td>Competitive</td><td>N</td><td>22675</td><td>NYS Office For Technology</td><td>NYSERDA ADMINISTRATION</td><td>05/11/2011</td><td></td><td>\$182,790</td><td>\$20,430</td><td>\$179,555</td></t<>			Competitive	N	22675	NYS Office For Technology	NYSERDA ADMINISTRATION	05/11/2011		\$182,790	\$20,430	\$179,555
Competitive N 35348 Gardiner & Theobaid Inc NYSERDA ADMINISTRATION 0912/2013 \$138,000 \$79,138 Competitive N 36966 Time Warner Cable NYC WAN and Internet Circuits 1105/2013 \$317,006 \$58,472 \$221,285 Competitive N 43051 Xerox Corp NYSERDA ADMINISTRATION 0817/2014 \$19,071 \$19,071 \$19,077 Competitive N 50809 Sierra-Codar, Inc. Consulting Services for 9.2 1028/2014 \$1,492,080 \$1,492,080 \$1,492,080 Competitive N 510208 Rafferty Enterprises, Inc. NYSERDA ADMINISTRATION 03/24/2015 \$31,492,080 \$1,492,080			Competitive	N	30994	mindSHIFT Technologies, Inc.	Hosting Cloud Solutions	01/24/2013		\$1,239,929		\$1,235,659
Competitive N 36966 Time Warner Cable NYC WAN and Internet Circuits 11/05/2013 \$317,086 \$56,472 \$211,285 Competitive N 43051 Xerox Corp NYSERDA ADMINISTRATION 06/17/2014 \$19,071 \$19,071 \$19,067 Competitive N 50809 Sierra-Cedar, Inc. Consulting Services for 9.2 10/28/2014 \$1,492,080 \$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 71187 GCOM Software LLC Salesforce implementation 08/13/2015 \$4,882,549 \$107,388 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 0903/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Employees Services 11/30/2015			Competitive	N	31421A	Lockheed Martin Corporation	Hotline & Fulfillment 2016	01/27/2016		\$189,999		\$171,196
Competitive N 43051 Xerox Corp NYSERDA ADMINISTRATION 06/17/2014 \$19,071 \$19,071 \$19,067 Competitive N 50809 Sierra-Cedar, inc. Consulting Services for 9.2 10/28/2014 \$1,492,080 \$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 71187 GCOM Software LLC Salesforce Implementation 08/13/2015 \$4,882,549 \$107,388 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$50,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$34,5150 <td< td=""><td></td><td></td><td>Competitive</td><td>N</td><td>35348</td><td>Gardiner & Theobald Inc</td><td>NYSERDA ADMINISTRATION</td><td>09/12/2013</td><td></td><td>\$138,000</td><td></td><td>\$79,136</td></td<>			Competitive	N	35348	Gardiner & Theobald Inc	NYSERDA ADMINISTRATION	09/12/2013		\$138,000		\$79,136
Competitive N 50809 Sierra-Cedar, Inc. Consulting Services for 9.2 10/28/2014 \$1,492,080 \$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 71187 GCOM Software LLC Salesforce Implementation 08/13/2015 \$4,582,549 \$107,388 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$20,183 \$19,770 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employees Services 11/20/2015 \$82,500 \$83,984 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$34,5150 \$393,90			Competitive	N	36966	Time Warner Cable	NYC WAN and Internet Circuits	11/05/2013		\$317,086	\$56,472	\$211,285
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 71187 GCOM Software LLC Salesforce Implementation 08/13/2015 \$4,582,549 \$107,368 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$20,183 \$19,770 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,988 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 8503 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306			Competitive	N	43051	Xerox Corp	NYSERDA ADMINISTRATION	06/17/2014		\$19,071		\$19,067
Competitive N 69111 Rafferty Enterprises, Inc. Temp Services 07/15/2015 \$37,674 \$29,004 Competitive N 71187 GCOM Software LLC Salesforce Implementation 08/13/2015 \$4,582,549 \$107,368 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$20,183 \$19,770 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	50809	Sierra-Cedar, Inc.	Consulting Services for 9.2	10/28/2014		\$1,492,080		\$1,492,080
Competitive N 71187 GCOM Software LLC Salesforce Implementation 08/13/2015 \$4,582,549 \$107,368 \$4,582,549 Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$20,183 \$19,770 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$383,900 \$383,306 \$282,831 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	61208	Rafferty Enterprises, Inc.	NYSERDA ADMINISTRATION	03/24/2015		\$23,184		\$10,980
Competitive N 72231 Rafferty Enterprises, Inc. Temp Services NYC Office 09/03/2015 \$40,769 \$25,121 Competitive N 78206 Rafferty Enterprises, Inc. Temp Services 10/16/2015 \$20,183 \$19,770 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	69111	Rafferty Enterprises, Inc.	Temp Services	07/15/2015		\$37,674		\$29,004
Competitive N 78206 Rafferty Enterprises, Inc. Temp Servies 10/16/2015 \$20,183 \$20,183 Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	71187	GCOM Software LLC	Salesforce Implementation	08/13/2015		\$4,582,549	\$107,368	\$4,582,549
Competitive N 82152 Rafferty Enterprises, Inc. Temp Employee Services 11/30/2015 \$59,000 \$58,968 Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	72231	Rafferty Enterprises, Inc.	Temp Services NYC Office	09/03/2015		\$40,769		\$25,121
Competitive N 82804 Rafferty Enterprises, Inc. Temp Employees Services 12/02/2015 \$82,500 \$81,954 Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	78206	Rafferty Enterprises, Inc.	Temp Servies	10/16/2015		\$20,183		\$19,770
Competitive N 85023 22nd Century Technologies, Inc. Staff Augmentation 12/18/2015 \$345,150 \$393,900 \$238,306 \$282,831			Competitive	N	82152	Rafferty Enterprises, Inc.	Temp Employee Services	11/30/2015		\$59,000		\$58,968
			Competitive	N	82804	Rafferty Enterprises, Inc.	Temp Employees Services	12/02/2015		\$82,500		\$81,954
Competitive N 85027 Unique Comp Inc. RFP3143 Umbrella Agreement 12/18/2015 \$1,689,870 \$5,502,825 \$1,821,104 \$3,724,930			Competitive	N	85023	22nd Century Technologies, Inc.	Staff Augmentation	12/18/2015	\$345,150	\$393,900	\$238,306	\$282,831
			Competitive	N	85027	Unique Comp Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$1,689,870	\$5,502,825	\$1,821,104	\$3,724,930

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 ADMINISTRA	TION	Competitive	N	85029	GCOM Software LLC	Staff Aug Umbrella Agreement	12/18/2015	\$370,500	\$1,645,800	\$338,770	\$1,116,945
	_	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	\$360,000	\$1,016,275	\$245,980	\$771,138
	_	Competitive	N	96887	Network Experts of New York, Inc.	Peoplesoft Development	04/22/2016		\$24,440		
	_	Competitive	N	98512	NYS Office of General Services	2016-2019 Microsoft ELA 3 year	05/16/2016		\$142,080		\$44,645
	_	Competitive	N	102977	Xerox Corp	Xerox Maintenance Agreement	08/30/2016	\$22,000	\$89,200	\$41,311	\$88,162
	_	Competitive	N	109508	Direct Packet Inc.	Direct Response 2017	01/30/2017		\$5,055		
		Competitive	N	110542	Infosys International Inc	RFP3365 Private Cloud Hosting	02/21/2017		\$861,843	\$322,852	\$677,178
	_	Competitive	N	112665	Randstad North America, Inc.	Temp Services	04/11/2017		\$226,950	\$75,651	\$224,375
	_	Competitive	N	113214	Lincoln Life & Annuity Company of NY	Long Term Disability Premium	04/28/2017	\$170,000	\$243,022	\$83,426	\$156,448
	_	Competitive	N	117866	The McAulay Smith Firm, LTD	SrLdr Smart Grid Search Firm	09/05/2017		\$50,000	\$370	\$16,370
	_	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	122683	NYS Technology Enterprise Corporation	NYSERDA ADMINISTRATION	01/18/2018		\$55,044	\$54,727	\$54,727
	_	Competitive	N	125908	Carahsoft Technology Corporation	25 Salesforce Licenses	04/18/2018	\$42,350	\$42,350	\$42,350	\$42,350
	_	Competitive	N	127927	Dell, Inc.	Laptops for West Valley - DELL	06/14/2018	\$10,750	\$10,750	\$10,750	\$10,750
	_	Competitive	N	129633	Provantage, LLC	Monitors for NYC and Alb.	08/01/2018	\$10,078	\$10,078	\$10,078	\$10,078
	_	Competitive	N	130408	Zones LLC	Network Switch - 15th Fl. NYC	08/22/2018	\$9,995	\$9,995	\$9,995	\$9,995
	_	Competitive	N	130914	Penda Aiken Inc.	Temporary Receptionist	09/06/2018	\$23,955	\$23,955	\$18,278	\$18,278
	_	Competitive	N	130983	Direct Packet Inc.	Video Service Renewal - Cisco	09/07/2018	\$26,082	\$26,082	\$26,082	\$26,082
	_	Competitive	N	132144	Atlantic Data Security, LLC	Checkpoint Management Server	10/05/2018	\$55,164	\$55,164	\$55,164	\$55,164
	_	Competitive	N	132466	Darling Advertising Agency Inc.	TWO #7 Strat Comm Renewables R	10/12/2018	\$12,000	\$12,000	\$9,798	\$9,79
	_	Competitive	N	135250	Tech Valley Talent, LLC	TWO26 Server Ops	12/17/2018	\$185,250	\$185,250	\$21,043	\$21,043
	_	Competitive	N	135474	Carahsoft Technology Corporation	Salesforces	12/21/2018	\$1,326,217	\$1,326,217	\$1,326,217	\$1,326,217
	_	Competitive	N	135707	Tech Valley Talent, LLC	SecureAuth 2 new + maint.	01/02/2019	\$26,851	\$26,851	\$25,348	\$25,348
	_	Competitive	N	136123	TEKsystems Inc	TWO EVConsultant	01/15/2019	\$6,800	\$6,800	\$1,445	\$1,445
	_	Competitive	N	136530	Provantage, LLC	Provantage Monitors - 52	01/28/2019	\$10,078	\$10,078	\$10,078	\$10,078
	_	Competitive	N	136923	Atlantic Data Security, LLC	Checkpoint Firewall - 3 yrs	02/07/2019	\$203,916	\$203,916	\$203,916	\$203,916
	_	Competitive	Υ	18607	Zone 5, Inc.	RFQL and RFP 1224	04/05/2010		\$612,575		\$612,205
	_	Competitive	Υ	21239	Bond, Schoeneck & King, PLLC	Outside Legal Services	12/02/2010		\$50,000	\$6,893	\$40,944
	_	Competitive	Υ	21430	CDH Energy Corporation	DG-CHP Remote Monitoring Data	12/29/2010		\$17,013		\$8,69
		Competitive	Υ	21727	Xerox Corp	NYSERDA ADMINISTRATION	01/26/2011		\$509,597		\$422,975
	_	Competitive	Υ	21784	Antares Group, Inc.	Renewable Portfolio Standard T	02/01/2011		\$718,381		\$627,318
		Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$2,225,208		\$1,895,876
	_	Competitive	Υ	30272	Xerox Corp	NYSERDA ADMINISTRATION	11/14/2012		\$164,799		\$144,352
	_	Competitive	Υ	30472A	Fiber Technologies Networks, LLC	NYSERDA ADMINISTRATION	01/17/2017		\$20,935	\$4,000	\$20,000
	_	Competitive	Υ	32004	First Columbia Property Services, LLC	Property Management Services	03/24/2016		\$1,339,311	\$24,622	\$1,287,45

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	Υ	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	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	\$3,231	\$19,009
		Competitive	Υ	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	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$16,502	\$0	\$16,502
		Competitive	Υ	42112	Xerox Corp	Xerox Maintenace	05/28/2014		\$187,673		\$183,534
		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	Υ	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	Υ	59143	mindSHIFT Technologies, Inc.	Application Support and Manage	02/19/2015		\$16,000		
		Competitive	Υ	62858	Marshall & Sterling, Inc.	Property Liability and Other	04/20/2015		\$1,055,038	\$191,522	\$839,702
		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	72025	mindSHIFT Technologies, Inc.	Website Development	08/31/2015		\$775,000	\$188,255	\$775,000
		Competitive	Υ	72126	Terremark Federal Group, LLC	Enterprise eCloud Renewal	09/01/2015		\$65,928	\$3,255	\$65,090
		Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$1,273,568	\$6,275,308	\$1,475,360	\$4,537,048
		Competitive	Υ	85026	Computer Aid, Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$0	\$280,800		\$97,200
		Competitive	Υ	86529	Oracle America, Inc.	Oracle Service and Maintenance	01/11/2016		\$53,598		\$53,208
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$692,355	\$2,633,826	\$572,397	\$2,174,871
		Competitive	Υ	98840	KPMG LLP	Audit Services	05/24/2016		\$533,000	\$102,000	\$197,000
		Competitive	Υ	102626	NYS Office for Technology	Office 365 - 2015/2016	08/24/2016		\$67,766	\$12,760	\$67,709
		Competitive	Υ	102994	Terremark Federal Group, LLC	Enterprise ECloud - Renewal	08/31/2016	\$13,914	\$79,842	\$13,881	\$79,716
		Competitive	Υ	107299	CLEAResult Consulting, Inc.	Phone Email & Web Support	11/28/2016		\$438,004	\$117,862	\$281,570
		Competitive	Υ	113863	Dell, Inc.	MS Project and Visio	05/16/2017		\$114,755		\$81,730
		Competitive	Υ	114057	Oracle America, Inc.	User Productivity Kit (UPK)	05/23/2017		\$8,968	\$2,242	\$8,968
		Competitive	Υ	114189	ADP, Inc.	ADP Payroll and HR Svcs 2017	05/26/2017		\$180,521	\$65,912	\$112,667
		Competitive	Υ	119371	International Business Machines	Replacement for PPSI Site	10/16/2017		\$34,129		
		Competitive	Υ	120292	GCOM Software LLC	Salesforce	11/07/2017	\$1,440,000	\$2,851,135	\$2,248,130	\$2,248,130
		Competitive	Υ	121379	Carahsoft Technology Corporation	Renewal: Salesforce.com	12/06/2017		\$1,239,347	\$5,779	\$1,239,347
		Competitive	Υ	122320	Oracle America, Inc.	Peoplesoft - Oracle 2018/2019	01/04/2018		\$53,598	\$40,199	\$53,598
		Competitive	Υ	123054	Gartner Inc.	Gartner Services 2018 - 2019	02/01/2018		\$55,334	\$55,334	\$55,334

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 ADMINISTR	NYSERDA ADMINISTRATION	Competitive	Y	124009	SHI, Inc.	Renewal - Adobe Creative Cloud	03/01/2018		\$9,848	\$9,848	\$9,848
		Competitive	Y	124438	Systems Management Planning, Inc.	Webex Services - 2018 - 2019	03/20/2018		\$20,511	\$18,231	\$18,231
		Competitive	Y	124908	First Columbia Property Services, LLC	Property Management	03/27/2018	\$228,674	\$228,674	\$197,094	\$197,094
		Competitive	Υ	125128	Systems Management Planning, Inc.	Aerohive Renewal 2018-2019	04/02/2018	\$5,941	\$5,941	\$5,941	\$5,941
		Competitive	Υ	125131	SHI, Inc.	1 Year - Adobe Acrobat Pro DC	04/02/2018	\$20,378	\$20,378	\$20,378	\$20,378
		Competitive	Υ	127360	Xerox Corp	NYSERDA ADMINISTRATION	05/30/2018	\$269,102	\$269,102	\$24,684	\$24,684
		Competitive	Υ	127705	Oracle America, Inc.	Oracle - User Productivity Kit	06/07/2018	\$8,968	\$8,968	\$6,726	\$6,726
		Competitive	Υ	129116	ESRI, Incorporated	ArcGIS Desktop and Spatial	07/18/2018	\$22,200	\$22,200	\$22,200	\$22,200
		Competitive	Υ	130077	Hewlett-Packard Enterprise Company	Support for NYSERDA HP Servers	08/14/2018	\$5,204	\$5,204	\$5,204	\$5,204
		Competitive	Υ	130233	ITS-NY	Office 365 2018-2019	08/16/2018	\$96,970	\$96,970		
		Competitive	Y	130233-1	NYS Office for Technology	Office 365 2018-2019	12/12/2018	\$96,697	\$96,697	\$89,581	\$89,581
		Competitive	Υ	132775	Systems Management Planning, Inc.	NetApp 2240 2018 - 2019	10/18/2018	\$6,642	\$6,642	\$6,642	\$6,642
		Competitive	Y	133271	Kelliher Samets Volk	TWO 25 KSV Program Linkages	10/30/2018	\$23,300	\$23,300	\$23,290	\$23,290
		Competitive	Y	133389	mindSHIFT Technologies, Inc.	RFP 3919-Sitecore CMS Admin	11/01/2018	\$800,000	\$800,000	\$16,683	\$16,683
		Competitive	Y	134066	Randstad North America Inc	Temp Services -	11/15/2018	\$104,442	\$104,442	\$7,244	\$7,244
		Competitive	Y	134907	SHI, Inc.	ADA-Compliance Subscription	12/07/2018	\$15,544	\$15,544	\$15,544	\$15,544
		Competitive	Y	135247	Oracle America, Inc.	Peoplesoft -Oracle 2019 - 2020	12/17/2018	\$53,598	\$53,598	\$13,400	\$13,400
		Competitive	Y	136369	Unique Comp Inc.	TWO SQL ETL Dev.	01/23/2019	\$176,800	\$176,800	\$12,750	\$12,750
		Competitive	Y	136430	SHI, Inc.	Embarcadero Enterprise Support	01/24/2019	\$16,829	\$16,829	\$16,829	\$16,829
		Competitive	Y	136980	Unique Comp Inc.	TWO Sr. Systems Admin Bhanu	02/08/2019	\$176,800	\$176,800	\$4,080	\$4,080
		Competitive	Y	137225	Systems Management Planning, Inc.	Webex Services - 2019 2020	02/15/2019	\$19,011	\$19,011		
		Competitive	Y	137565	Systems Management Planning, Inc.	VMWare Airwatch 2019 - 2020	02/27/2019	\$6,439	\$6,439		
		Competitive	Y	137985	Unique Comp Inc.	TWO 1 Server Op's Support	03/12/2019	\$203,775	\$203,775		
		Competitive	Y	138056	Gartner Inc.	Gartner Services 2019-2020	03/13/2019	\$55,356	\$55,356		
		Competitive	Y	138079	SHI, Inc.	Adobe Creative Cloud Licenses	03/14/2019	\$12,312	\$12,312		
		Competitive	Y	138080	SHI, Inc.	Adobe Acrobat Pro DC - 1 yr.	03/14/2019	\$48,064	\$48,064		
		Discretionary	N	40419	First Quality Maintenance II, LLC	Office Cleaning Contract	03/24/2014		\$10,285		\$10,006
		Discretionary	N	43614	Computer SOS Inc.	Miscellaneous Buffalo/West Val	07/01/2014		\$7,980	\$170	\$5,491
		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	79916	Rafferty Enterprises, Inc.	NYC Temp employee	11/05/2015		\$37,908		\$37,684
		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	91451	Adirondack Area Network	Video Recording Services	02/25/2016	\$405	\$17,405	\$8,480	\$17,405

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 ADMINISTRA	NYSERDA ADMINISTRATION	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	\$40,000	\$123,125
		Discretionary	N	98191	Fried, Frank, Harris, Shriver, Jacobson	Legal Services	05/11/2016	\$15,323	\$15,323	\$15,323	\$15,323
		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	104775	Employee Leasing of Greater NY	Temp Employee Services	10/11/2016	\$120,381	\$316,022	\$121,439	\$272,670
		Discretionary	N	107295-1	New York State Ag & Markets	2017 NYS Fair Exhibit	05/26/2017		\$9,475		\$8,200
		Discretionary	N	111168	Siteimprove, Inc.	Siteimprove Renewal 17-20	03/07/2017		\$17,916	\$5,972	\$11,944
		Discretionary	N	114801	Xerox Corp	Xerox Mobile Print - 3 years	06/13/2017		\$20,985	\$137	\$137
		Discretionary	N	115165	Concur Technologies, Inc.	Concur annual cost estimate	06/23/2017		\$17,000		\$13,171
		Discretionary	N	115913	Harris Wiltshire & Grannis LLP	NYSERDA ADMINISTRATION	07/17/2017		\$24,999		\$24,255
		Discretionary	N	116250	Control Solutions Group, Inc.	NYSERDA ADMINISTRATION	07/25/2017		\$10,238	\$2,520	\$10,006
		Discretionary	N	116252	Kelliher Samets Volk	Salesforce Optimization	07/25/2017		\$46,480	\$18,098	\$44,703
		Discretionary	N	116345	The Bonadio Group	data analysis extraction	07/26/2017		\$9,000	\$9,000	\$9,000
		Discretionary	N	116882	Executive Information Systems, LLC	Purchase SAS Analytical Softwa	08/10/2017	\$6,991	\$39,443	\$6,991	\$39,443
		Discretionary	N	119704	Arctic Air Mechanical Corp	HVAC for NY Office	10/24/2017		\$16,800	\$4,200	\$8,400
		Discretionary	N	121166	NGenious Solutions Inc.	SharePoint Online Consulting	11/30/2017	\$28,000	\$35,000	\$16,363	\$23,363
		Discretionary	N	122566	205 Wolf Holdings, LLC	2018 NYSERDA All Staff Meeting	01/12/2018		\$6,500	\$5,826	\$5,826
		Discretionary	N	123459	Milliman, Inc.	Valuation GASB 74 OPEB Liabili	02/16/2018	\$5,666	\$17,166	\$17,166	\$17,166
		Discretionary	N	124208	Petrecky Consulting LLC	DOE OSW Consortium Proposal	03/07/2018		\$35,000	\$35,000	\$35,000
		Discretionary	N	124427	Independent Security Services, Inc.	Security Servies	03/19/2018	\$5,000	\$5,000	\$813	\$813
		Discretionary	N	124443	Systems Management Planning, Inc.	VEEAM License Renewal - 3yrs	03/20/2018	\$20,426	\$20,426	\$20,426	\$20,426
		Discretionary	N	125126	New York State Ag & Markets	2018 NYS Fair Exhibit	04/02/2018	\$8,530	\$8,530	\$8,530	\$8,530
		Discretionary	N	126096	Control Solutions Group, Inc.	HVAC Maintenance NYC Office	04/24/2018	\$12,571	\$12,571	\$9,042	\$9,042
		Discretionary	N	129114	Rochester Computer Recycling & Recovery,	Data Destruction Services 2 yr	07/18/2018	\$25,000	\$25,000		
		Discretionary	N	129291	Bishop House Consulting, Inc.	NYSERDA ADMINISTRATION	07/25/2018	\$48,000	\$48,000	\$36,000	\$36,000
		Discretionary	N	130155	Taylor Group LTD	NYSERDA ADMINISTRATION	08/15/2018	\$15,482	\$15,482	\$15,482	\$15,482
		Discretionary	N	130288	Complete Cabling Solutions LLC	Cabling Solutions - NYC Office	08/17/2018	\$18,357	\$18,357	\$18,357	\$18,357
		Discretionary	N	131050	Bynder LLC	WebDAM Photo Library	09/10/2018	\$8,975	\$8,975	\$8,975	\$8,975
		Discretionary	N	131315	Environment & Energy Publishing, LLC	Annual subscription	09/14/2018	\$12,330	\$12,330	\$12,330	\$12,330
		Discretionary	N	131329	Executive Information Systems, LLC	NYSERDA ADMINISTRATION	09/17/2018	\$9,087	\$9,087	\$9,087	\$9,087
		Discretionary	N	133525	Low-Level Radioactive Waste Forum, Inc.	NYSERDA ADMINISTRATION	11/05/2018	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	N	133817	TEKsystems Inc	Agile Team Training Camp	11/09/2018	\$17,743	\$17,743	\$17,509	\$17,509
		Discretionary	N	134229	City and State	City and State Advertisement	11/20/2018	\$5,900	\$5,900	\$5,900	\$5,900
		Discretionary	N	135135	Lumsden & McCormick, LLP	Tax Compliance 2018- 3yr cycle	12/13/2018	\$20,200	\$20,200		
		Discretionary	N	135136	TEKSYSTEMS Global Services, LLC	Agile Team Training Camp	12/13/2018	\$17,743	\$17,743		
		Discretionary	N	135327	ITS-NY	pay SLMS invoices	12/19/2018	\$11,280	\$11,280		

Category Initi	tiative	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 NYS	NYSERDA ADMINISTRATION	Discretionary	N	136833	ThunderCat Technology LLC	Circuit for NYC Office	02/05/2019	\$34,689	\$34,689		
		Discretionary	N	136884	ThunderCat Technology LLC	Precise Peoplesoft - Remote	02/06/2019	\$15,120	\$15,120		
		Discretionary	N	137216	Randstad North America Inc	Temporary mail room clerk	02/15/2019	\$22,425	\$22,425	\$2,916	\$2,916
		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	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$24,100		\$23,767
		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
		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	Υ	61044	Tech Valley Talent, LLC	Data Warehouse Analyst	03/19/2015		\$200,000		\$30,62
		Discretionary	Υ	61065	Tech Valley Talent, LLC	Project Manager for ITG-0058 D	03/20/2015		\$200,000		\$160,125
		Discretionary	Υ	62076	LexisNexis	NYSERDA ADMINISTRATION	04/08/2015		\$49,260	\$5,636	\$48,133
		Discretionary	Υ	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		\$181,37
		Discretionary	Υ	68016	Tech Valley Talent, LLC	Buiness Intelligence Dev.	06/29/2015		\$200,000		
		Discretionary	Υ	68677	Commercial Investigations LLC	Background Checks	07/09/2015		\$30,000	\$6,018	\$24,034
		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	Υ	73490	Corporate Resolutions Inc	KYC Services	09/21/2015		\$50,000		\$32,300
		Discretionary	Υ	77909	Unique Comp Inc.	Tableau Developer -	10/15/2015		\$199,939		\$189,26
		Discretionary	Υ	77910	Tech Valley Talent, LLC	Data Architect	10/15/2015		\$200,000		\$191,87
		Discretionary	Υ	82806	GCOM Software LLC	Salesforce Administrator Suppo	12/02/2015		\$199,500		\$158,74
		Discretionary	Υ	87393	Tech Valley Talent, LLC	Tableau Bl Developer	01/19/2016		\$199,823		\$176,28
		Discretionary	Υ	92213	Systems Management Planning, Inc.	Webex Services - Renewal	03/03/2016		\$25,661		\$13,90
		Discretionary	Υ	104111	Network Experts of New York, Inc.	Helpdesk Technician	09/26/2016		\$120,000		\$103,47
		Discretionary	Υ	104250	Tech Valley Talent, LLC	Information Security Sercices	09/26/2016		\$191,100		\$189,58
		Discretionary	Υ	108816	Capital District Records Management, Inc	Media Storage & Destruction	01/09/2017		\$6,768	\$2,442	\$5,55
		Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017		\$10,000	\$546	\$54
		Discretionary	Υ	110323	Systems Management Planning, Inc.	Webex Services - Renewal 17-18	02/15/2017		\$25,101		\$13,90

Category		Туре	Term >		Contracts Open During the Pe	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYSERDA ADMINISTRATION	Discretionary	Y	110904	NYS Office for Technology	O365 Point to Point Circuit	03/01/2017	\$11,232	\$22,464	\$15,336	\$17,471
	ADMINISTRATION	Discretionary	· Y	113597	Network Experts of New York, Inc.	Adoption /Training Coordinator	05/09/2017	V11,202	\$90,000	\$10,000	\$36,383
		Discretionary	Y	115432	Troy Web Consulting, LLC	SEP Comment Sysytem	07/03/2017		\$14,985	\$5,333	\$10,598
		Discretionary	· Y	117673	Network Experts of New York, Inc.	Helpdesk Technician	08/29/2017		\$130,000	\$75,693	\$128,863
		Discretionary	· Y	118940	EC Infosystems, Inc.	Electronic Data Interchange	09/29/2017		\$190,650	\$91,800	\$132,600
		Discretionary	· Y	118970	Performance Systems Development	TREAT SITE License 17.18	10/02/2017		\$6,400	\$01,000	\$102,000
		Discretionary	Y	121232	Troy Web Consulting, LLC	Troy Web Hosting - Cloud	12/04/2017		\$7,020	\$7,020	\$7,020
		Discretionary	· Y	121299	Cullen and Dykman, LLP	NYSERDA ADMINISTRATION	12/05/2017		\$5,000	\$5,000	\$5,000
		Discretionary	· Y	121379	Carahsoft Technology Corporation	Renewal: Salesforce.com	12/06/2017		\$11,585	\$11,585	\$11,585
		Discretionary	Y	123746	Bizodo Inc	Seamless Docs Licensing 18-19	02/22/2018		\$27,450	\$27,450	\$27,450
			' Y								
		Discretionary		124007	Concur Technologies, Inc.	2018-2020 Concur annual cost	03/01/2018	20.004	\$33,000	\$16,871	\$16,871
		Discretionary	Υ	125134	Systems Management Planning, Inc.	Manage Engine Desktop Central	04/02/2018	\$8,821	\$8,821	\$8,821	\$8,821
		Discretionary	Y	125707	AlienVault, Inc.	AlienVault License Renewal	04/13/2018	\$12,209	\$12,209	\$12,209	\$12,209
		Discretionary	Y	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	04/17/2018	\$49,999	\$49,999	\$48,330	\$48,330
		Discretionary	Y	126037	Triad Technology Partners LLC	Tableau Maintenance 18-19	04/23/2018	\$70,305	\$70,305	\$70,305	\$70,305
		Discretionary	Y	126194	LexisNexis	Online Legal Research Access	04/26/2018	\$49,968	\$49,968	\$11,272	\$11,272
		Discretionary	Y	126536	Phire, Inc	Phire Maintenance - 1 year	05/07/2018	\$15,300	\$15,300	\$15,300	\$15,300
		Discretionary	Y	126611	APPEXTREMES, LLC	Conga Composer	05/08/2018	\$7,200	\$7,200	\$7,200	\$7,200
		Discretionary	Y	126706	Politico LLC	NYSERDA ADMINISTRATION	05/10/2018	\$5,000	\$5,000	\$5,000	\$5,000
		Discretionary	Y	126763	ThunderCat Technology LLC	Renewal: Docusign Subscription	05/11/2018	\$82,290	\$82,290	\$82,290	\$82,290
		Discretionary	Y	127219	CDWG, Incorporated	SNOW - Endpoint Licenses 1 yr	05/23/2018	\$18,450	\$18,450	\$18,450	\$18,450
		Discretionary	Y	127345	Sitecore USA, Inc.	Sitecore Web Support 18-19	05/29/2018	\$25,300	\$25,300	\$25,300	\$25,300
		Discretionary	Y	128352	Center for Internet Security Inc	Information Security Malicious	06/26/2018	\$7,400	\$7,400	\$7,400	\$7,400
		Discretionary	Υ	128475	Diana L. McWilliams Interior Design, PLL	Capital Plan Renov Study	06/28/2018	\$75,000	\$75,000	\$47,482	\$47,482
		Discretionary	Υ	129858	New York State Forum for IRM	NYS Forum Membership 18-19	08/08/2018	\$5,500	\$5,500	\$5,500	\$5,500
		Discretionary	Υ	130036	Fiber Technologies Networks, LLC	Renewal: Dark Fiber	08/13/2018	\$11,940	\$11,940	\$6,975	\$6,975
		Discretionary	Υ	130037	ThunderCat Technology LLC	Atlassian Product Suite	08/13/2018	\$19,540	\$19,540	\$19,540	\$19,540
		Discretionary	Υ	131667	Network Experts of New York, Inc.	Helpdesk Technician	09/24/2018	\$142,000	\$142,000	\$41,858	\$41,858
		Discretionary	Υ	131998	Netsparker Limited	Vulnerability Scanning Softwar	10/02/2018	\$6,000	\$6,000	\$6,000	\$6,000
		Discretionary	Υ	132629	OwnBackup Inc.	Salesforce Backup Solutions	10/17/2018	\$14,573	\$14,573	\$14,573	\$14,573
		Discretionary	Υ	133472	ThunderCat Technology LLC	Atlassian (Jira) - Phase 1	11/02/2018	\$105,308	\$105,308	\$97,362	\$97,362
		Discretionary	Υ	133824	Troy Web Consulting, LLC	Troy Web Hosting - Cloud 1 yr	11/09/2018	\$7,380	\$7,380	\$1,755	\$1,755
		Discretionary	Υ	136005	ThunderCat Technology LLC	Jira Software User Count	01/11/2019	\$18,338	\$18,338	\$18,338	\$18,338
		Discretionary	Υ	136601	ThunderCat Technology LLC	Jira Plug-in Licenses	01/29/2019	\$5,065	\$5,065	\$5,065	\$5,065
		Discretionary	Υ	136882	ThunderCat Technology LLC	Docusign - Subscription 19-20	02/06/2019	\$84,516	\$84,516	\$84,516	\$84,516
		Discretionary	Υ	137220	Bizodo Inc	Seamless Docs 2019 - 2020	02/15/2019	\$29,950	\$29,950	\$29,950	\$29,950
		Discretionary	Υ	137222	Systems Management Planning, Inc.	AeroHive Subscription 1 year	02/15/2019	\$5,414	\$5,414	\$5,414	\$5,414

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	Discretionary	Υ	137436	Randstad North America, Inc.	Temporary NYSUN Coordinator	02/22/2019	\$112,476	\$112,476	\$905	\$905
		Discretionary	Υ	137480	ThunderCat Technology LLC	Precise Peoplesoft Software	02/25/2019	\$66,842	\$66,842		
		Discretionary	Υ	137525	AmTrust North America Inc.	NYSERDA ADMINISTRATION	02/26/2019	\$42,000	\$42,000		
		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	\$2,138	\$117,838
		Non-Competitive	N	46873	Tobi Jo Creative, LLC	NYSERDA Website Redesign	09/04/2014		\$109,885		\$107,638
		Non-Competitive	N	66093	Sperry Energy	Innovation Advisory Services	06/03/2015		\$300,000		\$298,783
		Non-Competitive	N	68802	First Quality Maintenance II, LLC	NYC Office Cleaning	07/10/2015		\$88,842		\$82,549
		Non-Competitive	N	98191	Fried, Frank, Harris, Shriver, Jacobson	Legal Services	05/11/2016		\$100,000	\$21,727	\$100,000
		Non-Competitive	N	113027	NYS Office for Technology	Office 365 - 2016 - 2017	04/24/2017		\$67,766	\$65,996	\$65,996
		Non-Competitive	N	116344	Kelliher Samets Volk	Digital Transformation	07/26/2017		\$88,800	\$28,890	\$75,735
		Non-Competitive	N	118453	inMotion, Inc.	inMotion Project Management	09/25/2017		\$74,500	\$24,000	\$50,500
		Non-Competitive	N	119824	First Quality Maintenance II, LLC	NYSERDA ADMINISTRATION	10/26/2017		\$97,948	\$51,015	\$92,643
		Non-Competitive	N	136610	Metropolitan Life Insurance Company	NYSERDA ADMINISTRATION	01/29/2019	\$300,000	\$300,000	\$69,219	\$69,219
		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		
		Non-Competitive	Υ	69931	Amphora Consulting	Strategic Program Dev Training	07/28/2015	\$33,400	\$108,400	\$26,000	\$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		\$10,086	\$5,835	\$9,913
	NYSERDA Fixed Asset	Competitive	N	26140	Albany Dodge	New Fleet Car	01/05/2012		\$21,121		\$21,121
		Competitive	N	28043	Verizon Network Integration Corp.	Auto Attendant	06/12/2012		\$6,274		\$6,274
		Competitive	N	29983-1	Ally Financial Inc.	2012 Chevy Volt	12/21/2012		\$36,272		\$36,272
		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	107793	Carbone Auto Group, LLC	Replacement vehicle for Admini	12/09/2016		\$45,630		\$45,630
		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	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	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	123751	Nye Automotive Group, Inc	Ford Fusion fleet	02/26/2018		\$24,788		\$24,788
		Competitive	N	124906	Zones LLC	RFP 3670 VOIP	03/27/2018	\$319,735	\$319,735		

egory 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 NYSERDA Fixed Asset	Competitive	N	129626	FM Office Express	Furniture 1359 Broadway 15th	08/01/2018	\$84,185	\$84,185	\$84,185	\$84,185
	Competitive	N	130454	Offshore Electric Corp.	NYC Suite 1540 Electrical Work	08/24/2018	\$17,496	\$17,496	\$17,496	\$17,496
	Competitive	Υ	60292	ESRI, Incorporated	ESRI Arc Server - 1 year	03/06/2015		\$32,643		\$32,643
	Competitive	Υ	104106	nfrastructure	Tintri Flash Storage - Renewal	09/22/2016		\$7,548		\$7,548
	Discretionary	N	24708	ASKCO Electric Supply Co Inc	Upgrade NYSERDA meters	10/13/2011		\$16,554		\$16,554
	Discretionary	N	27624	Carrow Real Estate Services, LLC	Office Buildout at 15	05/01/2012		\$10,962		\$10,962
	Discretionary	N	27625	LCO Buildings LLC	Office Buildout at Buffalo Reg	05/01/2012		\$6,853		\$6,853
	Discretionary	N	30648	Tech Home Electric, LLC	ev plug in charger	12/18/2012		\$5,465		\$5,465
	Discretionary	N	34467	Gard Tec Security Svcs., Inc.	Security System for 15 Columbi	08/13/2013		\$14,220		\$14,220
	Discretionary	N	34468	Gard Tec Security Svcs., Inc.	15 Columbia Circle Office Secu	08/13/2013		\$14,055		\$14,055
	Discretionary	N	43567	Phire, Inc	Phire - PeopleSoft Renewal - 3	06/30/2014		\$41,715		\$41,715
	Discretionary	N	45875	Network Experts of New York, Inc.	Albany: Redundant Checkpoint H	08/19/2014		\$29,872		\$29,872
	Discretionary	N	101670	Gard Tec Security Svcs., Inc.	Security for West Valley offic	07/28/2016		\$9,657		\$9,657
	Discretionary	N	114799	DFB Sales Inc.	Black-out shades for NYC	06/13/2017		\$6,325		\$6,325
	Discretionary	N	119825	ClipperCreek, Inc.	EV Charging Stations	10/26/2017		\$6,873		\$6,873
	Discretionary	N	126539	FM Office Express	Sit Stand Desks	05/07/2018	\$19,368	\$19,368	\$19,368	\$19,368
	Discretionary	N	135863	W & E Phillips Locksmith, Inc	17CC Card Readers Reception	01/07/2019	\$13,820	\$13,820		
	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	\$6,859	\$6,859
	Non-Competitive	N	57885	Performance Systems Development	TREAT Site License for VMWARE	01/28/2015		\$8,000		\$8,000
	Non-Competitive	Υ	78360	Performance Systems Development	Treat Site Licenses - 16	10/20/2015		\$6,400		\$6,400
Off-Shore Wind Master Plan	Competitive	Υ	101085	Brattle Group Inc.	Large Scales Renewables Techni	07/15/2016	\$45,500	\$982,500	\$41,697	\$913,888
	Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$575,500	\$914,219	\$400,085	\$690,372
	Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016	\$283,172	\$689,372	\$319,478	\$513,720
	Competitive	Υ	111606	Ecology and Environment Engineering, Po	C RFP3462 Umbrella Agreement	03/16/2017	\$843,792	\$2,665,560	\$524,452	\$2,198,205
	Discretionary	N	113873	Sea Risk Solutions LLC	Fisheries Liaison/ Consulting	05/18/2017		\$50,000	\$0	\$50,000
	Discretionary	N	117863	Keams & West, Inc.	OWE InteragencyMeeting support	09/05/2017		\$20,235	\$0	\$20,083
	Discretionary	N	132086	RHC Operating LLC	2018 OSW Supplier Forum	10/04/2018	\$107,034	\$107,034	\$97,034	\$97,034
	Discretionary	N	135577	Business Network for Maryland Offshore \	W 2019 IPF Conference	12/28/2018	\$50,000	\$50,000	\$50,000	\$50,000
	Discretionary	N	137984	Hyatt Corporation as agent for Hyatt Equ	Reception at IPF Conference	03/12/2019	\$18,600	\$18,600	\$5,000	\$5,000
Off-Shore Wind Pre-Dev Act	Competitive	N	118972	BioDiversity Research Institute	BRI: TWO umbrella agreement	10/02/2017	\$415,037	\$602,026	\$250,922	\$312,308
	Competitive	N	135752	Fugro Marine GeoServices, Inc.	TWO 1 Agreement 111941	01/03/2019	\$27,860	\$27,860		
	Competitive	N	135752A	Fugro USA Marine, Inc.	TWO 1 Agreement 111941	03/05/2019	\$27,860	\$27,860		
	Competitive	N	136703	Ecology and Environment Engineering, Po	C TWO#17 Fishing Lanes	01/31/2019	\$97,600	\$97,600		
	Competitive	N	136704	Ecology and Environment Engineering, Po	C TWO#18 G&G surveys	01/31/2019	\$84,700	\$84,700		
	Competitive	Υ	111611	Quanta Technology LLC	RFP3462 Umbrella Agreement	03/16/2017		\$255,000	\$1,990	\$226,042
On-Site Energy Manager	Competitive	N	134956	The Cadmus Group, LLC	Task Order #3 from 104542	12/10/2018	\$139,971	\$139,971	\$55,854	\$55,854

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PCMT	On-Site Energy Manager	Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$189,655	\$324,628		\$40,976
	OREC: Technical Support	Competitive	Υ	111614	Levitan & Associates, Inc.	RFP3462 Umbrella Agreement	03/16/2017	\$1,445,000	\$1,445,000	\$1,037,711	\$1,037,711
		Competitive	Υ	123374	ABB, Incorporated	RFQL3685 Round 1	02/13/2018	\$236,500	\$236,500		
		Competitive	Υ	134231	Merrimack Energy Group, Inc.	RFQL3926 Umbrella Contract	11/20/2018	\$65,000	\$65,000		
		Competitive	Υ	134235	Power Advisory LLC	RFQL3926 Umbrella Contract	11/20/2018	\$65,000	\$65,000		
		Competitive	Υ	134428	M.J. Beck Consulting LLC	RFQL3926 Umbrella Contract	11/27/2018	\$65,000	\$65,000		
		Discretionary	N	130450	Lumsden & McCormick, LLP	OREC: Technical Support	08/23/2018	\$7,000	\$7,000	\$4,000	\$4,000
		Discretionary	N	136754	Kearns & West, Inc.	OSW RFP Facilitation Support	02/01/2019	\$36,433	\$36,433		
	OTHER PROGRAM AREA	Competitive	N	30726	Village of Tupper Lake	Tupper Lake District Heat	12/21/2012		\$300,000		\$285,000
		Competitive	N	137165	Holland & Knight LLP	OTHER PROGRAM AREA	02/14/2019	\$35,000	\$35,000		
		Competitive	Υ	30712	The Research Foundation for the State	CNSE Net Zero Project	12/21/2012		\$1,000,000		\$670,000
		Competitive	Υ	30713	Research Foundation of SUNY	Regional Economic Development	12/21/2012		\$397,831	\$23,334	\$397,723
		Competitive	Υ	30717	Village of Skaneateles	Skaneateles Village Hall NZEB	12/21/2012		\$546,493	\$44,214	\$540,980
		Competitive	Υ	30718	Cornell University	CornellNYC Tech Energy Program	12/21/2012		\$870,030		\$870,030
		Competitive	Υ	30728	Watertown, City of	Sludge permitting and design	12/21/2012		\$585,646	\$126,639	\$460,494
		Competitive	Υ	70333	Cornell University	76West Building a Clean Energy	08/03/2015	\$1,380,192	\$4,632,913	\$1,052,046	\$3,167,166
		Competitive	Υ	99297	Center for Sustainable Energy	ChargeNY ZEV Rebate Imp Contra	06/02/2016	\$402,007	\$956,971	\$361,712	\$817,608
		Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$205,000	\$260,353	\$183,085	\$227,573
		Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$833,500	\$1,926,070	\$583,261	\$1,460,417
		Competitive	Υ	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016		\$338,276	\$121,308	\$269,634
		Competitive	Υ	114065	Center for Sustainable Energy	Centralized Services & Support	05/25/2017	\$170,234	\$170,234	\$22,415	\$22,415
		Competitive	Υ	116896	United Way of Long Island	CEEP Long Island (UWLI)	08/10/2017		\$420,000	\$110,223	\$110,223
		Competitive	Υ	118163	D.L. English Consulting, Inc.	Indian Point Consultant	09/13/2017	\$6,660	\$356,475	\$52,786	\$355,904
		Competitive	Υ	129761	Four Points Group, Inc.	RFQL 3685 R2	08/06/2018	\$86,039	\$86,039	\$41,378	\$41,378
		Discretionary	N	70365A	Essense Partners Inc.	76West Marketing Consultant	12/08/2016		\$40,026		\$39,420
		Discretionary	N	100693	Essense Partners Inc.	ZEV Marketing Support	07/08/2016		\$197,900		\$195,721
		Discretionary	N	107800	Amerex Brokers LLC	OTHER PROGRAM AREA	12/13/2016		\$49,999	\$1,130	\$16,610
		Discretionary	N	109345	Electric Energy Services & Advisors, LLC	OTHER PROGRAM AREA	01/24/2017		\$35,000		\$25,460
		Discretionary	N	125503	New York Convention Center Operating Cor	Booth services of NY Auto Show	04/10/2018	\$7,884	\$7,884	\$7,884	\$7,884
		Discretionary	N	126409	Freeman Decorating Co	2018 NY Auto Show - Exhibit	05/02/2018	\$5,244	\$5,244	\$5,244	\$5,244
		Discretionary	N	129416	Ruskin Moscou Faltischek, P.C.'s	OSW legal incorporation filing	07/26/2018	\$6,679	\$6,679	\$6,679	\$6,679
		Discretionary	N	130510	GreenBiz Group, Inc.	2018 Verge Sponsorship	08/24/2018	\$7,500	\$7,500		
		Discretionary	N	130600	BHCC II LLC	2018 76West Finals Event	08/29/2018	\$6,000	\$6,000	\$3,475	\$3,475
		Discretionary	N	132090	PitchBook Data, Inc.	Online Subscription	10/05/2018	\$22,500	\$22,500	\$22,500	\$22,500
		Discretionary	N	132343	Cornell University	Sponsor Cornell Energy Connect	10/10/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	132615	B & W Sound Services, Inc.	2018 76West Finals A/V Service	10/16/2018	\$12,950	\$12,950	\$12,950	\$12,950
		Discretionary	N	133193	CTG:I LLC	Online subscription to CTG i3	10/29/2018	\$8,500	\$8,500	\$8,500	\$8,500

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OTHER PROGRAM AREA	Discretionary	N	133600	Upstate Capital Association of New York	NY Business Plan Comp Sponsor	11/07/2018	\$25,000	\$25,000	\$25,000	\$25,000
	Discretionary	Υ	100675	Vatsal Bhatt	Review of EEA Project Program	07/05/2016		\$25,000		\$10,468
	Discretionary	Υ	112570	Benchemark Printing, Inc.	Printing Services - EV Rebate	04/07/2017	\$5,000	\$29,500	\$7,155	\$27,512
	Non-Competitive	N	120914	NESCAUM	ZEV Marketing Campaign	11/21/2017		\$525,000	\$350,000	\$525,000
	Non-Competitive	Υ	117416	Upstate Venture Connect	OTHER PROGRAM AREA	08/22/2017		\$49,000	\$23,000	\$37,600
POLICY DEVELOPMENT	Competitive	N	36995	NYS Office of General Services	POLICY DEVELOPMENT	11/08/2013		\$150,000	\$2,129	\$140,116
	Competitive	N	126609	NYS Office of General Services	2018 NYS DPS Printing Services	05/08/2018	\$50,000	\$50,000	\$40,507	\$40,507
	Discretionary	N	126613	New York State Ag & Markets	2018 DPS NYS Fair Exhibit	05/08/2018	\$11,365	\$11,365	\$11,365	\$11,365
	Discretionary	N	131260	JCB Specialties, Inc.	DPS NYS Fair giveaways	09/13/2018	\$44,269	\$44,269	\$44,269	\$44,269
	Discretionary	N	131316	Culver Company, LLC	DPS 2018 NYS Fair giveaways	09/14/2018	\$18,113	\$18,113	\$18,113	\$18,113
Prof & Expert Engagement	Discretionary	N	123748	Upstate Venture Connect	UVC Sponsorship	02/22/2018		\$25,000	\$25,000	\$25,000
	Discretionary	N	124014	Consortium for Energy Efficiency, Inc.	Industrial Process Efficiency	03/02/2018		\$48,000	\$48,000	\$48,000
	Discretionary	N	125125	The Business Council of NYS, Inc.	Renewal of Membership	04/02/2018	\$5,876	\$5,876	\$5,876	\$5,876
	Discretionary	N	128418	Clean Energy States Alliance	2018 CESA Membership	06/27/2018	\$68,500	\$68,500	\$68,500	\$68,500
	Discretionary	N	133011	The Business Council of NYS, Inc.	Membership Business Council	10/24/2018	\$6,081	\$6,081	\$6,081	\$6,081
	Discretionary	N	135576	Efficiency Forward, Inc.	2019 DesignLights Sponsorship	12/27/2018	\$25,000	\$25,000	\$25,000	\$25,000
	Discretionary	N	135859	Alliance to Save Energy	2019 ASE Membership	01/07/2019	\$25,000	\$25,000		
	Discretionary	N	137562	ACEEE	2019 ACEEE Membership	02/27/2019	\$10,000	\$10,000		
	Discretionary	N	137767	Upstate Venture Connect	UVC 2019 Sponsorship	03/06/2019	\$25,000	\$25,000		
	Discretionary	N	138293	Consortium for Energy Efficiency, Inc.	Industrial Process Efficiency	03/20/2019	\$48,000	\$48,000		
	Discretionary	Υ	125566	Compressed Air Challenge, Inc.	Industrial Process Efficiency	04/11/2018	\$7,500	\$7,500	\$7,500	\$7,500
	Discretionary	Υ	134242	Efficiency Forward, Inc.	DesignLights 2018 Sponsorship	11/20/2018	\$25,000	\$25,000	\$25,000	\$25,000
Real Time Enrgy Management	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$965,755	\$992,405	\$402,628	\$402,628
wanagement .	Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$646,795	\$646,795	\$53,863	\$53,863
REC:CES REC Pgm Non-Rec Exp	Discretionary	N	106525	Kearns & West, Inc.	LSR siting support	11/08/2016		\$50,000	\$24,978	\$49,978
RENEWABLE HEAT NY	Competitive	Y	18599A	FARM, LLC	RENEWABLE HEAT NY	09/05/2012		\$853,626		\$729,742
-	Competitive	Y	101132	NESCAUM	Tech Assist, REV Pool	07/15/2016		\$246,284	\$43,983	\$205,661
RENEWABLE THERMAL	Competitive	N	81695	Rafferty Enterprises, Inc.	Temp Employee Services	11/19/2015		\$13,650		\$2,230
	Non-Competitive	N	66654	Energy and Environmental Economics Inc	. Solar Adoption Forecast	06/11/2015		\$49,000		\$47,680
	Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$1,878,603	\$6,500	\$1,734,618
Residential-Engaging New Mkts	Discretionary	N	124468	Seek More LLC	Consultant for SFR Upstream	03/23/2018	\$50,000	\$50,000	\$37,545	\$37,545
	Discretionary	Υ	122871	Johnstone Group, LLC	Residential-Engaging New Mkts	01/25/2018		\$50,000	\$25,200	\$31,514
Retrofit NY	Discretionary	N	111167	Jasper Van den Munckhof	RetrofitNY advisement	03/07/2017		\$50,000		\$24,011
	Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$8,500	\$8,500	\$8,500	\$8,500
	Discretionary	N	127830	Taitem Engineering, P.C.	Retrofit NY	06/12/2018	\$6,000	\$6,000	\$6,000	\$6,000
	Discretionary	N	128063	Integrative Design Collaborative, INC	Retrofit NY	06/19/2018	\$50,000	\$50,000	\$34,091	\$34,091
-	Discretionary	N	128084	7group, LLC	Retrofit NY	06/20/2018	\$50,000	\$50,000	\$47,683	\$47,683

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PCMT	Retrofit NY	Discretionary	N	130604	Thornton Tomasetti, Inc.	Retrofit NY	08/30/2018	\$18,000	\$18,000	\$6,000	\$6,000
		Discretionary	N	134727	Passive Buildings Canada	Retrofit NY	12/04/2018	\$50,000	\$50,000	\$50,000	\$50,000
		Discretionary	Υ	126881	Forsyth Street Advisors, LLC	Retrofit NY	05/15/2018	\$50,000	\$50,000	\$44,500	\$44,500
		Non-Competitive	Υ	132545	Stichting Energiesprong	Retrofit NY	10/15/2018	\$200,000	\$200,000	\$35,725	\$35,725
	REV Campus Challenge	Competitive	N	49526	Meister Consultants Group, Inc.	REV CC - Meister CG	10/10/2014		\$499,872	\$94,106	\$357,763
		Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$252,552	\$252,552		
		Competitive	Y	121106	Meister Consultants Group, Inc.	REV Campus Challenge	11/29/2017	\$586,265	\$586,265	\$170,626	\$170,626
		Competitive	Υ	135754	Ecology and Environment Engineering, PC	Commercial Market Engagement	01/03/2019	\$266,950	\$266,950		
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$269,178	\$269,178		
	Rmve Barriers Dist Enrgy Storg	Discretionary	N	123419	Climate Policy Initiative	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$48,900	\$28,098	\$28,098
	9	Discretionary	N	123420	Center for Renewables Integration	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$37,900	\$37,268	\$37,268
		Discretionary	N	127932	Wadsworth Energy LLC	Rmve Barriers Dist Enrgy Storg	06/15/2018	\$49,900	\$49,900	\$49,680	\$49,680
		Discretionary	N	134228	Associated Power Analysts Inc.	Rmve Barriers Dist Enrgy Storg	11/20/2018	\$48,000	\$48,000	\$32,000	\$32,000
	SARATOGA TECHNOLOGY &	Competitive	N	39723	NYS Office of General Services	OGS Services	02/25/2014		\$20,449		\$11,331
	ENERGY PARK	Competitive	N	53104	OGS State Office Building Campus	OGS Services	11/24/2014		\$5,714		\$1,124
		Competitive	N	53114	OGS State Office Building Campus	SARATOGA TECHNOLOGY & ENERGY PARK	11/24/2014		\$6,650		\$575
		Competitive	N	58912	NYS Office of General Services	Permitting Services, GE, 107 H	02/17/2015		\$11,500		\$2,615
		Competitive	N	60179	NYS Office of General Services	OGS Design/Permitting, 20 TT	03/05/2015	\$220	\$5,067	\$5,067	\$5,067
		Competitive	N	79574	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	10/29/2015	\$9,640	\$9,640	\$8,736	\$8,736
		Competitive	N	133475	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	11/02/2018	\$5,034	\$5,034	\$5,034	\$5,034
		Competitive	N	133522	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	11/05/2018	\$43,032	\$43,032	\$43,032	\$43,032
		Competitive	Υ	20896	Bergmann Associates	STEP Engineering, Design and C	10/19/2010		\$173,350		\$158,437
		Competitive	Υ	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$45,606	\$124,606	\$45,436	\$97,195
		Competitive	Υ	107762	Rosenblum Property Services, LLC	STEP Property Mgmt Services	12/07/2016		\$482,685	\$130,952	\$284,100
		Competitive	Υ	STD11181	Rosenblum Property Services, LLC	STEP Property Management Servi	06/09/2009		\$2,292,665		\$1,530,741
		Discretionary	N	28950	NYS Office of General Services	OGS permiting services- 20 TT	08/13/2012		\$45,000		\$40,270
		Discretionary	N	101037	William Morlok	STEP options paper	07/14/2016		\$25,000		\$24,071
		Non-Competitive	N	69174	NYS Office of General Services	OGS Services- GE Exp, 107 Herm	07/16/2015		\$10,032		
	Small Wind	Discretionary	Υ	96890	AWS Truepower	AWS Small Wind Explorer	04/25/2016		\$36,000	\$9,000	\$36,000
	SMART GRID SYSTEMS	Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$1,603,930	\$30,687	\$1,505,947
		Competitive	Υ	59850	Cornell University-Office of Sponsored P	Anaerobic Digestion Assistance	03/02/2015		\$750,000	\$52,421	\$287,642
	Strategic Energy Manager	Competitive	Y	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$189,655	\$324,628		\$40,976
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$1,422,528	\$2,905,878	\$366,953	\$366,953
		Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018	\$950,000	\$950,000	\$36,433	\$36,433
	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		
		Discretionary	N	120495	Continental Automated Buildings	Subscription/Data Access	11/10/2017	\$10,000	\$21,700	\$10,000	\$21,700

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 Subscription/Da	ata Access	Discretionary	N	122877	ACEEE	Subscription/Data Access	01/25/2018		\$50,000	\$31,250	\$31,250
		Discretionary	N	124011	CoStar Realty Information, Inc.	CoStar Subscription	03/01/2018		\$18,887	\$18,886	\$18,886
	_	Discretionary	N	126300	Greentech Media Inc.	GTM Wind Service Subscription	04/30/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	132476	Bloomberg, L.P.	Bloomberg Datafeed Access	10/12/2018	\$22,500	\$22,500		
	_	Discretionary	N	132476-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$22,500	\$22,500	\$22,500	\$22,500
		Discretionary	N	135791	E Source Companies LLC	Subscription/Data Access	01/04/2019	\$39,000	\$39,000	\$39,000	\$39,000
		Discretionary	N	137643	Continental Automated Buildings	market research for NYSERDA	03/04/2019	\$6,900	\$6,900		
		Discretionary	Υ	135794	American Council for an Energy Efficient	Research Support for NYSERDA	01/04/2019	\$50,000	\$50,000		
	_	Non-Competitive	N	133822	Greentech Media Inc.	Subscription/Data Access	11/09/2018	\$57,500	\$57,500	\$57,500	\$57,500
Talent Pipeline OJT	:CE and	Competitive	Υ	130548	Kelliher Samets Volk	TWO 21 WFD Talent Pipeline Mkt	08/27/2018	\$600,000	\$600,000		
Technical Serv	ices	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$252,552	\$252,552		
	-	Competitive	Υ	136881	L&S Energy Services, Inc.	Tech Review - OsEM	02/06/2019	\$100,522	\$100,522		
	-	Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$269,178	\$269,178		
WEST VALLEY DEVELOPMEN		Competitive	N	28636	The Logue Group	Facilitation Services	07/26/2012		\$410,349		\$182,136
PROGRAM		Competitive	N	PO9602	The Garrick Co., LLC	Probabilistic Evaluation	06/17/2009	\$44,270	\$574,231	\$6,460	\$523,245
		Competitive	Υ	34224	McMahon and Mann Consulting Engineers	Engineering/Surveying Cont	07/30/2013		\$432,500	\$10,468	\$423,247
	-	Competitive	Υ	61280	MJW Technical Services, Inc.	Radiation Protection Support	03/24/2015		\$2,874,040	\$185,512	\$2,211,843
		Competitive	Υ	69474	Seven Springs West LLC	Operations and Maintenance Sup	07/22/2015	\$700,000	\$3,110,000	\$298,215	\$2,269,160
	-	Competitive	Υ	69939	AECOM Technical Services Inc.	Environmental Monitoring Suppo	07/28/2015		\$554,660		\$554,660
	-	Competitive	Υ	104075	Enercon Services Inc	RFP 3305 Licence Consultation	09/21/2016	\$53,897	\$372,676	\$51,187	\$325,577
	-	Competitive	Υ	104264	Arnold & Porter Kaye Scholer LLP	RFP 3300 Outside Counsel Servi	09/27/2016		\$50,000	\$13,226	\$27,418
	-	Competitive	Υ	105183	McMahon and Mann Consulting Engineers	Engineering Services WV	10/20/2016	\$550,000	\$750,000	\$245,891	\$247,452
		Competitive	Υ	113450	Chenango Contracting, Inc.	RFP 3456	05/04/2017	\$100,000	\$1,238,102	\$16,233	\$1,121,488
	-	Competitive	Υ	118436	The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM	09/22/2017		\$413,446	\$38,809	\$55,546
		Discretionary	N	31496	Brenda Sayers	Janitorial Services Contract	03/11/2013		\$33,480		\$32,670
	_	Discretionary	Υ	91278	Brenda Sayers	W/V Office Cleaning	02/24/2016		\$23,880	\$990	\$21,905
	_	Discretionary	Υ	123699	Brenda Sayers	Janitorial contract	02/21/2018		\$48,720	\$11,990	\$11,990
		Non-Competitive	N	20948	U.S. Nuclear Regulatory Commission	WEST VALLEY DEVELOPMENT PROGRAM	10/26/2010		\$500,000		\$19,307
	_	Non-Competitive	N	48779	U.S. Department of Energy/Wv	FFY 2015 WVDP Cost Share	09/29/2014		\$7,416,887		\$4,925,610
		Non-Competitive	Υ	53151	GZA GeoEnvironmental of New York	Trench 14 Investigation	11/24/2014		\$575,875	\$133,997	\$550,754
	_	Non-Competitive	Υ	69939	AECOM Technical Services Inc.	Environmental Monitoring Suppo	07/28/2015	\$581,116	\$1,616,272	\$307,220	\$938,859
		Non-Competitive	Υ	93559	Peter L. Krog	Ashford Office Complex Lease	03/21/2016		\$458,280	\$91,656	\$267,330
		Non-Competitive	Υ	107662	U.S. Nuclear Regulatory Commission	PO Payment of NRC License Fees	12/06/2016		\$250,000	\$80,561	\$188,018
		Non-Competitive	Υ	PO9465	Dr. Michael P. Wilson	WEST VALLEY DEVELOPMENT PROGRAM	08/29/2011		\$8,000		\$3,600
WORKFORCE DEVELOPMEN	IT	Non-Competitive	Υ	92212	Green City Force	Career pathways training	03/03/2016		\$367,000	\$135,365	\$354,170
Workforce Indu Partnership	stry	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016	\$139,647	\$646,859	\$173,982	\$400,728
		Discretionary	Υ	121174	Steven Winter Associates, Inc.	NYC Retrofit Demo	11/30/2017		\$49,830	\$34,286	\$34,286

Category Initiative	Туре	Term > Contract ID Contractor	Project Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
Grand Total					\$84,912,747	\$414,792,206	\$59,664,585	\$258,057,855

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT		Discretionary	N	136006	Alberto Aceves Cornejo	Agbotic - Tech. Due Diligence	01/11/2019	\$10,000	\$10,000	\$10,000	\$10,000
		Discretionary	N	136007	New Venture Advisors LLC	Agbotic - Market DD	01/11/2019	\$35,000	\$35,000	\$17,500	\$17,500
		Discretionary	N	136119	NRG Energy Inc	Reimbursement to Clearway for	01/15/2019	\$5,000	\$5,000	\$5,000	\$5,000
		Non-Competitive	Υ	138090	General Electric International Inc	GE MAPS Software	03/15/2019	\$391,500	\$391,500	\$130,500	\$130,500
	>200KW PV	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016		\$43,794		\$34,101
		Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016		\$50,000	\$6,707	\$49,615
		Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$100,000	\$100,000		
		Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$200,000	\$210,000	\$17,851	\$17,851
		Competitive	Y	104266	Couch White, LLP	RFP 3300 Outside Counsel Servi	09/27/2016	\$100,000	\$100,000		
		Competitive	Y	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$12,000	\$0	\$12,000
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$108,249	\$281,285	\$86,851	\$120,280
		Competitive	Y	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$630,260	\$794,712	\$237,742	\$237,742
		Discretionary	Y	112974	CHA Consulting Inc.	SEQR Services	04/21/2017		\$50,000		\$11,467
	ADVANCED BUILDINGS	Competitive	Y	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$425		\$425
		Competitive	Y	18599A	FARM, LLC	ADVANCED BUILDINGS	09/05/2012		\$5,759		\$4,173
		Competitive	Y	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$108,779		\$108,779
		Competitive	Y	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$115,000		\$114,337
		Competitive	Y	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$117,750		\$117,750
		Competitive	Y	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$508		\$508
		Discretionary	N	91066	Taitem Engineering, P.C.	Deep Energy Retrofits	02/19/2016		\$49,986	\$2,535	\$49,836
		Non-Competitive	Y	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$120,000		\$150,000
	ADVANCED ENERGY CODES	Competitive	Y	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$530,970		\$270,526
		Competitive	Υ	18607	Zone 5, Inc.	RFQL and RFP 1224	04/05/2010		\$52,575		\$52,574
		Competitive	Υ	38888	Institute for Building Technology and Sa	Energy Code Training: EPros	01/10/2014		\$897,133	\$79,931	\$752,328
		Competitive	Y	49730	T.Y. Lin International	Energy Code Support Services	10/15/2014		\$1,905,876		\$1,905,876
		Competitive	Υ	49731	New Buildings Institute, Inc.	NYStretch	10/15/2014		\$249,926	\$47,753	\$249,926
		Competitive	Y	49732	Vidaris, Inc.	Code Manual for Design Pros	10/15/2014		\$149,962	\$145,862	\$149,962
	-	Competitive	Υ	49736	Karpman Consulting, LLC	Ecode Performance Enforcement	10/15/2014		\$74,816	\$10,262	\$74,816
		Competitive	Y	62667	Building Media, Inc.	Energy Code Training and Suppo	04/16/2015		\$349,921	\$39,562	\$87,629
		Competitive	Υ	64597	ICF Resources, LLC	ECode Microsite	05/13/2015		\$249,961	\$54,440	\$154,348
		Non-Competitive	Y	37589	International Code Council, Inc.	ECCCNYS Commentary IECC2015	11/21/2013		\$256,730		\$206,027
	Advancing Ag Enrgy Technologie	Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$63,218	\$63,218		
	Affordable Housing Build & Dev	Discretionary	N	131739	Apprise, Incorporated	Research and analytic support	09/26/2018	\$50,000	\$50,000	\$50,000	\$50,000
-	Agriculture Energy Eff Pgm	Competitive	Y	35743	Ensave, Inc.	AEEP Implementation Contractor	09/26/2013		\$1,345,000	\$433,969	\$1,345,000
	AGRICULTURE ENERGY EFFICIENCY	Competitive	Υ	35743	Ensave, Inc.	AEEP Implementation Contractor	09/26/2013		\$1,779,945	\$39,953	\$1,769,668
	-	Competitive	Υ	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$75,000		\$26,345
		Competitive	Y	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$261,000		\$261,000

gory Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
T AGRICULTURE ENERGY EFFICIENCY	Competitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$6,400		\$2,155
Air Source Heat Pumps	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$375,000	\$249,478	\$329,132
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$158,398	\$270,346	\$81,851	\$114,191
	Competitive	Υ	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$25,000	\$25,000	\$3,466	\$3,466
	Competitive	Y	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$125,000	\$125,000	\$23,317	\$23,317
	Discretionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$5,000	\$5,000	\$5,000
	Discretionary	N	124422	Bruce Harley Energy Consulting LLC	ASHP Consultant	03/15/2018	\$22,500	\$22,500	\$22,500	\$22,500
	Discretionary	N	127608	Rocky Mountain Institute	ELab Session	06/05/2018	\$10,000	\$10,000	\$10,000	\$10,000
	Discretionary	N	130549	The Cadmus Group, LLC	NYC ASHP Supply Chain Research	08/27/2018	\$50,000	\$50,000	\$50,000	\$50,000
ANAEROBIC DIGESTER	Competitive	Y	29200	CDH Energy Corporation	RPS-CST Quality Assurance/Qual	09/17/2012		\$240,000		\$85,213
	Competitive	Υ	29200A	Frontier Energy, Inc.	RPS CST QA/QC Support	03/30/2018	\$154,787	\$154,787	\$5,000	\$5,000
	Competitive	Υ	29202	L&S Energy Services, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$5,000	\$41,019
	Competitive	Υ	29203	Arcadis of New York, Inc.	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$9,650	\$67,575
	Competitive	Y	29204	Wendel WD Architecture, Engineering,	RPS-CST Quality Assurance/Qual	09/17/2012		\$200,000	\$2,275	\$60,144
ASSISTED HOME PERFORMANCE WITH	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$1,020,786		\$1,020,786
ENERGY STAR	Competitive	Y	35659	Tech Valley Talent, LLC	RES QACSS Development	09/24/2013		\$24,000		\$24,000
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$4,736	\$17,603	\$4,539	\$15,252
	Competitive	Y	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017		\$89,654	\$37,064	\$50,937
	Competitive	Υ	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017	\$7,180	\$7,180	\$3,299	\$3,299
	Competitive	Υ	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$18,170	\$18,170	\$338	\$338
	Competitive	Υ	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$7,665	\$7,665	\$0	\$0
	Non-Competitive	Υ	53820	EnergySavvy Inc	HPWES Program Mgmt Portal	12/03/2014		\$472,740		\$472,740
Behavior Support for Pilots	Discretionary	Υ	127000	Action Research Inc.	Behavior Support for Pilots	05/17/2018	\$50,000	\$50,000		
Campus/Technical Assistance	Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$52,425	\$52,425	\$1,266	\$1,266
	Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$51,159	\$51,159	\$1,686	\$1,686
	Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$30,046	\$58,391	\$24,353	\$24,353
	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$23,811	\$23,811	\$19,351	\$19,351
	Non-Competitive	N	111668	Yale University	Campus/Technical Assistance	03/17/2017	\$270,000	\$270,000	\$67,120	\$67,120
CI Engy Siting & Soft Cost Rec	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$42,000	\$42,000	\$38,544	\$38,544
	Competitive	Y	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016	\$402,700	\$402,700		
	Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$20,000	\$20,000		
	Competitive	Y	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$48,750	\$48,750	\$0	\$0
Clean Energy Communities	Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$5,000	\$10,000	\$3,439	\$6,999
	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016				
	Competitive	Υ	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016		\$533,000	\$158,396	\$218,244
	Discretionary	N	127094	First Colonie Company	2018 CEEP Training	05/21/2018	\$7,156	\$7,156	\$7,156	\$7,156
	Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019	\$2,500	\$2,500		

ory li	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
C	Clean Energy Communities	Discretionary	Υ	113765	iPROMOTEu.com Inc.	Branded Marketing	05/12/2017		\$12,000		\$11,625
		Discretionary	Υ	123125	Laurie D Kerr	Clean Energy Communities	02/05/2018		\$25,000	\$21,335	\$21,335
-	CLEAN TRANSPORTATION	Competitive	Υ	18599A	FARM, LLC	CLEAN TRANSPORTATION	09/05/2012		\$60,305		\$53,046
		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$416,570		\$240,58
		Competitive	Υ	22942	Poseidon Systems, LLC	Renewable, Clean Energy and En	06/01/2011		\$1,500,000	\$473,493	\$1,481,49
		Competitive	Υ	27045	EV Connect Inc.	EV Connect, Inc. PON 2301 EVSE	03/05/2012		\$249,814		\$211,97
		Competitive	Υ	27553	Calstart	Implementation contractor for	04/17/2012		\$850,000		\$850,00
		Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016		\$33,428		\$33,42
		Discretionary	Υ	93558	Emerald Alternative Energy Solutions, In	Tech. Assistance contractor fo	03/21/2016		\$11,000		\$4,0
		Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017		\$5,000		
		Non-Competitive	Υ	27553	Calstart	Implementation contractor for	04/17/2012		\$711,643	\$219,033	\$604,4
		Non-Competitive	Υ	107657	New York Battery and Energy Storage	NYS Energy Storage Outreach	12/05/2016		\$150,000		
-	CLEANER GREENER COMMUNITIES	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$199		\$1:
	55 5	Competitive	Υ	30425	NYS Economic Development Council	EDGE Program Support Services	11/26/2012		\$574,823		\$574,82
		Competitive	Υ	30426-1	CEC Stuyvesant Cove, Inc.	EDGE Territory 3	06/05/2013		\$2,587,506		\$2,615,5
		Competitive	Υ	30427	NYS Economic Development Council	EDGE Territory 2	11/26/2012		\$2,133,125		\$1,994,6
		Competitive	Υ	30428	NYS Economic Development Council	EDGE Territory 1	11/26/2012		\$2,482,375		\$2,351,7
		Competitive	Υ	33867	Ecology and Environment Engineering, PC	CGC Implementation Contractor	07/16/2013		\$4,500,000	\$569,123	\$3,654,3
		Competitive	Υ	36976	Adirondack North Country Association	Green Jobs Green New York Outr	11/06/2013		\$47,423		\$41,9
		Competitive	Υ	36986	Long Island Progressive Coalition	GJGNY Outreach CBO	11/06/2013		\$220,204		\$166,7
		Competitive	Υ	49730	T.Y. Lin International	Energy Code Support Services	10/15/2014		\$500,000	\$183,463	\$285,4
		Competitive	Υ	119375	Erdman Anthony & Associates, Inc.	RFP3628FlexTechConsultUmbrella	10/17/2017	\$56,408	\$56,408	\$9,892	\$9,8
		Competitive	Υ	120837-1	L&S Energy Services, Inc.	RFP3628FlexTechConsultUmbrella	01/30/2018	\$28,204	\$28,204	\$6,835	\$6,8
		Competitive	Υ	123212	Steven Winter Associates, Inc.	RFP3628FlexTechConsultUmbrella	02/07/2018	\$169,224	\$169,224	\$6,304	\$6,3
		Competitive	Υ	124442	Leidos Engineering of New York, P.C.	RFP3628FlexTechConsultUmbrella	03/20/2018	\$42,306	\$42,306		
-	Cleantech Geo Coverage	Discretionary	N	130448	Cornell University	2019 Entrepreneurship at Corne	08/23/2018	\$30,000	\$30,000	\$30,000	\$30,0
-	Cleantech ICC Engage	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$487,000	\$487,000	\$227,863	\$227,8
		Discretionary	N	126652	NECEC Institute	2018 NECEC Sponsorship	05/09/2018	\$150,000	\$150,000	\$150,000	\$150,0
		Discretionary	N	132285	New York Academy of Sciences	2018 NY Green Innovation Showc	10/09/2018	\$35,000	\$35,000	\$31,089	\$31,0
		Discretionary	N	136656	New York Academy of Sciences	2019 NY Green Innovation Showc	01/30/2019	\$35,000	\$35,000	\$6,914	\$6,9
		Discretionary	N	137130	Global Change Associates Inc.	18th Annual WSGS Sponsorship	02/13/2019	\$5,000	\$5,000	\$5,000	\$5,0
		Discretionary	N	137883	National Renewable Energy Laboratory	NREL's Industry Growth Forum	03/08/2019	\$20,000	\$20,000	\$20,000	\$20,00
C	Cleantech Startup Growth	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016		\$150,589		\$80,5
-	Code to Zero	Competitive	N	136436	Resource Refocus LLC	TWO#1 Res Rulemaking Support	01/24/2019	\$42,232	\$42,232		
		Competitive	N	136611	Kelliher Samets Volk	TWO 26 Codes Marketing	01/29/2019	\$225,000	\$225,000		
		Competitive	N	137172	Harris Beach PLLC	Code to Zero	02/14/2019	\$20,000	\$20,000		
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016	\$491,512	\$491,512		

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Code to Zero	Competitive	Υ	123329	New Buildings Institute, Inc.	Code to Zero	02/12/2018		\$66,680	\$63,229	\$63,229
	Discretionary	Υ	123125	Laurie D Kerr	Code to Zero	02/05/2018		\$90,000	\$40,653	\$40,653
	Non-Competitive	N	126537	Battelle Memorial Institute	NYStretch Code (2018) support	05/07/2018	\$59,525	\$59,525	\$59,514	\$59,51
COMBINED HEAT AND POWER	Competitive	N	73679	Rafferty Enterprises, Inc.	Temp Employment Services	09/30/2015		\$10,764		\$1,72
. 51121	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$91,086		\$91,08
	Competitive	Υ	21430	CDH Energy Corporation	DG-CHP Remote Monitoring Data	12/29/2010				
	Competitive	Υ	30191	Abt Associates Inc.	Flex Energy Tech Analysis 2	11/09/2012		\$149,905	\$100,939	\$108,43
	Competitive	Υ	30426-1	CEC Stuyvesant Cove, Inc.	EDGE Territory 3	06/05/2013		\$120,000		\$86,56
	Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013		\$588,160	\$124,185	\$291,50
	Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$275,828		\$123,55
	Competitive	Υ	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$775		\$77
	Competitive	Υ	55508	Energy & Resource Solutions, Inc.	Technical and Logistic Support	12/23/2014		\$3,800,000	\$114,279	\$3,744,74
	Competitive	Υ	55511	CDH Energy Corporation	Technical and Logistic Support	12/23/2014		\$300,000		\$74,15
	Competitive	Υ	55511A	Frontier Energy, Inc.	Technical Advisors to CHP	03/30/2018	\$225,844	\$225,844	\$8,436	\$8,43
	Competitive	Υ	68174	CDH Energy Corporation	CHP System Inspection	07/01/2015		\$3,500,000		\$334,89
	Competitive	Υ	68174A	Frontier Energy, Inc.	CHP System Inspection and ReCo	03/29/2018	\$3,165,108	\$3,165,108	\$105,580	\$105,58
	Competitive	Υ	122632	Energy & Resource Solutions, Inc.	RFP 3643 Tech To Market	01/16/2018	\$2,000,000	\$2,000,000	\$855,886	\$855,88
	Discretionary	N	45865	Wichcraft Operating, LLC	Catering Manhattan CHP Expo	08/19/2014		\$6,497		\$6,49
	Discretionary	N	136267	Marriott Hotel Services	Onsite Resilient Power Conf	01/18/2019	\$85,000	\$85,000	\$10,000	\$10,00
Commercial HVAC	Discretionary	N	121306	Rocky Mountain Institute	Digital Solutions Research	12/05/2017		\$50,000	\$25,000	\$50,00
Commercial Imp Assist	Competitive	Υ	37393	ICF Resources, LLC	Technical Review and Program S	11/15/2013		\$12,582	\$1,956	\$7,50
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$10,000	\$1,363	\$10,00
	Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$9,500	\$9,500	\$9,479	\$9,47
	Competitive	Υ	135754	Ecology and Environment Engineering, PC	Commercial Market Engagement	01/03/2019	\$44,814	\$44,814		
COMMERCIAL INDUSTRIAL PERFORMANCE PROGRAM	Competitive	Υ	ST10130	EME Consulting Engineering Group, LLC	NCP TA Contract - ST10130	04/04/2009		\$9,290		\$9,29
Commercial Market Mapping	Competitive	Υ	136264	Meister Consultants Group, Inc.	NYSERDA-Utility Collaboration	01/18/2019	\$200,000	\$200,000		
Commercial New Construc	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$39,576	\$89,576	\$29,841	\$29,84
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$141,397	\$141,397	\$5,053	\$5,0
	Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$42,640	\$42,640	\$3,347	\$3,3
Commercial Real Estate Ten	Competitive	N	123052	NYC Climate Action Alliance Inc.	NYC Climate Alliance - CT	02/01/2018		\$50,000	\$35,925	\$40,00
	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$50,000	\$50,000	\$20,070	\$20,07
	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$84,184	\$84,184		
	Competitive	Y	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$75,000		\$75,00
	Competitive	Υ	104539	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	10/05/2016		\$586,200	\$142,111	\$142,1
	Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016		\$246,792	\$167,387	\$243,4
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$1,980	\$267,326	\$76,396	\$167,7
	Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$377,058	\$377,058	\$6,769	\$6,76

ry In	itiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
Cı	ommercial Real Estate Ten	Competitive	Υ	121106	Meister Consultants Group, Inc.	Commercial Real Estate Ten	11/29/2017	\$36,265	\$36,265		
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$89,726	\$89,726		
		Discretionary	N	134422	The Real Estate Board of New York, Inc.	2018 PropTech Challenge	11/27/2018	\$12,500	\$12,500	\$12,500	\$12,500
Ci	ommunity RH&C	Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	11/15/2013		\$44,390		\$0
		Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$44,390	\$44,390	\$0	\$0
		Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016	\$48,201	\$48,201	\$48,201	\$48,201
		Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$40,047	\$40,047	\$967	\$967
		Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$39,079	\$39,079	\$1,288	\$1,288
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$164,000	\$199,000	\$164,657	\$192,220
		Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$11,000	\$0	\$11,000
		Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$30,046	\$58,391	\$24,353	\$24,353
		Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$71,432	\$71,432	\$58,054	\$58,054
EI	ectric Vehicles - Innovation	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$42,000	\$42,000	\$2,083	\$2,083
		Discretionary	N	123285	The Initiatives Group	HEVO Executive Training	02/09/2018		\$50,000		
		Discretionary	N	134855	Clean Power Research	PO for 2019 WattPlan EV	12/06/2018	\$18,000	\$18,000	\$9,000	\$9,000
		Discretionary	N	136354	Electrification Coalition Foundation	EV Awareness Campaign Design	01/23/2019	\$50,000	\$50,000		
		Discretionary	N	137955	Sustainable Westchester	Westchester HS EV Video/Awards	03/11/2019	\$2,500	\$2,500		
		Non-Competitive	N	120914	NESCAUM	ZEV Marketing Campaign	11/21/2017		\$262,500	\$175,000	\$262,500
		Non-Competitive	N	132467	Unique Electric Solutions LLC	Electric Vehicles - Innovation	10/12/2018	\$400,000	\$400,000		
		Non-Competitive	Υ	132467-1	Unique Electric Solutions of NYS LLC	Electric Vehicles - Innovation	11/29/2018	\$400,000	\$400,000	\$116,121	\$116,121
EI	ectric Vehicles - Rebate	Competitive	Υ	99297	Center for Sustainable Energy	ChargeNY ZEV Rebate Imp Contra	06/02/2016	\$402,007	\$402,007	\$262,644	\$262,644
		Competitive	Υ	137992	Center for Sustainable Energy	TWO #3 - Drive Clean Program	03/12/2019	\$1,331,278	\$1,331,278		
A	MERGING TECHNOLOGY /	Competitive	N	49526	Meister Consultants Group, Inc.	REV CC - Meister CG	10/10/2014		\$249,872		\$249,872
C	OMMERCIALIZATION	Competitive	Υ	18599A	FARM, LLC	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION	09/05/2012		\$118,252		\$38,660
		Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013		\$65,637	\$11,302	\$56,202
		Competitive	Υ	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$14,540		\$6,702
		Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013		\$336,125	\$58,640	\$272,854
		Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$111,363		\$110,644
		Competitive	Υ	37379	Taitem Engineering, P.C.	Technical Review and Program S	11/15/2013		\$196,992		\$46,764
		Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	11/15/2013		\$412,025		\$107,218
		Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$281,554	\$281,554	\$463	\$460
		Competitive	Υ	37391	LaBella Associates, P.C.	Technical Review and Program S	11/15/2013		\$245,580	\$73,888	\$137,505
		Competitive	Υ	37398	Nexant, Incorporated	Technical Review and Program S	11/15/2013		\$84,965	\$1,758	\$53,897
		Competitive	Υ	37404	Applied Energy Group, Inc.	Technical Review and Program S	11/15/2013		\$144,863		\$107,483
_		Non-Competitive	Υ	40553	Energy Improvement Corporation	Enabling CPACE in NYS	03/28/2014		\$0		\$0
EI	MPOWER NY	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$1,905,495		\$1,553,750
		Competitive	Υ	35659	Tech Valley Talent, LLC	RES QACSS Development	09/24/2013		\$200,000		\$197,750

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PCMT	EMPOWER NY	Competitive	Υ	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$3,379		\$3,379
		Competitive	Υ	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$177		\$177
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$203,430	\$265,191	\$104,069	\$155,494
		Competitive	Υ	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017		\$56,036	\$29,199	\$37,870
		Competitive	Υ	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017	\$7,180	\$7,180	\$3,299	\$3,299
		Competitive	Υ	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$143,661	\$143,661	\$31,719	\$31,719
		Competitive	Υ	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$2,905	\$2,905	\$490	\$490
	ENERGY ANALYSIS	Competitive	N	136796	Energy and Environmental Economics Inc.	TWO#15 Solar PV Adoption Forec	02/04/2019	\$75,000	\$75,000		
		Competitive	N	137219	Energy and Environmental Economics Inc.	101127 TWO#14	02/15/2019	\$800,000	\$800,000		
		Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$266		\$266
		Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$279,448		\$279,344
		Competitive	Υ	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$516,621	\$149,393	\$508,121
		Competitive	Υ	30191	Abt Associates Inc.	Flex Energy Tech Analysis 2	11/09/2012				
		Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$429,843		\$394,984
		Competitive	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$46,153		\$46,153
		Competitive	Υ	96266	Energy & Resource Solutions, Inc.	Renewable Heating Cooling TA	04/19/2016		\$149,150	\$142,819	\$149,150
		Competitive	Υ	96268	Meister Consultants Group, Inc.	Renewable Heating Cooling TA	04/19/2016	\$50,000	\$50,000	\$49,998	\$49,998
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$102,500	\$189,793	\$52,513	\$133,318
		Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016	\$97,637	\$912,417	\$132,577	\$918,126
		Competitive	Υ	101128	ICF Resources, LLC	Tech Assist, REV Pool	07/15/2016	\$269,783	\$629,471	\$247,422	\$384,912
		Competitive	Υ	101132	NESCAUM	Tech Assist, REV Pool	07/15/2016				
		Competitive	Υ	101133	Industrial Economics, Incorporated	Tech Assist, REV Pool	07/15/2016				
		Competitive	Υ	101159	Navigant Consulting Inc.	Tech Assist, REV Pool	07/15/2016				
		Competitive	Υ	101161	National Economic Research	Tech Assist, REV Pool	07/15/2016		\$50,000		\$50,000
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$136,000		\$136,000
		Competitive	Υ	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016				
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$233,100	\$233,100	\$84,403	\$84,403
		Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$83,948	\$83,948	\$60,496	\$60,496
		Competitive	Υ	118163	D.L. English Consulting, Inc.	Indian Point Consultant	09/13/2017		\$0		\$0
		Competitive	Υ	123055	ICF Resources, LLC	RFQL 3685 - Flexergy 3.0	02/01/2018	\$249,883	\$249,883		
		Competitive	Υ	123450	General Electric International, Inc.	RFQL3685 Round 1	02/15/2018	\$175,000	\$175,000	\$160,000	\$160,000
		Competitive	Υ	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$17,550	\$17,550	\$9,900	\$9,900
		Competitive	Υ	127158	The Cadmus Group, LLC	RFQL 3685 R2 Umbrella	05/22/2018	\$90,332	\$90,332	\$38,926	\$38,926
		Competitive	Υ	135251	Industrial Economics, Incorporated	EE Supply Curve Analysis	12/17/2018	\$159,788	\$159,788	\$13,301	\$13,301
		Competitive	Υ	137234	The Cadmus Group, LLC	TWO#3 -Supply Curve Analysis	02/19/2019	\$45,000	\$45,000		
		Competitive	Υ	138055	Four Points Group, Inc.	TWO #2 - NPP 60+	03/13/2019	\$75,000	\$75,000		
		Discretionary	N	29899	CONEG Policy Research Center, Inc.	ENERGY ANALYSIS	10/22/2012		\$22,000		

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PCMT	ENERGY ANALYSIS	Discretionary	N	83751	Optimal Energy Inc.	Support for EE&RE Potential	12/15/2015		\$49,000		\$44,192
		Discretionary	N	104461	Interaction Associates	ENERGY ANALYSIS	10/03/2016		\$19,000		\$17,914
		Discretionary	N	108968	Interaction Associates	ENERGY ANALYSIS	01/13/2017		\$9,500		\$9,301
		Discretionary	N	112765	Evolved Energy Research	ENERGY ANALYSIS	04/13/2017		\$45,000		\$44,235
		Discretionary	N	119091	Varun Sivaram	ENERGY ANALYSIS	10/05/2017		\$49,025		\$4,950
		Discretionary	N	124433	IHS Global Inc.	IHS Forecasting Service	03/19/2018	\$31,060	\$31,060	\$31,060	\$31,060
		Discretionary	N	124448	Max Wei	Technical Assistance for EEA	03/21/2018	\$10,000	\$10,000	\$600	\$600
		Discretionary	N	128474	Bloomberg, L.P.	Bloomberg Datafeed Access	06/28/2018	\$22,500	\$22,500		
		Discretionary	N	128474-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$22,500	\$22,500		
		Discretionary	N	130286	Regional Economic Models, Inc	ENERGY ANALYSIS	08/17/2018	\$6,000	\$6,000	\$6,000	\$6,000
		Discretionary	N	137639	IHS Global Inc.	IHS/CERA Subscription	03/01/2019	\$32,750	\$32,750		
		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		
		Discretionary	Υ	124423	Jeffery B. Greenblatt	EEA Project Review	03/16/2018		\$24,000	\$900	\$900
		Non-Competitive	N	108297	Regional Greenhouse Gas Initiative, Inc.	ENERGY ANALYSIS	12/20/2016		\$902,790		\$865,709
		Non-Competitive	N	111668	Yale University	ENERGY ANALYSIS	03/17/2017		\$30,000	\$15,000	\$30,000
		Non-Competitive	N	135181	Regional Greenhouse Gas Initiative, Inc.	RGGI Funding Agreement 2019	12/14/2018	\$829,256	\$829,256	\$829,256	\$829,256
		Non-Competitive	Υ	96262	Energy and Environmental Economics Inc.	Renewable Heating Cooling TA	04/19/2016		\$100,000	\$100,000	\$100,000
		Non-Competitive	Υ	115215	Resources for the Future Inc	Macroeconomic Methods	06/27/2017		\$50,000	\$31,454	\$31,454
	Energy Storage Tech/Prod Dev	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016		\$48,181		\$0
	Environmental Research	Competitive	N	118972	BioDiversity Research Institute	BRI: TWO umbrella agreement	10/02/2017		\$157,159	\$125,602	\$157,159
		Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$10,671		\$10,671
		Competitive	Υ	18599A	FARM, LLC	ENVIRONMENTAL RESEARCH	09/05/2012		\$5,759		\$4,173
		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$153,956		\$153,956
		Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$161,964		\$161,959
		Competitive	Υ	30191	Abt Associates Inc.	Flex Energy Tech Analysis 2	11/09/2012	\$200,000	\$721,038	\$157,910	\$551,261
		Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$138,620		\$135,971
		Competitive	Υ	31648A	Cornell University	NY climate clearinghouse	06/03/2013		\$354,752	\$66,698	\$351,698
		Competitive	Υ	34356	U.S. Geological Survey (Troy).	ALTM Stream Monitoring	08/07/2013		\$600,215		\$265,985
		Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$49,750	\$47,264	\$49,750
		Competitive	Υ	40322	Cornell University	optimize LED for greenhouses	03/18/2014		\$249,081	\$2,142	\$249,081
		Competitive	Υ	40325	Cornell University	improve EE of crop production	03/18/2014		\$83,765	\$1,933	\$49,640
		Competitive	Υ	60444	Warren Pinnacle Consulting, Inc.	SLAMM adaptation	03/10/2015		\$364,318	\$0	\$364,295
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$50,306	\$56,089	\$39,385	\$39,385
		Competitive	Υ	100415	Research Foundation of CUNY	Integrated Air Quality Monitor	06/29/2016		\$199,730	\$74,803	\$97,397
		Competitive	Υ	100416	Research Foundation of SUNY	Combining Measurements and Mod	06/29/2016		\$382,848	\$97,839	\$177,041
		Competitive	Y	100417	Research Foundation of SUNY	IDEA-NYS air quality forecast	06/29/2016		\$358,781	\$147,798	\$275,004

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT	Environmental Research	Competitive	Υ	103851	SUNY - ESF	Biofiltration drainage media	09/20/2016		\$292,911	\$75,761	\$128,708
		Competitive	Υ	103852	Electric Power Research Institute	Climate & future electric syst	09/20/2016		\$299,652	\$135,529	\$211,218
		Competitive	Υ	103853	DNV GL Energy Services USA Inc.	Building-Resiliency Assessment	09/20/2016		\$177,965	\$53,250	\$128,739
		Competitive	Υ	103862	The Trustees of Columbia University	Tropical Cyclone Risk Model	09/20/2016		\$299,873	\$112,967	\$163,716
		Competitive	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016		\$292,829	\$139,472	\$139,472
		Competitive	Υ	111606	Ecology and Environment Engineering, PC	RFP3462 Umbrella Agreement	03/16/2017		\$0	\$0	\$0
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$333,000	\$333,000	\$69,485	\$69,485
		Discretionary	N	102959-1	Research Foundation of SUNY	Forest Biomass	05/15/2017		\$49,982	\$20,811	\$20,811
		Discretionary	N	119410	Clarkson Univ., Research Div.	MAP-AQ mobile platform	10/20/2017		\$45,000	\$9,765	\$9,765
		Discretionary	N	123696	Kearns & West, Inc.	ETWG meeting prep & support	02/21/2018		\$49,940	\$49,625	\$49,625
		Discretionary	N	128724	BuildingGreen, Inc.	Malin: meeting facilitator	07/06/2018	\$8,000	\$8,000	\$8,000	\$8,000
		Discretionary	N	129934	Scotto Brothers Woodbury Restaurant, LLC	2018 State of the Science Wksp	08/09/2018	\$23,812	\$23,812	\$23,642	\$23,642
		Discretionary	N	130230	Evoworld	KEBA Analysis; TRNSYS Modeling	08/16/2018	\$24,500	\$24,500		
		Discretionary	N	131747	First Colonie Company	2018 Adapting Buildings Symp	09/28/2018	\$14,000	\$14,000	\$12,831	\$12,831
		Discretionary	N	135322	Boecker Consulting Services	Facilitate Devlpmt Proces	12/19/2018	\$12,400	\$12,400		
		Discretionary	Υ	31577	Richard E. Gibbs, Ph.D., P.E.	env program science advisor	03/15/2013		\$35,000		\$9,811
		Discretionary	Υ	31663	John E. Batey	science advisor support env	03/21/2013		\$35,000		\$11,475
		Discretionary	Υ	103081	Praveen Amar	Environmental Research Science	09/13/2016		\$40,000	\$16,634	\$24,150
		Discretionary	Υ	103918	The Trustees of Columbia University	Upstate building footprints	09/20/2016	\$47,487	\$47,487		
		Discretionary	Υ	104107	Watershed Assessment Associates, LLC	Aquatic Macroinvertebrate ID	09/22/2016		\$24,000	\$3,854	\$7,200
		Discretionary	Υ	127262	Research Foundation of SUNY	LISTOS	05/24/2018	\$46,048	\$46,048		
		Discretionary	Υ	134909	Praveen Amar	Amar ENV Rsch Science Advisor	12/07/2018	\$45,000	\$45,000	\$16,718	\$16,718
	Eval MCDC Cross Cutting	Competitive	N	136171	The Cadmus Group, LLC	TWO#2-Top_Down_Analysis	01/16/2019	\$49,995	\$49,995		
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016	\$47,840	\$47,840	\$40,969	\$40,969
		Non-Competitive	Υ	102013	Infogroup Government Division	Infogroup	08/05/2016		\$200,000	\$40,000	\$120,000
	Eval MCDC EE Master Soft Cost	Competitive	Υ	137083	The Cadmus Group, LLC	TWO#4 Soft Cost study	02/12/2019	\$332,038	\$332,038		
	EVALUATION	Competitive	N	131730	Carahsoft Technology Corporation	EVALUATION	09/25/2018	\$52,650	\$52,650	\$52,650	\$52,650
		Competitive	N	136171	The Cadmus Group, LLC	TWO#2-Top_Down_Analysis	01/16/2019	\$188,513	\$188,513		
		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$99,999		\$100,000
		Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$117,567		\$43,825
		Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$69,135		\$41,806
		Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	11/15/2013		\$124,840		\$79,717
		Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$45,040	\$45,040	\$31,152	\$31,152
		Competitive	Υ	43672	Opinion Dynamics Corporation	Commercial Statewide Baseline	07/02/2014		\$5,741,667	\$3,091,385	\$3,864,534
		Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$208,650	\$280,822		
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$12,000	\$18,974	\$8,917	\$15,892
		Competitive	Y	104531	ADM Associates, Inc.,	RFQ3183 Umbrella Agreement	10/05/2016		\$193,200	\$57,005	\$146,110

Category		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT	EVALUATION	Competitive	Υ	104535	NMR Group, Inc.	RFQ 3183 NMR Group, Inc.	10/05/2016	\$134,463	\$134,463	\$51,978	\$51,978
		Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$848,325	\$1,148,325	\$189,344	\$401,579
		Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$1,004,029	\$1,004,029	\$97,632	\$97,632
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016				
		Competitive	Υ	104543	Energy & Resource Solutions, Inc.	Energy & Resource Sol. TWO	10/05/2016		\$772,800	\$253,519	\$582,353
		Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016	\$139,647	\$139,647	\$12,814	\$12,814
		Competitive	Υ	104559	West Hill Energy & Computing, Inc.	RFQ3183 Umbrella Agreement	10/06/2016	\$67,150	\$267,150	\$49,273	\$59,699
		Competitive	Υ	123365	Energetics, Incorporated	RFQL3685 Round 1	02/13/2018	\$65,281	\$65,281	\$50,309	\$50,309
		Competitive	Υ	129931	The Cadmus Group, LLC	RFP3916 Res Bldg Stock Assessm	08/09/2018	\$2,035,881	\$2,035,881	\$1,716,471	\$1,716,471
		Competitive	Υ	137083	The Cadmus Group, LLC	TWO#4 Soft Cost study	02/12/2019	\$282,848	\$282,848		
		Discretionary	N	108968	Interaction Associates	EVALUATION	01/13/2017		\$9,500		\$9,301
		Discretionary	N	136612	Association of Energy Engineers	EVALUATION	01/29/2019	\$9,792	\$9,792	\$9,156	\$9,156
		Discretionary	Υ	107298	Dodge Data & Analytics	Dodge Data	11/28/2016		\$41,425	\$13,808	\$41,425
		Discretionary	Y	124424	Northeast Energy Efficiency Partnerships	NEEP CT EMV Project	03/16/2018	\$45,900	\$45,900	\$11,900	\$11,900
		Discretionary	Υ	132702	EC Infosystems, Inc.	EC Infosystems for EDI	10/17/2018	\$185,850	\$185,850	\$31,450	\$31,450
		Discretionary	Υ	136265	The Cadmus Group, LLC	EVALUATION	01/18/2019	\$50,000	\$50,000		
	-	Non-Competitive	N	104270	D & R International Ltd	EVALUATION	09/28/2016		\$84,400	\$20,600	\$84,400
		Non-Competitive	Υ	102013	Infogroup Government Division	Infogroup	08/05/2016		\$300,000	\$60,000	\$180,000
	EXISTING FACILITIES	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$11,257		\$11,257
		Competitive	Υ	18599A	FARM, LLC	EXISTING FACILITIES	09/05/2012		\$436		
		Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013		\$1,130,000	\$28,868	\$1,130,000
		Competitive	Υ	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$2,596,839		\$2,594,794
		Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013	\$7,837	\$166,566	\$6,039	\$150,614
		Competitive	Υ	37373	EME Consulting Engineering Group, LLC	Tech Review and Program Staff	11/15/2013		\$493,580		\$454,071
		Competitive	Y	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$37,819		\$23,718
		Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	11/15/2013		\$330,000		\$271,688
		Competitive	Υ	37380A	Frontier Energy, Inc.	Technical Review_Prgm Support	04/11/2018	\$3,857	\$3,857	\$3,857	\$3,857
		Competitive	Υ	37381	Vermont Energy Investment Corporation	Umbrella Contract	11/15/2013		\$54,977		\$38,153
		Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$395,275		\$385,876
		Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$823,892		\$745,209
		Competitive	Υ	37385	Versar, Inc	Technical Review and Program S	11/15/2013		\$21,299		\$13,248
		Competitive	Υ	37387	M/E Engineering, P.C.	Technical Review and Program S	11/15/2013		\$25,035		\$25,035
		Competitive	Υ	37393	ICF Resources, LLC	Technical Review and Program S	11/15/2013		\$134,380	\$14,517	\$114,073
		Competitive	Υ	37398	Nexant, Incorporated	Technical Review and Program S	11/15/2013		\$190,000		\$167,859
		Competitive	Υ	37403	C.T. Male Associates Engineering,	Technical Review and Program S	11/15/2013		\$64,335	\$2,208	\$59,777
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$16,544	\$16,544	\$14,274	\$14,274
		Competitive	Y	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$399,211	\$399,211	\$93,781	\$93,781

gory Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
IT EXISTING FACILITIES	Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$44,125	\$44,125	\$31,550	\$31,550
	Competitive	Υ	134066	Randstad North America Inc	Temp Services -	11/15/2018	\$0	\$0	\$0	\$0
	Competitive	Υ	135071	Bergmann Associates	TWO_EFP/DMP_QA/QC	12/12/2018	\$17,600	\$17,600		
	Discretionary	N	34225	Emacx Systems, Inc.	EXISTING FACILITIES	07/30/2013		\$30,000		\$3,000
Financing Solutions	Discretionary	N	126709	The Cadmus Group, LLC	Financing Solutions	05/10/2018	\$50,000	\$50,000	\$49,989	\$49,989
Flexible Tech Assistance	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$200,000	\$200,000	\$80,280	\$80,280
	Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$17,500	(\$17,500)	\$17,500
	Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$35,000	(\$25,344)	\$35,000
	Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$25,000	(\$16,580)	\$25,000
	Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$44,466	\$44,466	\$6,706	\$6,700
	Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$37,760	\$37,760	\$183	\$183
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$420,872	\$80,155	\$126,711
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016				
	Competitive	Y	114065	Center for Sustainable Energy	Centralized Services & Support	05/25/2017				
	Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$150,992	\$150,992	\$12,297	\$12,297
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$185,311	\$185,311	\$91,508	\$91,508
	Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$193,481	\$193,481	\$3,535	\$3,53
	Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$9,500	\$9,500	\$9,479	\$9,479
	Competitive	Υ	135754	Ecology and Environment Engineering, PC	Commercial Market Engagement	01/03/2019	\$88,661	\$88,661		
FLEXIBLE TECHNICAL ASSISTANCE	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$2,467		\$2,467
	Competitive	Υ	18599A	FARM, LLC	FLEXIBLE TECHNICAL ASSISTANCE	09/05/2012		\$23,472		\$16,694
	Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013		\$243,972		\$243,972
	Competitive	Υ	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$40,000		\$26,293
	Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$1,012,500	\$17,500	\$1,012,500
	Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$731,947	\$35,000	\$731,947
	Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$773,912	\$25,000	\$773,91
	Competitive	Υ	37398	Nexant, Incorporated	Technical Review and Program S	11/15/2013		\$1,149,146	\$13,315	\$1,046,22
	Competitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$682,693	\$51,555	\$682,69
	Competitive	Υ	37402	Steven Winter Associates, Inc.	Technical Review and Program S	11/15/2013		\$228,574		
	Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$22,500	\$22,500		
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$98,881	\$98,881		
FUEL NY	Competitive	N	48593	Buckeye Terminals, LLC	Upstate NY Strategic Fuels Res	09/25/2014	\$1,343,000	\$5,389,000	\$1,315,821	\$4,468,234
	Competitive	Y	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$9,422,846	\$1,366,346	\$6,531,075
	Competitive	Υ	39731	Garner Environmental Services, Inc.	Fuel NY Portable Emergency Gen	02/25/2014		\$51,000,000	\$25,087	\$932,85
	Discretionary	N	125065	IHS Global Inc.	OPIS Rack Price Subscription	03/30/2018	\$8,232	\$8,232	\$8,232	\$8,23
	Discretionary	N	138345	IHS Global Inc.	OPIS Rack Price Subscription	03/21/2019	\$8,736	\$8,736		
Geothermal Incentive Program	Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$295,577	\$295,577	\$7,139	\$7,139

	tegory Initiative	Туре		Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
	MT Geothermal Incenti	ve Program Compe	etitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$288,438	\$288,438	\$9,506	\$9,506
Part		Compe	etitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$80,000	\$115,000	\$84,130	\$111,693
Part		Compe	etitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$7,000	\$0	\$7,000
Part		Compe	etitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$125,971	\$224,086	\$72,816	\$106,116
Property		Compe	etitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$30,046	\$58,391	\$24,353	\$24,353
Perform Perf		Compe	etitive	Υ	127557	Frontier Energy, Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$400,000	\$400,000	\$70,430	\$70,430
Procession		Compe	etitive	Υ	127559	L&S Energy Services, Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$400,000	\$400,000	\$3,281	\$3,281
		Discret	tionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$5,000	\$5,000	\$5,000
Companies 1		Discret	tionary	N	124414		2018 NY GEO	03/14/2018	\$5,100	\$5,100	\$5,100	\$5,100
Competition N 2002		Discret	tionary	N	136372		2019 NY-Geo Conference	01/23/2019	\$8,900	\$8,900	\$8,900	\$8,900
Computing No. 2022 Concomit Information Control Member Control		IG LOAN Compe	etitive	N	18847	Lamont Financial Services Corporation	GJGNY REVOLVING LOAN FUND	04/29/2010		\$76,000		\$76,000
Compatible V Suffee Address Assemble Compatible V Suffee Address Assemble Compatible Compatible V Suffee Compatible Compatible V Suffee Compatible Compatible V Suffee Compatible Compatible V V Suffee Compatible V Suffee	. 0.1.5	Compe	etitive	N	20822	Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND	10/07/2010		\$606,000	\$3,513	\$37,925
Competition Y 2006 Lang Maior Programme Coatton LASINY Comment Case 11062013 \$11607211 \$11607213 \$1560721 \$15607		Compe	etitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$2,478,818		\$2,430,410
Competition V 3770		Compe	etitive	Υ	36976	Adirondack North Country Association	Green Jobs Green New York Outr	11/06/2013		\$265,960		\$265,600
Competitive V 37373 Tattom Engineering P.C. Technical Review and Program 5 11/15/2013 \$54.000 \$54.00		Compe	etitive	Υ	36986	Long Island Progressive Coalition	GJGNY Outreach CBO	11/06/2013		\$1,169,781		\$1,169,781
Competitive Y 37301 LaBiella Association P.C. Technical Review and Program S 1116/2013 \$34,640 \$81 \$344,640 \$85,000 \$5,000 \$5,000 \$5,000 \$6,000		Compe	etitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$9,539		\$9,539
Competitive V 37401 Bergmann Associaties Tech Review, Support, Liminorials 11/15/2013 55,000 55,000 55,000		Compe	etitive	Υ	37379	Taitem Engineering, P.C.	Technical Review and Program S	11/15/2013		\$24,982	\$950	\$24,982
Competitive V 41140 Bend Coursel K Printing, Inc. Printing Services 04/23/2014 85.167 86.000 85.167		Compe	etitive	Υ	37391	LaBella Associates, P.C.	Technical Review and Program S	11/15/2013		\$24,640	\$81	\$24,640
Competitive V 60713		Compe	etitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$5,900		\$5,900
Competitive V S0714A Dentons US LLP Band Counsel Services 09/25/2015 \$88.000 \$85.534		Compe	etitive	Υ	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$5,167		\$5,167
Competitive Y 104265		Compe	etitive	Υ	60713	Hawkins Delafield & Wood LLC	Bond Counsel Services	03/13/2015		\$60,000		\$57,301
Competitive Y 105461		Compe	etitive	Υ	60714A	Dentons US LLP	Bond Counsel Services	09/29/2015		\$26,000		\$25,834
Non-Competitive N		Compe	etitive	Υ	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016		\$20,000	\$5,173	\$19,036
Non-Competitive N 113648 Kroll Bond Rating Agency, Inc. GJGNY REVOLVING LOAN FUND 05/10/2017 S65,000 S61,838 S22,962		Compe	etitive	Υ	105451	Omnicap Group, LLC	Financial Advisory Services	10/21/2016		\$375,000	\$38,298	\$165,389
Non-Competitive Y 34250 First Associates Loan Servicing, LLC GJGNY REVOLVING LOAN FUND 07/31/2013 \$564,700 \$61,838 \$232,962		Non-Co	ompetitive	N	18847	Lamont Financial Services Corporation	GJGNY REVOLVING LOAN FUND	04/29/2010		\$442,100		\$408,151
Non-Competitive Y 68533 Bank of New York \$3000 annual fee for 14 yrs 07/08/2015 \$57,000 \$4,000 \$20,000		Non-Co	ompetitive	N	113648	Kroll Bond Rating Agency, Inc.	GJGNY REVOLVING LOAN FUND	05/10/2017		\$65,000		
Non-Competitive Y 71389 Bank of New York EFC REEF 2015 FEE 2015 08/19/2015 \$62,000 \$3,000 \$14,000		Non-Co	ompetitive	Υ	34250	First Associates Loan Servicing, LLC	GJGNY REVOLVING LOAN FUND	07/31/2013		\$564,700	\$61,838	\$232,962
Non-Competitive Y 104094 Bank of New York GJGNY 2016 Bonds Trustee 09/21/2016 \$62,000 \$3,050 \$14,050		Non-Co	ompetitive	Υ	68533	Bank of New York	\$3000 annual fee for 14 yrs	07/08/2015		\$57,000	\$4,000	\$20,000
GREEN AFFORDABLE HOUSING Competitive Y 29222 TRC Energy Services MF Energy Perf Portfolio Imple 09/17/2012 \$306,767 \$306,767 Competitive Y 29226 Taitem Engineering, P.C. MEPP Quality Assurance Contract 09/17/2012 \$84,374 \$3,780 \$84,374 Competitive Y ST9628 TRC Engineers, Inc. GREEN AFFORDABLE HOUSING 11/24/2009 \$118,668 \$118,668 Competitive Y ST9941 Taitem Engineering, P.C. GREEN AFFORDABLE HOUSING 06/02/2009 \$19,420 \$19,420 Non-Competitive Y 28551 Documentation Strategies, Inc. Multifamily IT Support 07/18/2012 \$14,693 \$14,693 Greenhouse Light & Systems Eng Competitive Y 104532 Apprise, Incorporated RFQ3183 Umbrella Agreement 10/05/2016 \$63,218 \$63,218		Non-Co	ompetitive	Υ	71389	Bank of New York	EFC REEF 2015 FEE 2015	08/19/2015		\$62,000	\$3,000	\$14,000
HOUSING Competitive Y 29226 Taitem Engineering, P.C. MEPP Quality Assurance Contrac 09/17/2012 \$84,374 \$3,780 \$84,374		Non-Co	ompetitive	Υ	104094	Bank of New York	GJGNY 2016 Bonds Trustee	09/21/2016		\$62,000	\$3,050	\$14,050
Competitive	GREEN AFFORDA	.BLE Compe	etitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$306,767		\$306,767
Competitive Y ST9941 Taitem Engineering, P.C. GREEN AFFORDABLE HOUSING 06/02/2009 \$19,420 \$19,420 \$19,420 Non-Competitive Y 28551 Documentation Strategies, Inc. Multifamily IT Support 07/18/2012 \$14,693 \$14,693 Greenhouse Light & Systems Eng Competitive Y 104532 Apprise, Incorporated RFQ3183 Umbrella Agreement 10/05/2016 \$63,218 \$63,218	HOUSING	Compe	etitive	Y	29226	Taitem Engineering, P.C.	MEPP Quality Assurance Contrac	09/17/2012		\$84,374	\$3,780	\$84,374
Non-Competitive Y 28551 Documentation Strategies, Inc. Multifamily IT Support 07/18/2012 \$14,693 \$14,693		Compe	etitive	Υ	ST9628	TRC Engineers, Inc.	GREEN AFFORDABLE HOUSING	11/24/2009		\$118,668		\$118,665
Greenhouse Light & Systems Eng Competitive Y 104532 Apprise, Incorporated RFQ3183 Umbrella Agreement 10/05/2016 \$63,218		Compe	etitive	Υ	ST9941	Taitem Engineering, P.C.	GREEN AFFORDABLE HOUSING	06/02/2009		\$19,420		\$19,420
Eng Composition in the Control of th		Non-Co	ompetitive	Υ	28551	Documentation Strategies, Inc.	Multifamily IT Support	07/18/2012		\$14,693		\$14,693
		& Systems Compe	etitive	Y	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$63,218	\$63,218		
		RONX Compe	etitive	N	120837-2	L&S Energy Services, Inc.	Greening the Bronx	05/16/2018	\$99,934	\$99,934	\$72,525	\$72,525

Category	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT	GREENING THE BRONX	Discretionary	N	100963	L&S Energy Services, Inc.	GtB- Evaluation	07/13/2016		\$42,814		
	Home Perf w Energy Star	Competitive	N	123698	Randstad North America, Inc.	Home Perf w Energy Star	02/21/2018		\$50,000	\$31,912	\$34,299
		Competitive	Υ	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$2,744	\$0	\$2,744
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$13,000	\$16,982	\$16,982	\$16,982
		Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$50,000	\$50,000	\$31,662	\$31,662
		Competitive	Υ	104535	NMR Group, Inc.	RFQ 3183 NMR Group, Inc.	10/05/2016	\$11,683	\$11,683	\$4,516	\$4,516
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$510,850	\$161,522	\$245,008
		Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$12,000	\$0	\$12,000
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$1,990,137	\$2,926,845	\$1,051,399	\$1,831,341
		Competitive	Υ	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017		\$4,460,966	\$1,843,113	\$2,582,814
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017		\$593,341	\$96,568	\$96,568
		Competitive	Y	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017	\$1,055,892	\$1,055,892	\$485,192	\$485,192
		Competitive	Y	127557	Frontier Energy, Inc.	3695 TWO Umbrella Agreement	06/04/2018				
		Competitive	Y	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$674,039	\$674,039	\$175,753	\$175,753
		Competitive	Y	127559	L&S Energy Services, Inc.	3695 TWO Umbrella Agreement	06/04/2018				
		Competitive	Y	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$360,580	\$360,580	\$91,465	\$91,465
		Discretionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$35,000	(\$10,000)	\$35,000
		Discretionary	N	128727	BPCA NYS Inc.	Tech Consulting for RES	07/06/2018	\$35,075	\$35,075	\$32,294	\$32,294
		Discretionary	N	129724	MCCK Syracuse Hotel No 2 LP	2018 RES Training - Central	08/03/2018	\$5,460	\$5,460	\$5,460	\$5,460
		Non-Competitive	Υ	53820	EnergySavvy Inc	HPWES Program Mgmt Portal	12/03/2014		\$1,233,057	\$65,248	\$1,232,871
	HOME PERFORMANCE WITH ENERGY STAR	Competitive	Y	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$374		\$374
		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$4,271,567		\$3,819,846
		Competitive	Y	35659	Tech Valley Talent, LLC	RES QACSS Development	09/24/2013		\$76,000		\$76,000
		Competitive	Y	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$673		\$673
		Competitive	Y	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$4,736	\$22,750	\$5,400	\$20,399
		Competitive	Υ	116844	CLEAResult Consulting, Inc.	Technical Support SFR	08/09/2017	\$305,525	\$759,481	\$680,275	\$701,083
		Competitive	Y	121807	EnergySavvy Inc	Residential Program MgtRFP3545	12/18/2017	\$7,180	\$7,180	\$3,299	\$3,299
		Competitive	Y	127558	Honeywell International Inc.	3695 TWO Umbrella Agreement	06/04/2018	\$84,130	\$84,130	\$35,548	\$35,548
		Competitive	Y	127604	Institute for Building Technology and Sa	3695 TWO Umbrella Agreement	06/05/2018	\$3,850	\$3,850	\$0	\$0
		Non-Competitive	Y	53820	EnergySavvy Inc	HPWES Program Mgmt Portal	12/03/2014		\$990,027		\$990,027
	Housing Analysis/Segmentation	Discretionary	N	125624	Apprise, Incorporated	Local coordination research	04/12/2018	\$50,000	\$50,000	\$50,000	\$50,000
	Industrial Process Effic	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$350,000	\$350,000	\$140,489	\$140,489
		Competitive	Y	30237	CHA Consulting Inc.	Commercial & Industrial Outrea	11/09/2012		\$970,253	\$175	\$907,965
		Competitive	Y	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013	\$13,800	\$42,696	\$13,520	\$41,653
		Competitive	Y	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$48,175	\$28,185	\$28,185
		Competitive	Y	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013	\$46,974	\$136,928	\$33,739	\$77,477
		Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$17,586		\$12,502

PCMT Industrial Proces		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
	ss Effic	Competitive	Y	37378	Antares Group, Inc.	Technical Review and Program S	11/15/2013		\$12,242		\$12,242
	-	Competitive	Υ	37381	Vermont Energy Investment Corporation	Umbrella Contract	11/15/2013		\$39,203	\$8,185	\$37,962
	-	Competitive	Υ	104531	ADM Associates, Inc.,	RFQ3183 Umbrella Agreement	10/05/2016		\$36,800	\$10,858	\$27,831
	-	Competitive	Υ	104543	Energy & Resource Solutions, Inc.	Energy & Resource Sol. TWO	10/05/2016		\$147,200	\$48,289	\$110,924
	-	Competitive	Υ	104557	Michaels Energy, Inc.	RFQ 3183 Michaels Energy	10/06/2016		\$300,000	\$57,237	\$202,554
	-	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$9,900	\$9,900	\$9,265	\$9,265
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$56,508	\$81,508	\$38,797	\$38,797
	_	Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$102,431	\$102,431	\$19,124	\$19,124
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$22,643	\$22,643	\$0	\$0
		Competitive	Υ	120138	Wendel Energy Services, LLC	RFP3628FlexTechConsultUmbrella	11/03/2017	\$150,000	\$150,000	\$105,318	\$105,318
		Competitive	Υ	120915	Arcadis of New York, Inc.	RFP3628FlexTechConsultUmbrella	11/21/2017	\$248,500	\$248,500	\$122,406	\$122,406
		Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$983,750	\$983,750	\$618,303	\$618,303
	_	Competitive	Υ	121439	O'Brien & Gere Engineers, Inc.	RFP3628FlexTechConsultUmbrella	12/07/2017	\$150,000	\$150,000	\$40,498	\$40,498
	_	Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018	\$150,000	\$150,000	\$5,753	\$5,753
	_	Discretionary	Υ	116434	Lawrence Berkeley National Laboratory	Industrial Process Efficiency	07/27/2017	\$30,000	\$30,000	\$30,000	\$30,000
INDUSTRIAL PE EFFICIENCY	ROCESS	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$315		\$315
	(Competitive	Υ	18599A	FARM, LLC	INDUSTRIAL PROCESS EFFICIENCY	09/05/2012		\$436		
		Competitive	Υ	30237	CHA Consulting Inc.	Commercial & Industrial Outrea	11/09/2012		\$2,899,279	\$0	\$2,899,279
		Competitive	Υ	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013	\$32,200	\$958,844	\$33,365	\$957,720
	-	Competitive	Y	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$14,000		\$4,431
	=	Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013	\$109,606	\$679,716	\$84,986	\$612,923
	-	Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013		\$110,802		\$103,561
	_	Competitive	Υ	37378	Antares Group, Inc.	Technical Review and Program S	11/15/2013		\$10,138		\$8,808
	_	Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	11/15/2013		\$959,018	\$2,261	\$957,020
	=	Competitive	Υ	37387	M/E Engineering, P.C.	Technical Review and Program S	11/15/2013		\$87,285		\$76,778
	-	Competitive	Υ	37393	ICF Resources, LLC	Technical Review and Program S	11/15/2013		\$2,110		\$2,054
	=	Competitive	Υ	37401	Bergmann Associates	Tech Review_Support_Umbrella	11/15/2013		\$89,103		\$89,103
	-	Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$602,323	\$602,323	\$90,700	\$90,700
	=	Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$290,571	\$290,571	\$17,914	\$17,914
INNOVATION C. BUSINESS DEV		Competitive	Y	18599A	FARM, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT	09/05/2012		\$5,759		\$4,173
BOOMEOO BEV		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$915,204		\$898,519
	-	Competitive	Y	27592	Frank Communications	Copywriting and Technical Edit	04/23/2012		\$100,000		\$96,579
	=	Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$65,000		\$64,350
		Competitive	Y	39066	Nixon Peabody LLP	Green Bank Outside Legal Serv.	01/21/2014		\$300,000		\$18,723
	-	Competitive	Υ	57387	Research Foundation of SUNY	EFRC co-funding	01/21/2015		\$391,000	\$2,700	\$197,240
		Competitive	Y	59723	The Research Foundation of SUNY at Bing	g EFRC co-funding	02/26/2015		\$199,250		\$199,250
	-	Competitive	Υ	70333	Cornell University	76West Building a Clean Energy	08/03/2015		\$584,126		\$490,312

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PCMT	INNOVATION CAPACITY & BUSINESS DEVELOPMENT	Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$25,000		\$24,506
		Discretionary	N	125315	Stony Brook Foundation - Advanced Energy	2018 AEC Cleantech Corral	04/05/2018	\$18,000	\$18,000	\$18,000	\$18,000
	Intervention Effectiv Training	Competitive	N	132045	Kelliher Samets Volk	TWO 22 Building Labeling Mkt	10/03/2018	\$98,190	\$98,190	\$65,881	\$65,881
		Discretionary	N	123845	American Council for an Energy Efficient	2018 ACEEE Finance Forum	02/27/2018	\$50,000	\$50,000	\$45,000	\$45,000
		Discretionary	N	130594	Institute for Market Transformation	Intervention Effectiv Training	08/28/2018	\$50,000	\$50,000	\$50,000	\$50,000
	K-12 SCHOOLS	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$0	\$0	\$0	\$0
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$49,631	\$49,631	\$16,778	\$16,778
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$1,052,467	\$1,052,467	\$85,943	\$85,943
		Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$0	\$0	\$0	\$0
	LARGE SCALE RENEWABLES	Competitive	Y	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$183,216		\$150,183
		Competitive	Υ	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016	\$75,000	\$75,000		
		Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$164,645		\$128,060
		Competitive	Υ	104541	Industrial Economics, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$179,750	\$179,750	\$87,586	\$87,586
	LMI Community Solar	Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$50,000	\$16,725	\$16,725
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$250,000	\$250,000	\$144,560	\$144,560
		Competitive	Y	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$255,624	\$255,624	\$42,221	\$42,221
	Low Rise New Construction	Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$213,444		\$213,444
		Competitive	Y	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$93,119	\$318,119	\$60,565	\$80,932
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$169,677	\$169,677	\$6,063	\$6,063
		Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$51,168	\$51,168	\$4,016	\$4,016
		Discretionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$5,000	\$2,500	\$5,000
		Discretionary	N	123506	Syracuse University	2018 Multifamily Summit	02/16/2018		\$5,000	\$2,705	\$2,705
		Discretionary	N	124959	The Research Foundation for the State	2018 NYS Green Building Conf.	03/28/2018	\$2,625	\$2,625	\$2,625	\$2,625
		Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$2,125	\$2,125	\$2,125	\$2,125
		Non-Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$325,000	\$26,115	\$317,634
	Low-Income Forum on Energy	Competitive	Υ	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$4,495		\$4,495
		Competitive	Υ	116343	TRC Energy Services	LIFE Implementation Services	07/26/2017		\$173,089	\$56,243	\$88,205
		Discretionary	N	111879	DNC Parks & Resorts at Gideon Putnam LLC	2017 LIFE Reg. Mtg Saratoga	03/22/2017		\$7,000		\$5,607
		Discretionary	N	120836	SMG Partners	LIFE 2018 Statewide Conference	11/20/2017		\$5,850	\$5,850	\$5,850
		Discretionary	N	120908	RAC Holdings Corp.	Mazzone Hospitality- LIFE 2018	11/21/2017	\$30,000	\$30,000	\$30,000	\$30,000
		Discretionary	N	120913	Color Methods	LIFE 2018 Conference - CMI AV	11/21/2017	\$1,080	\$11,080	\$11,080	\$11,080
		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		
		Discretionary	N	138143	AFP 108 Corp	Life 2019 Reg Mtg - Western NY	03/20/2019	\$6,000	\$6,000		
		Non-Competitive	N	120908	RAC Holdings Corp.	Mazzone Hospitality- LIFE 2018	11/21/2017	\$5,964	\$5,964	\$5,964	\$5,964
	MARKET PATHWAYS	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$276		\$276
		Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$638,614		\$638,614

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PCMT	MARKET PATHWAYS	Competitive	Υ	27892A	Lockheed Martin Corporation	Products Program	02/17/2016		\$434,981		\$182,675
		Discretionary	N	86068	CoStar Realty Information, Inc.	Research Subscription	12/30/2015		\$21,740		\$16,800
		Discretionary	Υ	40415	Rensselaer Polytechnic Institute-LRC	Outdoor Lighting Clearinghouse	03/21/2014		\$50,000		\$29,213
		Non-Competitive	Υ	29269	Rensselaer Polytechnic Institute-LRC	LRC Partners Program	09/17/2012		\$120,000		\$90,000
		Non-Competitive	Υ	40553	Energy Improvement Corporation	Enabling CPACE in NYS	03/28/2014		\$1,082,494	\$3,850	\$975,000
	Mkt Char: Tech Assist	Competitive	N	135615	Energy and Environmental Economics Inc.	TWO 13 - VDER Phase 2	12/28/2018	\$350,000	\$350,000	\$45,662	\$45,662
		Competitive	N	135945	Energy and Environmental Economics Inc.	TWO# 14 - Grid Value Model	01/09/2019	\$100,000	\$100,000	\$37,343	\$37,343
		Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016	\$380,124	\$1,665,485	\$993,452	\$1,549,811
		Competitive	Υ	101133	Industrial Economics, Incorporated	Tech Assist, REV Pool	07/15/2016	\$192,691	\$192,691	\$106,841	\$106,841
		Competitive	Υ	101159	Navigant Consulting Inc.	Tech Assist, REV Pool	07/15/2016	\$500,000	\$500,000		
		Competitive	Υ	101161	National Economic Research	Tech Assist, REV Pool	07/15/2016		\$387,000	\$63,073	\$234,540
		Competitive	Υ	127158	The Cadmus Group, LLC	RFQL 3685 R2 Umbrella	05/22/2018	\$30,000	\$30,000	\$12,928	\$12,928
		Competitive	Υ	135251	Industrial Economics, Incorporated	EE Supply Curve Analysis	12/17/2018	\$89,881	\$89,881	\$7,482	\$7,482
		Discretionary	N	122097	Van Nostrand Energy & Environmental	Policy Development Services	12/27/2017		\$200,000	\$69,618	\$92,514
		Discretionary	N	133820	Grid Strategies, LLC	Bulk Power System Resource Ad.	11/09/2018	\$200,000	\$200,000	\$20,000	\$20,000
		Discretionary	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016		\$50,000		\$6,737
		Discretionary	Υ	119092	Analysis Group, Inc.	Market Functions of DSP	10/05/2017		\$50,000	\$23,000	\$40,000
	MODELING & ANALYTICS	Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$100,000		\$100,000
	Multifam New Construction	Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$474,819		\$474,819
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$53,544	\$203,544	\$48,452	\$64,746
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$160,250	\$160,250	\$5,727	\$5,727
		Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$48,325	\$48,325	\$3,793	\$3,793
		Discretionary	N	113210-1	National Home Performance Council	2018 NY Regional Home Perf Con	05/24/2017		\$0	(\$2,500)	\$0
		Discretionary	N	123506	Syracuse University	2018 Multifamily Summit	02/16/2018		\$5,000	\$2,705	\$2,705
		Discretionary	N	124959	The Research Foundation for the State	2018 NYS Green Building Conf.	03/28/2018	\$2,625	\$2,625	\$2,625	\$2,625
		Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$2,125	\$2,125	\$2,125	\$2,125
		Non-Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$863,624	\$224,286	\$804,850
	Multifam Performance Pgm	Competitive	N	123698	Randstad North America, Inc.	Multifam Performance Pgm	02/21/2018		\$50,000	\$31,912	\$34,299
		Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$475,357		\$475,357
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$22,500	\$27,302	\$17,563	\$17,563
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$1,121,751	\$409,869	\$555,151
		Competitive	Y	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016		\$147,573	\$75,536	\$75,536
		Competitive	Υ	113498	Taitem Engineering, P.C.	RFQL3434 Cat1 Biomass Boilers	05/05/2017	\$430,000	\$430,000	\$223,059	\$223,059
		Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$165,603	\$165,603	\$95,924	\$95,924
		Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$785,501	\$785,501	\$431,589	\$431,589
		Discretionary	N	123506	Syracuse University	2018 Multifamily Summit	02/16/2018		\$40,000	\$21,639	\$21,639
		Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$2,125	\$2,125	\$2,125	\$2,125

y Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
Multifam Performance Pgm	Discretionary	N	138285	The Research Foundation for the State	2019 NYS Green Buildings Conf	03/20/2019	\$1,313	\$1,313		
	Discretionary	Υ	129937	TRC Energy Services	Program Tool Services for MPP	08/10/2018	\$50,000	\$50,000	\$5,422	\$5,422
	Non-Competitive	Y	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$836,640	\$403,842	\$836,640
MULTIFAMILY PERFORMANCE PROGRAM	Competitive	N	20822	Concord Servicing Corporation	MULTIFAMILY PERFORMANCE PROGRAM	10/07/2010		\$0		\$0
	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$6,955,977		\$6,863,894
	Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$10,474,027		\$10,474,027
	Competitive	Υ	29226	Taitem Engineering, P.C.	MEPP Quality Assurance Contrac	09/17/2012		\$2,455,166	\$109,997	\$2,455,166
	Competitive	Υ	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$7,511		\$7,51
	Competitive	Υ	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$3,040		\$3,04
	Competitive	Υ	ST9628	TRC Engineers, Inc.	MULTIFAMILY PERFORMANCE PROGRAM	11/24/2009		\$10,517,187		\$10,473,58
	Competitive	Υ	ST9941	Taitem Engineering, P.C.	MULTIFAMILY PERFORMANCE PROGRAM	06/02/2009		\$1,148,898		\$765,04
	Discretionary	Υ	91807	Robison Energy LLC	Oil Monitoring Pilot	02/29/2016		\$50,000	\$8,689	\$48,65
	Non-Competitive	N	18847	Lamont Financial Services Corporation	MULTIFAMILY PERFORMANCE PROGRAM	04/29/2010		\$0		\$
	Non-Competitive	Υ	28551	Documentation Strategies, Inc.	Multifamily IT Support	07/18/2012		\$405,307		\$405,30
	Non-Competitive	Υ	29222	TRC Energy Services	MF Energy Perf Portfolio Imple	09/17/2012		\$993,753	\$0	\$993,75
Nat'l OffShWind R&D Consortium	Competitive	N	131173	Alliance for Sustainable Energy, LLC	NREL for OSW Consortium	09/12/2018	\$79,672	\$79,672	\$53,115	\$53,111
	Competitive	N	131325	Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	09/17/2018	\$39,836	\$39,836	\$19,918	\$19,91
	Competitive	Υ	131674	The Renewables Consulting Group, LLC	RCG work for OSW Consortium	09/24/2018	\$159,344	\$159,344	\$117,915	\$117,91
NEW CONSTRUCTION PROGRAM	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$20,907		\$20,90
	Competitive	Υ	18599A	FARM, LLC	NEW CONSTRUCTION PROGRAM	09/05/2012		\$436		
	Competitive	Υ	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013	\$1,530	\$1,530	\$1,510	\$1,51
	Competitive	Υ	79701	Erdman Anthony & Associates, Inc.	EAA - EMP	11/02/2015		\$39,462		\$39,46
	Competitive	Υ	80550	C.J. Brown Energy, P.C.	CJ Brown - EMP	11/11/2015		\$23,571		\$18,70
	Competitive	Υ	83741	Atelier Ten	ATEN - EMP	12/14/2015		\$53,145		\$44,89
	Competitive	Υ	96883	Thornton Tomasetti, Inc.	Thornton Tomasetti-EMP	04/22/2016		\$13,995		\$13,999
	Competitive	Υ	ST10130	EME Consulting Engineering Group, LLC	NCP TA Contract - ST10130	04/04/2009		\$2,719,105	\$0	\$2,425,00
	Competitive	Υ	ST10140	Novus Engineering, P.C.	NCP TA Contract - ST10140	04/04/2009		\$449,300		\$295,36
New Construction- Commerc	al Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$7,500	\$7,500	\$6,630	\$6,63
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$13,968	\$13,968	\$0	\$
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$141,397	\$141,397	\$5,053	\$5,05
	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$14,000	\$40,650	\$39,607	\$39,60
	Competitive	Y	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$42,640	\$42,640	\$3,347	\$3,34
	Competitive	Υ	123329	New Buildings Institute, Inc.	New Construction- Commercial	02/12/2018		\$109,992	\$74,009	\$74,00
	Competitive	Y	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	02/19/2019	\$89,500	\$89,500		
New Construction- Housing	Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016	\$125,000	\$125,000	\$56,716	\$56,710
	Competitive	Y	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$265,000	\$265,000	\$168,128	\$168,128
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$32,592	\$32,592	\$0	\$0

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PCMT	New Construction- Housing	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$329,927	\$329,927	\$11,790	\$11,790
		Competitive	Υ	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$99,493	\$99,493	\$7,810	\$7,810
		Competitive	Υ	123329	New Buildings Institute, Inc.	New Construction- Housing	02/12/2018		\$73,328	\$59,077	\$59,077
		Competitive	Υ	128210	Newport Ventures, Inc.	New Construction- Housing	06/21/2018	\$200,000	\$200,000	\$112,273	\$112,273
		Competitive	Υ	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con	02/19/2019	\$179,000	\$179,000		
		Discretionary	N	136115	NESEA	2019 NESEA ProTour Series	01/15/2019	\$12,000	\$12,000	\$12,000	\$12,000
		Discretionary	N	138285	The Research Foundation for the State	2019 NYS Green Buildings Conf	03/20/2019	\$2,625	\$2,625		
		Discretionary	Υ	123125	Laurie D Kerr	New Construction- Housing	02/05/2018		\$85,000	\$70,803	\$70,803
	NEW YORK ENERGY STAR HOMES	Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$1,513,338		\$1,513,338
		Competitive	Υ	37379	Taitem Engineering, P.C.	Technical Review and Program S	11/15/2013		\$101,845	\$8,119	\$90,298
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016		\$49,957	\$24,205	\$32,345
		Non-Competitive	Υ	28876A	CLEAResult Consulting, Inc.	Implementation and Support con	08/04/2015		\$325,000	\$24,106	\$321,272
	NEW YORK GREEN BANK	Competitive	N	99720	DealCloud Inc.	DealCloud Implementation	06/13/2016		\$12,500		\$9,200
		Competitive	N	112666	Randstad North America, Inc.	Temp Services	04/11/2017		\$182,689	\$3,500	\$145,777
		Competitive	N	114696	Randstad North America, Inc.	Temporary Services	06/09/2017		\$186,000		\$135,881
		Competitive	N	128483	Randstad North America, Inc.	NEW YORK GREEN BANK	06/29/2018	\$6,500	\$6,500	\$5,515	\$5,515
		Competitive	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$6,620		\$6,257
		Competitive	Υ	39066	Nixon Peabody LLP	Green Bank Outside Legal Serv.	01/21/2014	\$224,559	\$471,880	\$224,559	\$471,880
		Competitive	Υ	39067	Holland & Knight LLP	Green Bank Outside Legal Serv.	01/21/2014	\$495,884	\$1,024,149	\$495,884	\$988,919
		Competitive	Υ	39068	Skadden, Arps, Slate, Meagher & Flom LL	Green Bank Outside Legal Couns	01/21/2014	\$22,288	\$328,138	\$22,288	\$318,504
		Competitive	Υ	39069	Loeb & Loeb LLP	Green Bank Outside Legal Couns	01/21/2014	\$239,240	\$583,634	\$239,240	\$583,634
		Competitive	Υ	39072	Clifford Chance US LLP	Green Bank Outside Legal Serv.	01/21/2014		\$36,000		\$26,038
		Competitive	Υ	46963	Navigant Consulting Inc.	Outside Technical and Eng. Srv	09/05/2014	\$175,774	\$376,587	\$92,207	\$181,514
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016		\$103,673		\$103,673
		Competitive	Υ	98838	DealCloud Inc.	DealCloud Licensing	05/24/2016		\$212,500	\$61,120	\$172,825
		Competitive	Υ	98839	SS&C Technologies, Inc.	Fund Administration/Loan Inves	05/24/2016		\$3,000,000	\$373,076	\$800,099
		Competitive	Υ	98840	KPMG LLP	Audit Services	05/24/2016		\$133,250	\$25,500	\$49,250
		Competitive	Υ	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$767,131	\$767,131	\$27,824	\$27,824
		Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$903,307	\$903,307	\$147,693	\$147,693
		Competitive	Υ	105451	Omnicap Group, LLC	Financial Advisory Services	10/21/2016		\$125,000		\$20,488
		Competitive	Υ	109917	BDO USA LLP	Background Investigation Servi	02/07/2017	\$2,500	\$11,850	\$2,500	\$11,850
		Competitive	Y	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$41,247	\$41,247	\$34,832	\$34,832
		Competitive	Υ	126362	Moelis & Company Group LP	3PC raise advisory Services	05/01/2018	\$750,000	\$750,000	\$526,321	\$526,321
		Discretionary	N	93592	James McCrea & Associates, LLC	NYGB Solar Energy RFP consulti	03/23/2016		\$50,000		\$34,576
		Discretionary	N	94004	Stewart Energy Consultants, LLC	NYGB Solar Energy RFP consulti	03/28/2016		\$50,000		\$48,774
		Discretionary	N	94360	Anne Compton Savage	Metrics, Reporting & Evaluatio	03/30/2016		\$50,000		\$6,994
		Discretionary	N	102573	Chadbourne & Parke LLP	Investec/Sunrun Legal Fees	08/17/2016		\$16,566		\$16,566

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PCMT	NEW YORK GREEN BANK	Discretionary	N	106599	William J Dombrowski	Revision of NYGB's RFP	11/10/2016		\$50,000		\$19,625
		Discretionary	N	108973	Robert O Gurman	Gurman Contract Consulting	01/17/2017		\$50,000		\$27,500
		Discretionary	N	115878	Pedro Barretto Leite de Barros	Pedro Barros - Strategy	07/14/2017		\$50,000		\$17,900
		Discretionary	N	117771	JCRA Financial LLC	JRCA Hedging Strategy	08/31/2017	\$25,000	\$25,000	\$3,497	\$3,497
		Discretionary	N	120012	Sunset Green Home LLC	Third-Party Capital Consulting	11/01/2017		\$200,000	\$88,493	\$123,274
		Discretionary	N	122814	Caroprese & Company	Forecast Model Development	01/23/2018		\$50,000	\$26,938	\$40,438
		Discretionary	N	125569	Albright Solutions LLC	3rd Party Capital Support	04/11/2018	\$25,000	\$25,000	\$6,456	\$6,456
		Discretionary	N	127480	Margaret R Cayten	NEW YORK GREEN BANK	06/01/2018	\$50,000	\$50,000		
		Discretionary	N	128157	Latham & Watkins LLP	NEW YORK GREEN BANK	06/20/2018	\$25,000	\$25,000	\$7,417	\$7,417
		Discretionary	N	132478	Bloomberg, L.P.	Bloomberg Datafeed Access	10/15/2018	\$22,500	\$22,500	\$7,276	\$7,276
		Discretionary	N	132478-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$15,224	\$15,224	\$6,420	\$6,420
		Discretionary	N	132773	Michael Farrell	Due Diligence Assistance	10/18/2018	\$50,000	\$50,000	\$20,396	\$20,396
		Discretionary	N	135908	Johnson Associates, Inc	JAI NYSERDA Consulting Cnt,	01/08/2019	\$50,000	\$50,000	\$42,000	\$42,000
		Discretionary	Y	62076	LexisNexis	NEW YORK GREEN BANK	04/08/2015				\$398
		Discretionary	Y	87399	James McCrea & Associates, LLC	James McCrea & Associates LLC	01/20/2016		\$50,000		\$450
		Discretionary	Y	115075	Essense Partners Inc.	Material development for NYGB	06/21/2017		\$150,000		\$21,828
		Discretionary	Y	118457	Adviser Compliance Associates, LLC	ACA Compliance Assessment	09/26/2017		\$49,000	\$24,500	\$49,000
		Non-Competitive	N	18847	Lamont Financial Services Corporation	NEW YORK GREEN BANK	04/29/2010		\$109,813		\$83,688
		Non-Competitive	N	123577	Proenergy Consulting LLC	Consulting NY Prize/Greenbank	02/20/2018	\$171,760	\$171,760	\$136,590	\$136,590
	NextGen HVAC	Discretionary	N	110961	Evoworld	NextGen HVAC	03/02/2017		\$48,089	\$18,689	\$18,689
		Discretionary	N	125319	Syracuse University	sponsor 2017 symposium	04/06/2018	\$10,000	\$10,000	\$10,000	\$10,000
	NY-SUN	Competitive	N	79049	Rafferty Enterprises, Inc.	Temp Services	10/28/2015		\$19,350		\$18,783
		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
		Competitive	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$48,616		\$34,676
		Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016		\$109,470		\$84,439
		Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016				
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$3,500,000	\$112,491	\$592,606
		Competitive	Y	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016				
		Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$0	\$0	\$0
		Competitive	Y	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017		\$10,128	\$120,710	\$120,710
		Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$164,697	\$164,697	\$60,311	\$60,311
		Discretionary	N	36460	Clean Power Research	Consut on NY SUN Block Program	10/24/2013		\$25,000		\$24,506
		Discretionary	N	104775	Employee Leasing of Greater NY	Temp Employee Services	10/11/2016	\$19,000	\$19,000	\$1,364	\$1,364
		Discretionary	N	124416	Solar Promotion International GmbH	2018 Intersolar	03/14/2018		\$20,000	\$20,000	\$20,000
		Discretionary	N	127352	Sustainable CUNY CUNY/RF	2018 Solar Storage Summit	05/30/2018	\$10,000	\$10,000	\$10,000	\$10,000
		Discretionary	N	132146	Greentech Media Inc.	GTM Solar Subscription	10/05/2018	\$25,000	\$25,000	\$25,000	\$25,000

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PCMT	NY-SUN	Discretionary	N	132628	Marriott Hotel Services	Solar + Storage Tech Conf	10/17/2018	\$50,372	\$50,372	\$50,372	\$50,372
		Discretionary	N	136612	Association of Energy Engineers	NY-SUN	01/29/2019	\$2,060	\$2,060	\$1,927	\$1,927
		Discretionary	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$3,810		\$3,742
		Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$538,649	\$0	\$399,000
	NYSERDA ADMINISTRATION	Competitive		98193	Xerox Corp	NYSERDA ADMINISTRATION	05/11/2016		\$14,674		\$14,022
		Competitive	N	22675	NYS Office For Technology	NYSERDA ADMINISTRATION	05/11/2011		\$182,790	\$20,430	\$179,555
		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	\$56,472	\$211,285
		Competitive	N	43051	Xerox Corp	NYSERDA ADMINISTRATION	06/17/2014		\$10,000		\$9,996
		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	71187	GCOM Software LLC	Salesforce Implementation	08/13/2015		\$4,582,549	\$107,368	\$4,582,548
		Competitive	N	72231	Rafferty Enterprises, Inc.	Temp Services NYC Office	09/03/2015		\$40,769		\$25,121
		Competitive	N	73679	Rafferty Enterprises, Inc.	Temp Employment Services	09/30/2015		\$5,382		\$861
		Competitive	N	78206	Rafferty Enterprises, Inc.	Temp Servies	10/16/2015		\$20,183		\$19,770
		Competitive	N	82152	Rafferty Enterprises, Inc.	Temp Employee Services	11/30/2015		\$59,000		\$58,968
		Competitive	N	82804	Rafferty Enterprises, Inc.	Temp Employees Services	12/02/2015		\$82,500		\$81,954
		Competitive	N	85023	22nd Century Technologies, Inc.	Staff Augmentation	12/18/2015	\$345,150	\$393,900	\$238,306	\$282,831
		Competitive	N	85027	Unique Comp Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$1,573,390	\$5,220,361	\$1,727,591	\$3,631,417
		Competitive	N	85029	GCOM Software LLC	Staff Aug Umbrella Agreement	12/18/2015	\$370,500	\$1,645,800	\$338,770	\$1,116,945
		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	\$360,000	\$1,016,275	\$245,980	\$771,138
		Competitive	N	96887	Network Experts of New York, Inc.	Peoplesoft Development	04/22/2016		\$24,440		
		Competitive	N	98512	NYS Office of General Services	2016-2019 Microsoft ELA 3 year	05/16/2016		\$142,080		\$44,645
		Competitive	N	102977	Xerox Corp	Xerox Maintenance Agreement	08/30/2016	\$22,000	\$89,200	\$41,311	\$88,162
		Competitive	N	109508	Direct Packet Inc.	Direct Response 2017	01/30/2017		\$5,055		
		Competitive	N	110542	Infosys International Inc	RFP3365 Private Cloud Hosting	02/21/2017		\$861,843	\$322,852	\$677,178
		Competitive	N	112665	Randstad North America, Inc.	Temp Services	04/11/2017		\$226,950	\$75,651	\$224,375
	- -	Competitive	N	113214	Lincoln Life & Annuity Company of NY	Long Term Disability Premium	04/28/2017	\$170,000	\$243,022	\$83,426	\$156,448
		Competitive	N	117866	The McAulay Smith Firm, LTD	SrLdr Smart Grid Search Firm	09/05/2017		\$50,000	\$370	\$16,370
		Competitive	N	121425	Oracle America, Inc.	UPK Developer Licenses - 2	12/07/2017		\$19,755		
	Co	Competitive	N	121855	Pitney Bowes, Inc.	NYSERDA ADMINISTRATION	12/19/2017		\$5,682		
		Competitive	N	122683	NYS Technology Enterprise Corporation	NYSERDA ADMINISTRATION	01/18/2018		\$55,044	\$54,727	\$54,727
		Competitive	N	125908	Carahsoft Technology Corporation	25 Salesforce Licenses	04/18/2018	\$42,350	\$42,350	\$42,350	\$42,350

Category Initiative	Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT NYSERDA ADMINISTRATION	Competitive	N	127927	Dell, Inc.	Laptops for West Valley - DELL	06/14/2018	\$10,750	\$10,750	\$10,750	\$10,750
	Competitive	N	129633	Provantage, LLC	Monitors for NYC and Alb.	08/01/2018	\$10,078	\$10,078	\$10,078	\$10,078
	Competitive	N	130408	Zones LLC	Network Switch - 15th Fl. NYC	08/22/2018	\$9,995	\$9,995	\$9,995	\$9,995
	Competitive	N	130914	Penda Aiken Inc.	Temporary Receptionist	09/06/2018	\$23,955	\$23,955	\$18,278	\$18,278
	Competitive	N	130983	Direct Packet Inc.	Video Service Renewal - Cisco	09/07/2018	\$26,082	\$26,082	\$26,082	\$26,082
	Competitive	N	132144	Atlantic Data Security, LLC	Checkpoint Management Server	10/05/2018	\$55,164	\$55,164	\$55,164	\$55,164
	Competitive	N	132466	Darling Advertising Agency Inc.	TWO #7 Strat Comm Renewables R	10/12/2018	\$12,000	\$12,000	\$9,798	\$9,798
	Competitive	N	135250	Tech Valley Talent, LLC	TWO26 Server Ops	12/17/2018	\$185,250	\$185,250	\$21,043	\$21,043
	Competitive	N	135474	Carahsoft Technology Corporation	Salesforces	12/21/2018	\$1,326,217	\$1,326,217	\$1,326,217	\$1,326,217
	Competitive	N	135707	Tech Valley Talent, LLC	SecureAuth 2 new + maint.	01/02/2019	\$26,851	\$26,851	\$25,348	\$25,348
	Competitive	N	136123	TEKsystems Inc	TWO EVConsultant	01/15/2019	\$6,800	\$6,800	\$1,445	\$1,445
	Competitive	N	136530	Provantage, LLC	Provantage Monitors - 52	01/28/2019	\$10,078	\$10,078	\$10,078	\$10,078
	Competitive	N	136923	Atlantic Data Security, LLC	Checkpoint Firewall - 3 yrs	02/07/2019	\$203,916	\$203,916	\$203,916	\$203,916
	Competitive	Y	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$69,072		\$67,668
	Competitive	Y	18599A	FARM, LLC	NYSERDA ADMINISTRATION	09/05/2012		\$31,748		\$10,379
	Competitive	Y	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010				
	Competitive	Y	18607	Zone 5, Inc.	RFQL and RFP 1224	04/05/2010		\$560,000		\$559,630
	Competitive	Y	21239	Bond, Schoeneck & King, PLLC	Outside Legal Services	12/02/2010		\$50,000	\$6,893	\$40,944
	Competitive	Y	21430	CDH Energy Corporation	DG-CHP Remote Monitoring Data	12/29/2010		\$17,013		\$8,693
	Competitive	Y	21727	Xerox Corp	NYSERDA ADMINISTRATION	01/26/2011		\$509,597		\$422,975
	Competitive	Y	21784	Antares Group, Inc.	Renewable Portfolio Standard T	02/01/2011		\$718,381		\$627,318
	Competitive	Y	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$1,270,475		\$1,123,990
	Competitive	Y	27592	Frank Communications	Copywriting and Technical Edit	04/23/2012		\$1,501		\$1,501
	Competitive	Y	30272	Xerox Corp	NYSERDA ADMINISTRATION	11/14/2012		\$142,721		\$65,687
	Competitive	Y	30472A	Fiber Technologies Networks, LLC	NYSERDA ADMINISTRATION	01/17/2017		\$20,935	\$4,000	\$20,000
	Competitive	Y	32004	First Columbia Property Services, LLC	Property Management Services	03/24/2016		\$1,105,344	\$24,622	\$1,053,484
	Competitive	Y	33863	Intellidatum LLC	NYSERDA ADMINISTRATION	07/15/2013		\$895,050		\$696,494
	Competitive	Y	34097	Tech Valley Talent, LLC	Identity and Access	07/24/2013		\$200,000		\$114,718
	Competitive	Y	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	37368	Energy & Resource Solutions, Inc.	Technical Review and Program S	11/15/2013		\$4,870		
	Competitive	Y	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$1,102,529		\$941,405
	Competitive	Y	38396	Northco Products, Inc.	Konica Minolta Copier	12/19/2013		\$20,000	\$3,231	\$19,009
	Competitive	Y	40300	Tech Valley Talent, LLC	Database Programmer - General	03/17/2014		\$200,000		\$190,229
	Competitive	Y	40488	Tech Valley Talent, LLC	.Net SQL Metrics Database Supp	03/26/2014		\$200,000		\$161,650
	Competitive	Y	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$1,282		\$1,282
	Competitive	Y	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$5,161		\$5,161

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PCMT NYSERDA ADMINISTRATION	Competitive	Υ	42112	Xerox Corp	Xerox Maintenace	05/28/2014		\$187,673		\$183,53
	Competitive	Υ	44920	Tech Valley Talent, LLC	Server Operations - Supplement	07/31/2014		\$185,250		\$151,19
	Competitive	Υ	48120	Terremark Federal Group, LLC	GSA Cloud Services - Renewal	09/18/2014		\$65,928		\$46,00
	Competitive	Υ	56630	Oracle America, Inc.	Renewal: Oracle PeopleSoft mai	01/12/2015		\$52,037		\$51,65
	Competitive	Υ	57857	inLogic, Inc.	RFID handheld scanners with 2	01/27/2015		\$6,149		\$6,11
	Competitive	Υ	59143	mindSHIFT Technologies, Inc.	Application Support and Manage	02/19/2015		\$16,000		
	Competitive	Υ	60713	Hawkins Delafield & Wood LLC	Bond Counsel Services	03/13/2015				
	Competitive	Υ	60714A	Dentons US LLP	Bond Counsel Services	09/29/2015				
	Competitive	Υ	62858	Marshall & Sterling, Inc.	Property Liability and Other	04/20/2015		\$1,055,038	\$191,522	\$839,70
	Competitive	Υ	64017	Rasky Baerlein Strategic Communications	Communications Services for Re	05/05/2015		\$172,692		\$172,09
	Competitive	Υ	67174	Unique Comp Inc.	Server Contractor	06/16/2015		\$167,700		\$161,04
	Competitive	Υ	69931	Amphora Consulting	Strategic Program Dev Training	07/28/2015		\$500,000		\$500,000
	Competitive	Υ	72025	mindSHIFT Technologies, Inc.	Website Development	08/31/2015		\$775,000	\$188,255	\$775,00
	Competitive	Υ	72126	Terremark Federal Group, LLC	Enterprise eCloud Renewal	09/01/2015		\$65,928	\$3,255	\$65,09
	Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$710,018	\$5,284,686	\$1,124,509	\$4,015,25
	Competitive	Υ	85026	Computer Aid, Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$0	\$280,800		\$97,20
	Competitive	Υ	86529	Oracle America, Inc.	Oracle Service and Maintenance	01/11/2016		\$53,598		\$53,20
	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$369,049	\$1,941,103	\$368,057	\$1,660,54
	Competitive	Υ	98840	KPMG LLP	Audit Services	05/24/2016		\$399,750	\$76,500	\$147,75
	Competitive	Υ	102626	NYS Office for Technology	Office 365 - 2015/2016	08/24/2016		\$67,766	\$12,760	\$67,70
	Competitive	Υ	102994	Terremark Federal Group, LLC	Enterprise ECloud - Renewal	08/31/2016	\$13,914	\$79,842	\$13,881	\$79,71
	Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$5,500	\$5,500	\$3,909	\$3,90
	Competitive	Υ	104259	Hodgson Russ LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016				
	Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016		\$9,425	\$9,425	\$9,42
	Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$85,355		\$85,35
	Competitive	Υ	104264	Arnold & Porter Kaye Scholer LLP	RFP 3300 Outside Counsel Servi	09/27/2016				
	Competitive	Υ	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$20,000	\$20,000	\$19,721	\$19,72
	Competitive	Υ	104266	Couch White, LLP	RFP 3300 Outside Counsel Servi	09/27/2016				
	Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016	\$158,172	\$244,372	\$154,249	\$202,44
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$50,000	\$58,000	\$49,638	\$57,60
	Competitive	Υ	106226	Arch Street Communications, Inc.	Marketing Support for NYSERDA	11/03/2016		\$8,000		\$8,00
	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$23,570	\$0	\$21,84
	Competitive	Υ	107299	CLEAResult Consulting, Inc.	Phone Email & Web Support	11/28/2016		\$438,004	\$117,862	\$281,570
	Competitive	Υ	113863	Dell, Inc.	MS Project and Visio	05/16/2017		\$114,755		\$81,730
	Competitive	Υ	114057	Oracle America, Inc.	User Productivity Kit (UPK)	05/23/2017		\$8,968	\$2,242	\$8,96
	Competitive	Υ	114189	ADP, Inc.	ADP Payroll and HR Svcs 2017	05/26/2017		\$180,521	\$65,912	\$112,66
	Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017		\$0	\$0	\$0

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PCMT NYSERDA ADMINISTRATION	Competitive	Υ	119371	International Business Machines	Replacement for PPSI Site	10/16/2017		\$34,129		
	Competitive	Υ	120292	GCOM Software LLC	Salesforce	11/07/2017	\$1,440,000	\$2,851,135	\$2,248,130	\$2,248,13
	Competitive	Υ	121379	Carahsoft Technology Corporation	Renewal: Salesforce.com	12/06/2017		\$1,239,347	\$5,779	\$1,239,34
	Competitive	Υ	122320	Oracle America, Inc.	Peoplesoft - Oracle 2018/2019	01/04/2018		\$53,598	\$40,199	\$53,59
	Competitive	Υ	123054	Gartner Inc.	Gartner Services 2018 - 2019	02/01/2018		\$55,334	\$55,334	\$55,33
	Competitive	Υ	124009	SHI, Inc.	Renewal - Adobe Creative Cloud	03/01/2018		\$9,848	\$9,848	\$9,84
	Competitive	Υ	124438	Systems Management Planning, Inc.	Webex Services - 2018 - 2019	03/20/2018		\$20,511	\$18,231	\$18,23
	Competitive	Υ	124908	First Columbia Property Services, LLC	Property Management	03/27/2018	\$228,674	\$228,674	\$197,094	\$197,09
	Competitive	Υ	125128	Systems Management Planning, Inc.	Aerohive Renewal 2018-2019	04/02/2018	\$5,941	\$5,941	\$5,941	\$5,94
	Competitive	Υ	125131	SHI, Inc.	1 Year - Adobe Acrobat Pro DC	04/02/2018	\$20,378	\$20,378	\$20,378	\$20,37
	Competitive	Υ	127360	Xerox Corp	NYSERDA ADMINISTRATION	05/30/2018	\$269,102	\$269,102	\$24,684	\$24,68
	Competitive	Υ	127705	Oracle America, Inc.	Oracle - User Productivity Kit	06/07/2018	\$8,968	\$8,968	\$6,726	\$6,720
	Competitive	Υ	129116	ESRI, Incorporated	ArcGIS Desktop and Spatial	07/18/2018	\$22,200	\$22,200	\$22,200	\$22,200
	Competitive	Υ	130077	Hewlett-Packard Enterprise Company	Support for NYSERDA HP Servers	08/14/2018	\$5,204	\$5,204	\$5,204	\$5,20
	Competitive	Υ	130233	ITS-NY	Office 365 2018-2019	08/16/2018	\$96,970	\$96,970		
	Competitive	Υ	130233-1	NYS Office for Technology	Office 365 2018-2019	12/12/2018	\$96,697	\$96,697	\$89,581	\$89,58
	Competitive	Υ	132775	Systems Management Planning, Inc.	NetApp 2240 2018 - 2019	10/18/2018	\$6,642	\$6,642	\$6,642	\$6,642
	Competitive	Υ	133271	Kelliher Samets Volk	TWO 25 KSV Program Linkages	10/30/2018	\$23,300	\$23,300	\$23,290	\$23,290
	Competitive	Υ	133389	mindSHIFT Technologies, Inc.	RFP 3919-Sitecore CMS Admin	11/01/2018	\$800,000	\$800,000	\$16,683	\$16,683
	Competitive	Υ	134066	Randstad North America Inc	Temp Services -	11/15/2018	\$104,442	\$104,442	\$7,244	\$7,24
	Competitive	Υ	134907	SHI, Inc.	ADA-Compliance Subscription	12/07/2018	\$15,544	\$15,544	\$15,544	\$15,544
	Competitive	Υ	135247	Oracle America, Inc.	Peoplesoft -Oracle 2019 - 2020	12/17/2018	\$53,598	\$53,598	\$13,400	\$13,400
	Competitive	Υ	136369	Unique Comp Inc.	TWO SQL ETL Dev.	01/23/2019	\$176,800	\$176,800	\$12,750	\$12,750
	Competitive	Υ	136430	SHI, Inc.	Embarcadero Enterprise Support	01/24/2019	\$16,829	\$16,829	\$16,829	\$16,829
	Competitive	Υ	136980	Unique Comp Inc.	TWO Sr. Systems Admin Bhanu	02/08/2019	\$176,800	\$176,800	\$4,080	\$4,08
	Competitive	Υ	137225	Systems Management Planning, Inc.	Webex Services - 2019 2020	02/15/2019	\$19,011	\$19,011		
	Competitive	Υ	137565	Systems Management Planning, Inc.	VMWare Airwatch 2019 - 2020	02/27/2019	\$6,439	\$6,439		
	Competitive	Υ	137985	Unique Comp Inc.	TWO 1 Server Op's Support	03/12/2019	\$203,775	\$203,775		
	Competitive	Υ	138056	Gartner Inc.	Gartner Services 2019-2020	03/13/2019	\$55,356	\$55,356		
	Competitive	Υ	138079	SHI, Inc.	Adobe Creative Cloud Licenses	03/14/2019	\$12,312	\$12,312		
	Competitive	Υ	138080	SHI, Inc.	Adobe Acrobat Pro DC - 1 yr.	03/14/2019	\$48,064	\$48,064		
	Discretionary	N	40419	First Quality Maintenance II, LLC	Office Cleaning Contract	03/24/2014		\$10,285		\$10,000
	Discretionary	N	43614	Computer SOS Inc.	Miscellaneous Buffalo/West Val	07/01/2014		\$7,980	\$170	\$5,49
	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

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PCMT NYSERDA ADMINISTRATION	Discretionary	N	73664	Tech Valley Talent, LLC	Infornatica, Data Quality Staf	09/24/2015		\$200,000		\$198,000
	Discretionary	N	79916	Rafferty Enterprises, Inc.	NYC Temp employee	11/05/2015		\$37,908		\$37,684
	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	91451	Adirondack Area Network	Video Recording Services	02/25/2016	\$405	\$17,405	\$8,480	\$17,405
	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	\$40,000	\$123,125
	Discretionary	N	98191	Fried, Frank, Harris, Shriver, Jacobson	Legal Services	05/11/2016	\$15,323	\$15,323	\$15,323	\$15,323
	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	104775	Employee Leasing of Greater NY	Temp Employee Services	10/11/2016	\$101,381	\$297,022	\$120,075	\$271,306
	Discretionary	N	107295-1	New York State Ag & Markets	2017 NYS Fair Exhibit	05/26/2017		\$9,475		\$8,200
	Discretionary	N	111168	Siteimprove, Inc.	Siteimprove Renewal 17-20	03/07/2017		\$17,916	\$5,972	\$11,944
	Discretionary	N	114801	Xerox Corp	Xerox Mobile Print - 3 years	06/13/2017		\$20,985	\$137	\$137
	Discretionary	N	115165	Concur Technologies, Inc.	Concur annual cost estimate	06/23/2017		\$17,000		\$13,171
	Discretionary	N	115913	Harris Wiltshire & Grannis LLP	NYSERDA ADMINISTRATION	07/17/2017		\$24,999		\$24,255
	Discretionary	N	116250	Control Solutions Group, Inc.	NYSERDA ADMINISTRATION	07/25/2017		\$10,238	\$2,520	\$10,006
	Discretionary	N	116252	Kelliher Samets Volk	Salesforce Optimization	07/25/2017		\$46,480	\$18,098	\$44,703
	Discretionary	N	116345	The Bonadio Group	data analysis extraction	07/26/2017		\$9,000	\$9,000	\$9,000
	Discretionary	N	116882	Executive Information Systems, LLC	Purchase SAS Analytical Softwa	08/10/2017	\$6,991	\$39,443	\$6,991	\$39,443
	Discretionary	N	119704	Arctic Air Mechanical Corp	HVAC for NY Office	10/24/2017		\$16,800	\$4,200	\$8,400
	Discretionary	N	121166	NGenious Solutions Inc.	SharePoint Online Consulting	11/30/2017	\$28,000	\$35,000	\$16,363	\$23,363
	Discretionary	N	122566	205 Wolf Holdings, LLC	2018 NYSERDA All Staff Meeting	01/12/2018		\$6,500	\$5,826	\$5,826
	Discretionary	N	123459	Milliman, Inc.	Valuation GASB 74 OPEB Liabili	02/16/2018	\$5,666	\$17,166	\$17,166	\$17,166
	Discretionary	N	124208	Petrecky Consulting LLC	DOE OSW Consortium Proposal	03/07/2018		\$35,000	\$35,000	\$35,000
	Discretionary	N	124427	Independent Security Services, Inc.	Security Servies	03/19/2018	\$5,000	\$5,000	\$813	\$813
	Discretionary	N	124443	Systems Management Planning, Inc.	VEEAM License Renewal - 3yrs	03/20/2018	\$20,426	\$20,426	\$20,426	\$20,426
	Discretionary	N	125126	New York State Ag & Markets	2018 NYS Fair Exhibit	04/02/2018	\$8,530	\$8,530	\$8,530	\$8,530
	Discretionary	N	126096	Control Solutions Group, Inc.	HVAC Maintenance NYC Office	04/24/2018	\$12,571	\$12,571	\$9,042	\$9,042
	Discretionary	N	129114	Rochester Computer Recycling & Recovery,	Data Destruction Services 2 yr	07/18/2018	\$25,000	\$25,000		
	Discretionary	N	129291	Bishop House Consulting, Inc.	NYSERDA ADMINISTRATION	07/25/2018	\$48,000	\$48,000	\$36,000	\$36,000
	Discretionary	N	130155	Taylor Group LTD	NYSERDA ADMINISTRATION	08/15/2018	\$15,482	\$15,482	\$15,482	\$15,482
	Discretionary	N	130288	Complete Cabling Solutions LLC	Cabling Solutions - NYC Office	08/17/2018	\$18,357	\$18,357	\$18,357	\$18,357
	Discretionary	N	131050	Bynder LLC	WebDAM Photo Library	09/10/2018	\$8,975	\$8,975	\$8,975	\$8,975
	Discretionary	N	131315	Environment & Energy Publishing, LLC	Annual subscription	09/14/2018	\$12,330	\$12,330	\$12,330	\$12,330
	Discretionary	N	131329	Executive Information Systems, LLC	NYSERDA ADMINISTRATION	09/17/2018	\$9,087	\$9,087	\$9,087	\$9,087
	Discretionary	N	133525	Low-Level Radioactive Waste Forum, Inc.	NYSERDA ADMINISTRATION	11/05/2018	\$5,000	\$5,000	\$5,000	\$5,000

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PCMT	NYSERDA ADMINISTRATION	Discretionary	N	133817	TEKsystems Inc	Agile Team Training Camp	11/09/2018	\$17,743	\$17,743	\$17,509	\$17,509
		Discretionary	N	134229	City and State	City and State Advertisement	11/20/2018	\$5,900	\$5,900	\$5,900	\$5,900
		Discretionary	N	135135	Lumsden & McCormick, LLP	Tax Compliance 2018- 3yr cycle	12/13/2018	\$20,200	\$20,200		
		Discretionary	N	135136	TEKSYSTEMS Global Services, LLC	Agile Team Training Camp	12/13/2018	\$17,743	\$17,743		
		Discretionary	N	135327	ITS-NY	pay SLMS invoices	12/19/2018	\$11,280	\$11,280		
		Discretionary	N	136612	Association of Energy Engineers	NYSERDA ADMINISTRATION	01/29/2019	\$2,060	\$2,060	\$1,927	\$1,927
		Discretionary	N	136833	ThunderCat Technology LLC	Circuit for NYC Office	02/05/2019	\$34,689	\$34,689		
		Discretionary	N	136884	ThunderCat Technology LLC	Precise Peoplesoft - Remote	02/06/2019	\$15,120	\$15,120		
		Discretionary	N	137216	Randstad North America Inc	Temporary mail room clerk	02/15/2019	\$22,425	\$22,425	\$2,916	\$2,916
		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	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$20,290		\$20,026
		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
		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	Υ	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	Υ	62076	LexisNexis	NYSERDA ADMINISTRATION	04/08/2015		\$49,260	\$5,636	\$47,735
		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	Y	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	Y	68677	Commercial Investigations LLC	Background Checks	07/09/2015		\$30,000	\$6,018	\$24,034
		Discretionary	Υ	69266	Network Experts of New York, Inc.	Contract Project Manager	07/17/2015		\$196,650		\$194,425
		Discretionary	Y	71766	Network Experts of New York, Inc.	Helpdesk Technician	08/26/2015		\$103,950		\$93,974
		Discretionary	Y	72723	Network Experts of New York, Inc.	.Net Developer for Staff Aug -	09/09/2015		\$174,525		\$131,207
		Discretionary	Y	73490	Corporate Resolutions Inc	KYC Services	09/21/2015		\$50,000		\$32,300
		Discretionary	Υ	77909	Unique Comp Inc.	Tableau Developer -	10/15/2015		\$199,939		\$189,266
		Discretionary	Υ	77910	Tech Valley Talent, LLC	Data Architect	10/15/2015		\$200,000		\$191,875
		Discretionary	Y	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

Category Initiative	Туре	Term > 1 Year		Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
PCMT NYSERDA ADMINISTRATION	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	104250	Tech Valley Talent, LLC	Information Security Sercices	09/26/2016		\$191,100		\$189,581
	Discretionary	Υ	108816	Capital District Records Management, Inc	Media Storage & Destruction	01/09/2017		\$6,768	\$2,442	\$5,550
	Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017		\$5,000	\$546	\$546
	Discretionary	Υ	110323	Systems Management Planning, Inc.	Webex Services - Renewal 17-18	02/15/2017		\$25,101		\$13,901
	Discretionary	Υ	110904	NYS Office for Technology	O365 Point to Point Circuit	03/01/2017	\$11,232	\$22,464	\$15,336	\$17,471
	Discretionary	Υ	113597	Network Experts of New York, Inc.	Adoption /Training Coordinator	05/09/2017		\$90,000		\$36,383
	Discretionary	Υ	115432	Troy Web Consulting, LLC	SEP Comment Sysytem	07/03/2017		\$14,985	\$5,333	\$10,598
	Discretionary	Υ	117673	Network Experts of New York, Inc.	Helpdesk Technician	08/29/2017		\$130,000	\$75,693	\$128,863
	Discretionary	Υ	118940	EC Infosystems, Inc.	Electronic Data Interchange	09/29/2017		\$190,650	\$91,800	\$132,600
	Discretionary	Υ	118970	Performance Systems Development	TREAT SITE License 17.18	10/02/2017		\$6,400		
	Discretionary	Υ	121232	Troy Web Consulting, LLC	Troy Web Hosting - Cloud	12/04/2017		\$7,020	\$7,020	\$7,020
	Discretionary	Υ	121299	Cullen and Dykman, LLP	NYSERDA ADMINISTRATION	12/05/2017		\$5,000	\$5,000	\$5,000
	Discretionary	Y	121379	Carahsoft Technology Corporation	Renewal: Salesforce.com	12/06/2017		\$11,585	\$11,585	\$11,585
	Discretionary	Υ	123746	Bizodo Inc	Seamless Docs Licensing 18-19	02/22/2018		\$27,450	\$27,450	\$27,450
	Discretionary	Υ	124007	Concur Technologies, Inc.	2018-2020 Concur annual cost	03/01/2018		\$33,000	\$16,871	\$16,871
	Discretionary	Υ	125134	Systems Management Planning, Inc.	Manage Engine Desktop Central	04/02/2018	\$8,821	\$8,821	\$8,821	\$8,821
	Discretionary	Υ	125707	AlienVault, Inc.	AlienVault License Renewal	04/13/2018	\$12,209	\$12,209	\$12,209	\$12,209
	Discretionary	Υ	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	04/17/2018	\$49,999	\$49,999	\$48,330	\$48,330
	Discretionary	Υ	126037	Triad Technology Partners LLC	Tableau Maintenance 18-19	04/23/2018	\$70,305	\$70,305	\$70,305	\$70,305
	Discretionary	Υ	126194	LexisNexis	Online Legal Research Access	04/26/2018	\$49,968	\$49,968	\$11,272	\$11,272
	Discretionary	Υ	126536	Phire, Inc	Phire Maintenance - 1 year	05/07/2018	\$15,300	\$15,300	\$15,300	\$15,300
	Discretionary	Υ	126611	APPEXTREMES, LLC	Conga Composer	05/08/2018	\$7,200	\$7,200	\$7,200	\$7,200
	Discretionary	Υ	126706	Politico LLC	NYSERDA ADMINISTRATION	05/10/2018	\$5,000	\$5,000	\$5,000	\$5,000
	Discretionary	Υ	126763	ThunderCat Technology LLC	Renewal: Docusign Subscription	05/11/2018	\$82,290	\$82,290	\$82,290	\$82,290
	Discretionary	Υ	127219	CDWG, Incorporated	SNOW - Endpoint Licenses 1 yr	05/23/2018	\$18,450	\$18,450	\$18,450	\$18,450
	Discretionary	Υ	127345	Sitecore USA, Inc.	Sitecore Web Support 18-19	05/29/2018	\$25,300	\$25,300	\$25,300	\$25,300
	Discretionary	Υ	128352	Center for Internet Security Inc	Information Security Malicious	06/26/2018	\$7,400	\$7,400	\$7,400	\$7,400
	Discretionary	Υ	128475	Diana L. McWilliams Interior Design, PLL	Capital Plan Renov Study	06/28/2018	\$75,000	\$75,000	\$47,482	\$47,482
	Discretionary	Υ	129858	New York State Forum for IRM	NYS Forum Membership 18-19	08/08/2018	\$5,500	\$5,500	\$5,500	\$5,500
	Discretionary	Υ	130036	Fiber Technologies Networks, LLC	Renewal: Dark Fiber	08/13/2018	\$11,940	\$11,940	\$6,975	\$6,975
	Discretionary	Υ	130037	ThunderCat Technology LLC	Atlassian Product Suite	08/13/2018	\$19,540	\$19,540	\$19,540	\$19,540
	Discretionary	Υ	131667	Network Experts of New York, Inc.	Helpdesk Technician	09/24/2018	\$142,000	\$142,000	\$41,858	\$41,858
	Discretionary	Υ	131998	Netsparker Limited	Vulnerability Scanning Softwar	10/02/2018	\$6,000	\$6,000	\$6,000	\$6,000
	Discretionary	Υ	132629	OwnBackup Inc.	Salesforce Backup Solutions	10/17/2018	\$14,573	\$14,573	\$14,573	\$14,573
	Discretionary	Υ	133472	ThunderCat Technology LLC	Atlassian (Jira) - Phase 1	11/02/2018	\$105,308	\$105,308	\$97,362	\$97,362

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PCMT	NYSERDA ADMINISTRATION	Discretionary	Υ	133824	Troy Web Consulting, LLC	Troy Web Hosting - Cloud 1 yr	11/09/2018	\$7,380	\$7,380	\$1,755	\$1,755
		Discretionary	Υ	136005	ThunderCat Technology LLC	Jira Software User Count	01/11/2019	\$18,338	\$18,338	\$18,338	\$18,338
		Discretionary	Υ	136601	ThunderCat Technology LLC	Jira Plug-in Licenses	01/29/2019	\$5,065	\$5,065	\$5,065	\$5,065
		Discretionary	Υ	136882	ThunderCat Technology LLC	Docusign - Subscription 19-20	02/06/2019	\$84,516	\$84,516	\$84,516	\$84,516
		Discretionary	Υ	137220	Bizodo Inc	Seamless Docs 2019 - 2020	02/15/2019	\$29,950	\$29,950	\$29,950	\$29,950
		Discretionary	Υ	137222	Systems Management Planning, Inc.	AeroHive Subscription 1 year	02/15/2019	\$5,414	\$5,414	\$5,414	\$5,414
		Discretionary	Υ	137436	Randstad North America, Inc.	Temporary NYSUN Coordinator	02/22/2019	\$112,476	\$112,476	\$905	\$905
		Discretionary	Υ	137480	ThunderCat Technology LLC	Precise Peoplesoft Software	02/25/2019	\$66,842	\$66,842		
		Discretionary	Υ	137525	AmTrust North America Inc.	NYSERDA ADMINISTRATION	02/26/2019	\$42,000	\$42,000		
		Non-Competitive	N	18847	Lamont Financial Services Corporation	NYSERDA ADMINISTRATION	04/29/2010		\$10,000		\$10,986
		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	\$2,138	\$117,838
		Non-Competitive	N	46873	Tobi Jo Creative, LLC	NYSERDA Website Redesign	09/04/2014		\$109,885		\$107,638
		Non-Competitive	N	66093	Sperry Energy	Innovation Advisory Services	06/03/2015		\$300,000		\$298,783
		Non-Competitive	N	68802	First Quality Maintenance II, LLC	NYC Office Cleaning	07/10/2015		\$88,842		\$82,549
		Non-Competitive	N	98191	Fried, Frank, Harris, Shriver, Jacobson	Legal Services	05/11/2016		\$100,000	\$21,727	\$100,000
		Non-Competitive	N	113027	NYS Office for Technology	Office 365 - 2016 - 2017	04/24/2017		\$67,766	\$65,996	\$65,996
		Non-Competitive	N	116344	Kelliher Samets Volk	Digital Transformation	07/26/2017		\$88,800	\$28,890	\$75,735
		Non-Competitive	N	118453	inMotion, Inc.	inMotion Project Management	09/25/2017		\$74,500	\$24,000	\$50,500
		Non-Competitive	N	119824	First Quality Maintenance II, LLC	NYSERDA ADMINISTRATION	10/26/2017		\$97,948	\$51,015	\$92,643
		Non-Competitive	N	136610	Metropolitan Life Insurance Company	NYSERDA ADMINISTRATION	01/29/2019	\$300,000	\$300,000	\$69,219	\$69,219
		Non-Competitive	Υ	28551	Documentation Strategies, Inc.	Multifamily IT Support	07/18/2012		\$18,000		\$15,804
		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		
		Non-Competitive	Υ	69931	Amphora Consulting	Strategic Program Dev Training	07/28/2015	\$33,400	\$108,400	\$26,000	\$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		\$10,086	\$5,835	\$9,913
		Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$136,377	\$0	\$108,872
	NYSERDA Fixed Asset	Competitive	N	26140	Albany Dodge	New Fleet Car	01/05/2012		\$21,121		\$21,121
		Competitive	N	28043	Verizon Network Integration Corp.	Auto Attendant	06/12/2012		\$6,274		\$6,274
		Competitive	N	29983-1	Ally Financial Inc.	2012 Chevy Volt	12/21/2012		\$36,272		\$36,272
		Competitive	N	43051	Xerox Corp		06/17/2014		\$9,071		\$9,071
		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	107793	Carbone Auto Group, LLC	Replacement vehicle for Admini	12/09/2016		\$45,630		\$45,630

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PCMT NYSERDA Fixed Asset	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	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	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	123751	Nye Automotive Group, Inc	Ford Fusion fleet	02/26/2018		\$24,788		\$24,788
	Competitive	N	124906	Zones LLC	RFP 3670 VOIP	03/27/2018	\$319,735	\$319,735		
	Competitive	N	129626	FM Office Express	Furniture 1359 Broadway 15th	08/01/2018	\$84,185	\$84,185	\$84,185	\$84,185
	Competitive	N	130454	Offshore Electric Corp.	NYC Suite 1540 Electrical Work	08/24/2018	\$17,496	\$17,496	\$17,496	\$17,496
	Competitive	Υ	30272	Xerox Corp		11/14/2012		\$22,078		\$78,665
	Competitive	Υ	32004	First Columbia Property Services, LLC	Property Management Services	03/24/2016		\$233,967		\$233,967
	Competitive	Υ	60292	ESRI, Incorporated	ESRI Arc Server - 1 year	03/06/2015		\$32,643		\$32,643
	Competitive	Υ	104106	nfrastructure	Tintri Flash Storage - Renewal	09/22/2016		\$7,548		\$7,548
	Discretionary	N	24708	ASKCO Electric Supply Co Inc	Upgrade NYSERDA meters	10/13/2011		\$16,554		\$16,554
	Discretionary	N	27624	Carrow Real Estate Services, LLC	Office Buildout at 15	05/01/2012		\$10,962		\$10,962
	Discretionary	N	27625	LCO Buildings LLC	Office Buildout at Buffalo Reg	05/01/2012		\$6,853		\$6,853
	Discretionary	N	30648	Tech Home Electric, LLC	ev plug in charger	12/18/2012		\$5,465		\$5,465
	Discretionary	N	34467	Gard Tec Security Svcs., Inc.	Security System for 15 Columbi	08/13/2013		\$14,220		\$14,220
	Discretionary	N	34468	Gard Tec Security Svcs., Inc.	15 Columbia Circle Office Secu	08/13/2013		\$14,055		\$14,055
	Discretionary	N	43567	Phire, Inc	Phire - PeopleSoft Renewal - 3	06/30/2014		\$41,715		\$41,715
	Discretionary	N	45875	Network Experts of New York, Inc.	Albany: Redundant Checkpoint H	08/19/2014		\$29,872		\$29,872
	Discretionary	N	101670	Gard Tec Security Svcs., Inc.	Security for West Valley offic	07/28/2016		\$9,657		\$9,657
	Discretionary	N	114799	DFB Sales Inc.	Black-out shades for NYC	06/13/2017		\$6,325		\$6,325
	Discretionary	N	119825	ClipperCreek, Inc.	EV Charging Stations	10/26/2017		\$6,873		\$6,873
	Discretionary	N	126539	FM Office Express	Sit Stand Desks	05/07/2018	\$19,368	\$19,368	\$19,368	\$19,368
	Discretionary	N	135863	W & E Phillips Locksmith, Inc	17CC Card Readers Reception	01/07/2019	\$13,820	\$13,820		
	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	\$6,859	\$6,859
	Non-Competitive	N	57885	Performance Systems Development	TREAT Site License for VMWARE	01/28/2015		\$8,000		\$8,000
	Non-Competitive	Υ	78360	Performance Systems Development	Treat Site Licenses - 16	10/20/2015		\$6,400		\$6,400
Off-Shore Wind Master Pl	n Competitive	N	118972	BioDiversity Research Institute	BRI: TWO umbrella agreement	10/02/2017		\$29,830	\$29,830	\$29,830
	Competitive	Υ	101085	Brattle Group Inc.	Large Scales Renewables Techni	07/15/2016		\$895,000		\$831,813
	Competitive	Y	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$175,000	\$475,000	\$172,017	\$432,962
	Competitive	Y	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$24,539	\$24,539	\$24,539

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PCMT	Off-Shore Wind Master Plan	Competitive	Υ	106224	Darling Advertising Agency Inc.	Marketing Support for NYSERDA	11/03/2016		\$320,000	\$108,513	\$254,564
		Competitive	Υ	111606	Ecology and Environment Engineering, PC	RFP3462 Umbrella Agreement	03/16/2017		\$1,530,701	\$1,524,200	\$1,524,200
		Discretionary	N	113873	Sea Risk Solutions LLC	Fisheries Liaison/ Consulting	05/18/2017		\$50,000	\$50,000	\$50,000
		Discretionary	N	117863	Kearns & West, Inc.	OWE InteragencyMeeting support	09/05/2017		\$20,235	\$20,083	\$20,083
		Discretionary	N	132086	RHC Operating LLC	2018 OSW Supplier Forum	10/04/2018	\$107,034	\$107,034	\$97,034	\$97,034
		Discretionary	N	135577	Business Network for Maryland Offshore W	/ 2019 IPF Conference	12/28/2018	\$48,800	\$48,800	\$48,800	\$48,800
		Discretionary	N	137984	Hyatt Corporation as agent for Hyatt Equ	Reception at IPF Conference	03/12/2019	\$17,032	\$17,032	\$4,578	\$4,578
	Off-Shore Wind Pre-Dev Act	Competitive	N	118972	BioDiversity Research Institute	BRI: TWO umbrella agreement	10/02/2017	\$415,037	\$415,037	\$95,489	\$125,319
		Competitive	N	135752	Fugro Marine GeoServices, Inc.	TWO 1 Agreement 111941	01/03/2019	\$27,860	\$27,860		
		Competitive	N	135752A	Fugro USA Marine, Inc.	TWO 1 Agreement 111941	03/05/2019	\$27,860	\$27,860		
		Competitive	N	136703	Ecology and Environment Engineering, PC	TWO#17 Fishing Lanes	01/31/2019	\$97,600	\$97,600		
		Competitive	N	136704	Ecology and Environment Engineering, PC	TWO#18 G&G surveys	01/31/2019	\$84,700	\$84,700		
		Competitive	Υ	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$123,302	\$4,112	\$115,874
		Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$50,000	\$50,000	\$50,000	\$50,000
		Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$0	(\$24,539)	\$0
		Competitive	Υ	111606	Ecology and Environment Engineering, PC	RFP3462 Umbrella Agreement	03/16/2017	\$843,792	\$1,134,859	(\$999,748)	\$674,005
		Competitive	Υ	111611	Quanta Technology LLC	RFP3462 Umbrella Agreement	03/16/2017		\$255,000	\$1,990	\$226,042
		Discretionary	N	113873	Sea Risk Solutions LLC	Fisheries Liaison/ Consulting	05/18/2017		\$0	(\$50,000)	\$0
		Discretionary	N	117863	Kearns & West, Inc.	OWE InteragencyMeeting support	09/05/2017		\$0	(\$20,083)	\$0
		Discretionary	N	137984	Hyatt Corporation as agent for Hyatt Equ	Reception at IPF Conference	03/12/2019	\$1,568	\$1,568	\$422	\$422
	On-Site Energy Manager	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$100,000	\$100,000	\$40,140	\$40,140
		Competitive	N	134956	The Cadmus Group, LLC	Task Order #3 from 104542	12/10/2018	\$139,971	\$139,971	\$55,854	\$55,854
		Competitive	Υ	30237	CHA Consulting Inc.	Commercial & Industrial Outrea	11/09/2012		\$73,535	\$29	\$64,632
		Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016		\$67,487		\$20,488
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016		\$212,803	\$40,397	\$143,196
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$25,000	\$2,927	\$25,000
		Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$110,000	\$110,000	\$69,368	\$69,368
		Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018	\$300,000	\$300,000	\$11,505	\$11,505
		Discretionary	N	136612	Association of Energy Engineers	On-Site Energy Manager	01/29/2019	\$2,577	\$2,577	\$2,410	\$2,410
	OREC: Technical Support	Competitive	Υ	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016	\$43,500	\$43,500	\$9,304	\$9,304
		Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$175,000	\$175,000	\$100,068	\$100,068
		Competitive	Υ	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$100,000	\$100,000	\$83,014	\$83,014
		Competitive	Υ	111614	Levitan & Associates, Inc.	RFP3462 Umbrella Agreement	03/16/2017	\$1,445,000	\$1,445,000	\$1,037,711	\$1,037,711
		Competitive	Υ	123374	ABB, Incorporated	RFQL3685 Round 1	02/13/2018	\$236,500	\$236,500		
		Competitive	Υ	134231	Merrimack Energy Group, Inc.	RFQL3926 Umbrella Contract	11/20/2018	\$65,000	\$65,000		
		Competitive	Υ	134235	Power Advisory LLC	RFQL3926 Umbrella Contract	11/20/2018	\$65,000	\$65,000		
		Competitive	Υ	134428	M.J. Beck Consulting LLC	RFQL3926 Umbrella Contract	11/27/2018	\$65,000	\$65,000		

y Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
OREC: Technical Support	Discretionary	N	130450	Lumsden & McCormick, LLP	OREC: Technical Support	08/23/2018	\$7,000	\$7,000	\$4,000	\$4,000
	Discretionary	N	136754	Kearns & West, Inc.	OSW RFP Facilitation Support	02/01/2019	\$36,433	\$36,433		
OTHER PROGRAM AREA	Competitive	N	30726	Village of Tupper Lake	Tupper Lake District Heat	12/21/2012		\$300,000		\$285,00
	Competitive	N	131173	Alliance for Sustainable Energy, LLC	NREL for OSW Consortium	09/12/2018	\$40,328	\$40,328	\$26,885	\$26,88
	Competitive	N	131325	Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	09/17/2018	\$20,164	\$20,164	\$10,082	\$10,08
	Competitive	N	137165	Holland & Knight LLP	OTHER PROGRAM AREA	02/14/2019	\$35,000	\$35,000		
	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$301,177		\$288,30
	Competitive	Υ	18599A	FARM, LLC	OTHER PROGRAM AREA	09/05/2012		\$5,764		\$4,1
	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$1,242,222		\$1,242,22
	Competitive	Υ	27892A	Lockheed Martin Corporation	Products Program	02/17/2016		\$44,588		\$10,28
	Competitive	Y	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$472,206		\$436,04
	Competitive	Y	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$33,871		\$33,8
	Competitive	Y	30712	The Research Foundation for the State	CNSE Net Zero Project	12/21/2012		\$1,000,000		\$670,00
	Competitive	Y	30713	Research Foundation of SUNY	Regional Economic Development	12/21/2012		\$397,831	\$23,334	\$397,72
	Competitive	Y	30717	Village of Skaneateles	Skaneateles Village Hall NZEB	12/21/2012		\$546,493	\$44,214	\$540,98
	Competitive	Y	30718	Cornell University	CornellNYC Tech Energy Program	12/21/2012		\$870,030		\$870,0
	Competitive	Υ	30728	Watertown, City of	Sludge permitting and design	12/21/2012		\$585,646	\$126,639	\$460,4
	Competitive	Y	37366	Arcadis U.S., Inc.	Tech Review & Program Staff	11/15/2013		\$313,530	\$165,734	\$165,73
	Competitive	Y	41144	Dowd-Witbeck Printing Corp.	Printing Services	04/23/2014		\$110		\$1
	Competitive	Y	70333	Cornell University	76West Building a Clean Energy	08/03/2015	\$1,380,192	\$4,048,786	\$1,052,046	\$2,676,8
	Competitive	Υ	99297	Center for Sustainable Energy	ChargeNY ZEV Rebate Imp Contra	06/02/2016		\$554,964	\$99,068	\$554,96
	Competitive	Y	101044	Arcadis of New York, Inc.	Large Scales Renewables Techni	07/15/2016		\$111,527	\$23,250	\$111,2
	Competitive	Y	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016		\$325,000	\$97,380	\$318,79
	Competitive	Y	101128	ICF Resources, LLC	Tech Assist, REV Pool	07/15/2016	\$5,217	\$52,506	\$0	\$42,16
	Competitive	Y	101132	NESCAUM	Tech Assist, REV Pool	07/15/2016		\$66,284		\$66,2
	Competitive	Y	101161	National Economic Research	Tech Assist, REV Pool	07/15/2016		\$50,000		\$50,00
	Competitive	Y	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$100,000	\$107,500	\$87,207	\$94,7
	Competitive	Y	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016				
	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$247,500	\$1,124,000	\$305,281	\$983,8
	Competitive	Υ	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016		\$278,956	\$121,308	\$269,6
	Competitive	Υ	114065	Center for Sustainable Energy	Centralized Services & Support	05/25/2017	\$170,234	\$170,234	\$22,415	\$22,4
	Competitive	Y	116896	United Way of Long Island	CEEP Long Island (UWLI)	08/10/2017		\$420,000	\$110,223	\$110,2
	Competitive	Υ	118163	D.L. English Consulting, Inc.	Indian Point Consultant	09/13/2017	\$6,660	\$356,475	\$52,786	\$355,9
	Competitive	Y	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$12,000	\$12,000	\$10,498	\$10,49
	Competitive	Υ	129761	Four Points Group, Inc.	RFQL 3685 R2	08/06/2018	\$86,039	\$86,039	\$41,378	\$41,3
	Competitive	Υ	131674	The Renewables Consulting Group, LLC	RCG work for OSW Consortium	09/24/2018	\$80,656	\$80,656	\$59,685	\$59,6
	Discretionary	N	70365A	Essense Partners Inc.	76West Marketing Consultant	12/08/2016		\$40,026		\$39,42

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PCMT	OTHER PROGRAM AREA	Discretionary	N	100693	Essense Partners Inc.	ZEV Marketing Support	07/08/2016		\$197,900		\$195,721
		Discretionary	N	107800	Amerex Brokers LLC	OTHER PROGRAM AREA	12/13/2016		\$49,999	\$1,130	\$16,610
		Discretionary	N	109345	Electric Energy Services & Advisors, LLC	OTHER PROGRAM AREA	01/24/2017		\$35,000		\$25,460
		Discretionary	N	125503	New York Convention Center Operating Cor	Booth services of NY Auto Show	04/10/2018	\$7,884	\$7,884	\$7,884	\$7,884
		Discretionary	N	126409	Freeman Decorating Co	2018 NY Auto Show - Exhibit	05/02/2018	\$5,244	\$5,244	\$5,244	\$5,244
		Discretionary	N	129416	Ruskin Moscou Faltischek, P.C.'s	OSW legal incorporation filing	07/26/2018	\$6,679	\$6,679	\$6,679	\$6,679
		Discretionary	N	130510	GreenBiz Group, Inc.	2018 Verge Sponsorship	08/24/2018	\$7,500	\$7,500		
		Discretionary	N	130600	BHCC II LLC	2018 76West Finals Event	08/29/2018	\$6,000	\$6,000	\$3,475	\$3,475
		Discretionary	N	132090	PitchBook Data, Inc.	Online Subscription	10/05/2018	\$22,500	\$22,500	\$22,500	\$22,500
		Discretionary	N	132343	Cornell University	Sponsor Cornell Energy Connect	10/10/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	132615	B & W Sound Services, Inc.	2018 76West Finals A/V Service	10/16/2018	\$12,950	\$12,950	\$12,950	\$12,950
		Discretionary	N	133193	CTG:I LLC	Online subscription to CTG i3	10/29/2018	\$8,500	\$8,500	\$8,500	\$8,500
		Discretionary	N	133600	Upstate Capital Association of New York	NY Business Plan Comp Sponsor	11/07/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	Υ	100675	Vatsal Bhatt	Review of EEA Project Program	07/05/2016		\$25,000		\$10,468
		Discretionary	Υ	112570	Benchemark Printing, Inc.	Printing Services - EV Rebate	04/07/2017	\$5,000	\$29,500	\$7,155	\$27,512
		Non-Competitive	N	120914	NESCAUM	ZEV Marketing Campaign	11/21/2017		\$262,500	\$175,000	\$262,500
		Non-Competitive	Υ	117416	Upstate Venture Connect	OTHER PROGRAM AREA	08/22/2017		\$49,000	\$23,000	\$37,600
	Pay for Performance	Competitive	N	85027	Unique Comp Inc.	RFP3143 Umbrella Agreement	12/18/2015	\$116,480	\$282,464	\$93,513	\$93,513
	POLICY DEVELOPMENT	Competitive	N	36995	NYS Office of General Services	POLICY DEVELOPMENT	11/08/2013		\$150,000	\$2,129	\$140,116
		Competitive	N	126609	NYS Office of General Services	2018 NYS DPS Printing Services	05/08/2018	\$50,000	\$50,000	\$40,507	\$40,507
		Discretionary	N	126613	New York State Ag & Markets	2018 DPS NYS Fair Exhibit	05/08/2018	\$11,365	\$11,365	\$11,365	\$11,365
		Discretionary	N	131260	JCB Specialties, Inc.	DPS NYS Fair giveaways	09/13/2018	\$44,269	\$44,269	\$44,269	\$44,269
		Discretionary	N	131316	Culver Company, LLC	DPS 2018 NYS Fair giveaways	09/14/2018	\$18,113	\$18,113	\$18,113	\$18,113
	Prof & Expert Engagement	Discretionary	N	123748	Upstate Venture Connect	UVC Sponsorship	02/22/2018		\$25,000	\$25,000	\$25,000
		Discretionary	N	124014	Consortium for Energy Efficiency, Inc.	Industrial Process Efficiency	03/02/2018		\$48,000	\$48,000	\$48,000
		Discretionary	N	125125	The Business Council of NYS, Inc.	Renewal of Membership	04/02/2018	\$5,876	\$5,876	\$5,876	\$5,876
		Discretionary	N	128418	Clean Energy States Alliance	2018 CESA Membership	06/27/2018	\$68,500	\$68,500	\$68,500	\$68,500
		Discretionary	N	133011	The Business Council of NYS, Inc.	Membership Business Council	10/24/2018	\$6,081	\$6,081	\$6,081	\$6,081
		Discretionary	N	135576	Efficiency Forward, Inc.	2019 DesignLights Sponsorship	12/27/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	135577	Business Network for Maryland Offshore W	V 2019 IPF Conference	12/28/2018	\$1,200	\$1,200	\$1,200	\$1,200
		Discretionary	N	135859	Alliance to Save Energy	2019 ASE Membership	01/07/2019	\$25,000	\$25,000		
		Discretionary	N	137562	ACEEE	2019 ACEEE Membership	02/27/2019	\$10,000	\$10,000		
		Discretionary	N	137767	Upstate Venture Connect	UVC 2019 Sponsorship	03/06/2019	\$25,000	\$25,000		
	•	Discretionary	N	138293	Consortium for Energy Efficiency, Inc.	Industrial Process Efficiency	03/20/2019	\$48,000	\$48,000		
		Discretionary	Υ	125566	Compressed Air Challenge, Inc.	Industrial Process Efficiency	04/11/2018	\$7,500	\$7,500	\$7,500	\$7,500
	·	Discretionary	Υ	134242	Efficiency Forward, Inc.	DesignLights 2018 Sponsorship	11/20/2018	\$25,000	\$25,000	\$25,000	\$25,000
	Real Time Enrgy Management	Competitive	N	132883	Kelliher Samets Volk	TWO 24: CI Awareness Pilot MKT	10/22/2018	\$300,000	\$300,000	\$120,419	\$120,419

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CMT	Real Time Enrgy Management	Competitive	Y	37347	Willdan Energy Solutions	Technical Review and Program S	11/15/2013		\$200,000	\$109,448	\$109,448
		Competitive	Υ	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$100,000		\$100,000
		Competitive	Y	104539	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	10/05/2016		\$527,215	\$145,600	\$282,563
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016		\$100,000	\$0	\$0
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$3,960	\$597,314	\$125,582	\$183,642
		Competitive	Y	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$199,900	\$199,900	\$78,243	\$78,243
		Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$503,125	\$503,125	\$78,375	\$78,375
		Competitive	Y	117989	Arcadis of New York, Inc.	Staff Augmentation Services	09/08/2017	\$318,405	\$318,405	\$0	\$0
		Competitive	Y	121106	Meister Consultants Group, Inc.	Real Time Enrgy Management	11/29/2017	\$200,000	\$200,000	\$121,609	\$121,609
		Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018	\$100,000	\$100,000	\$3,835	\$3,835
	REC:CES REC Pgm Non-Rec Exp	Competitive	Y	101085	Brattle Group Inc.	Large Scales Renewables Techni	07/15/2016		\$42,000		\$40,378
		Discretionary	N	106525	Kearns & West, Inc.	LSR siting support	11/08/2016		\$50,000	\$24,978	\$49,978
	REC:CES REC System Dev Costs	Competitive	Y	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$131,276		\$96,126
		Competitive	Y	30186	ICF Resources, LLC	Flex Energy Tech Analysis 2	11/09/2012		\$18,000		\$18,000
		Competitive	Y	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$354,900	\$532,350	\$258,872	\$344,344
		Competitive	Y	101085	Brattle Group Inc.	Large Scales Renewables Techni	07/15/2016	\$45,500	\$45,500	\$41,697	\$41,697
		Competitive	Y	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$20,000	\$20,000	\$18,321	\$18,321
		Competitive	Y	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$96,038	\$96,038	\$58,911	\$58,911
		Competitive	Y	134231	Merrimack Energy Group, Inc.	RFQL3926 Umbrella Contract	11/20/2018				
		Competitive	Y	134235	Power Advisory LLC	RFQL3926 Umbrella Contract	11/20/2018				
		Competitive	Y	134428	M.J. Beck Consulting LLC	RFQL3926 Umbrella Contract	11/27/2018				
	Remote Energy Management	Competitive	Y	104539	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	10/05/2016		\$172,456	\$0	\$0
	RENEWABLE HEAT NY	Competitive	Y	18599A	FARM, LLC	RENEWABLE HEAT NY	09/05/2012		\$595,500		\$594,266
		Competitive	Υ	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013	\$9,658	\$9,658	\$6,814	\$6,814
		Competitive	Y	37382	TRC Energy Services	Technical Review and Program S	11/15/2013		\$337,150		\$336,732
		Competitive	Y	41140	Benchemark Printing, Inc.	Printing Services	04/23/2014		\$4,112		\$1,442
		Competitive	Y	101132	NESCAUM	Tech Assist, REV Pool	07/15/2016		\$180,000	\$43,983	\$139,377
		Competitive	Y	104536	KEMA Incorporated	RFQ 3183 KEMA, Inc	10/05/2016	\$334,090	\$334,090	\$20,652	\$20,652
		Competitive	Y	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$313,438	\$313,438	\$31,560	\$31,560
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$60,000	\$60,000	\$57,519	\$57,519
		Competitive	Y	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$25,500	\$0	\$25,500
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$80,649	\$80,649	\$28,394	\$28,394
		Competitive	Y	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$60,092	\$88,437	\$24,353	\$24,353
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017		\$148,334	\$24,142	\$24,142
		Competitive	Y	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$31,748	\$31,748	\$25,802	\$25,802
	RENEWABLE THERMAL	Competitive	N	73679	Rafferty Enterprises, Inc.	Temp Employment Services	09/30/2015		\$5,382		\$861
		Competitive	N	79049	Rafferty Enterprises, Inc.	Temp Services	10/28/2015		\$18,954		\$18,954

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RENEWABLE THERMAL	Competitive	N	81695	Rafferty Enterprises, Inc.	Temp Employee Services	11/19/2015		\$13,650		\$2,230
	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$583		\$583
	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$57,336		\$20,974
	Competitive	Υ	38185	Rafferty Enterprises, Inc.	Temp Employee Services	12/13/2013		\$121,981		\$79,365
	Competitive	Υ	ST9628	TRC Engineers, Inc.	RENEWABLE THERMAL	11/24/2009		\$254,370		\$243,373
	Competitive	Υ	ST9941	Taitem Engineering, P.C.	RENEWABLE THERMAL	06/02/2009		\$50,127		\$37,035
	Non-Competitive	N	66654	Energy and Environmental Economics Inc.	Solar Adoption Forecast	06/11/2015		\$49,000		\$47,680
	Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$1,197,077	\$0	\$1,220,245
RENEWABLES & DER INTEGRATION	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$62,087		\$62,087
	Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$36,591		\$18,215
Residential-Engaging New Mkts	Competitive	Υ	96514	Randstad North America, Inc.	Temp Services Contract.	04/21/2016	\$39,000	\$42,645	\$28,352	\$28,352
	Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016	\$40,909	\$265,479	\$40,909	\$254,552
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$2,850,000	\$2,850,000	\$175,973	\$175,973
	Discretionary	N	124468	Seek More LLC	Consultant for SFR Upstream	03/23/2018	\$50,000	\$50,000	\$37,545	\$37,545
	Discretionary	Υ	122871	Johnstone Group, LLC	Residential-Engaging New Mkts	01/25/2018		\$50,000	\$25,200	\$31,514
Retrofit NY	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$164,070	\$389,070	\$63,240	\$228,796
	Discretionary	N	111167	Jasper Van den Munckhof	RetrofitNY advisement	03/07/2017		\$50,000		\$24,01
	Discretionary	N	127163	New York Passive House Inc.	2018 NYPH Conference & Expo	05/22/2018	\$2,125	\$2,125	\$2,125	\$2,125
	Discretionary	N	127830	Taitem Engineering, P.C.	Retrofit NY	06/12/2018	\$6,000	\$6,000	\$6,000	\$6,000
	Discretionary	N	128063	Integrative Design Collaborative, INC	Retrofit NY	06/19/2018	\$50,000	\$50,000	\$34,091	\$34,091
	Discretionary	N	128084	7group, LLC	Retrofit NY	06/20/2018	\$50,000	\$50,000	\$47,683	\$47,683
	Discretionary	N	130604	Thornton Tomasetti, Inc.	Retrofit NY	08/30/2018	\$18,000	\$18,000	\$6,000	\$6,000
	Discretionary	N	134727	Passive Buildings Canada	Retrofit NY	12/04/2018	\$50,000	\$50,000	\$50,000	\$50,000
	Discretionary	N	138285	The Research Foundation for the State	2019 NYS Green Buildings Conf	03/20/2019	\$1,313	\$1,313		
	Discretionary	Υ	126881	Forsyth Street Advisors, LLC	Retrofit NY	05/15/2018	\$50,000	\$50,000	\$44,500	\$44,500
	Non-Competitive	Υ	132545	Stichting Energiesprong	Retrofit NY	10/15/2018	\$200,000	\$200,000	\$35,725	\$35,725
REV Campus Challenge	Competitive	N	49526	Meister Consultants Group, Inc.	REV CC - Meister CG	10/10/2014		\$250,000	\$94,106	\$107,891
	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$84,184	\$84,184		
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$1,980	\$91,980	\$11,838	\$52,536
	Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$89,566	\$89,566	\$3,535	\$3,538
	Competitive	Υ	121106	Meister Consultants Group, Inc.	REV Campus Challenge	11/29/2017	\$350,000	\$350,000	\$49,017	\$49,017
	Competitive	Υ	135754	Ecology and Environment Engineering, PC	Commercial Market Engagement	01/03/2019	\$133,475	\$133,475		
	Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$89,726	\$89,726		
REV Connect	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016		\$125,000	\$416	\$109,630
REVitalize	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016		\$27,826		\$26,852
	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016		\$48,000	\$18,105	\$47,972
Rmve Barriers Dist Enrgy Stor	g Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	07/15/2016	\$277,815	\$307,815	\$250,192	\$279,696

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Rmve Barriers Dist Enrgy Storg	Competitive	Υ	106227	Essense Partners Inc.	Marketing Support for NYSERDA	11/03/2016	\$99,000	\$99,000	\$49,700	\$49,700
	Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$20,000	\$20,000	\$2,167	\$2,10
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$48,750	\$48,750	\$0	
	Discretionary	N	123419	Climate Policy Initiative	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$48,900	\$28,098	\$28,09
	Discretionary	N	123420	Center for Renewables Integration	Rmve Barriers Dist Enrgy Storg	02/14/2018		\$37,900	\$37,268	\$37,26
	Discretionary	N	127932	Wadsworth Energy LLC	Rmve Barriers Dist Enrgy Storg	06/15/2018	\$49,900	\$49,900	\$49,680	\$49,68
	Discretionary	N	134228	Associated Power Analysts Inc.	Rmve Barriers Dist Enrgy Storg	11/20/2018	\$48,000	\$48,000	\$32,000	\$32,00
	Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017				
SARATOGA TECHNOLOGY & ENERGY PARK	Competitive	N	39723	NYS Office of General Services	OGS Services	02/25/2014		\$20,449		\$11,33
ENERGYTTAN	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		\$5
	Competitive	N	58912	NYS Office of General Services	Permitting Services, GE, 107 H	02/17/2015		\$11,500		\$2,6
	Competitive	N	60179	NYS Office of General Services	OGS Design/Permitting, 20 TT	03/05/2015	\$220	\$5,067	\$5,067	\$5,00
	Competitive	N	79574	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	10/29/2015	\$9,640	\$9,640	\$8,736	\$8,73
	Competitive	N	133475	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	11/02/2018	\$5,034	\$5,034	\$5,034	\$5,03
	Competitive	N	133522	NYS Office of General Services	SARATOGA TECHNOLOGY & ENERGY PARK	11/05/2018	\$43,032	\$43,032	\$43,032	\$43,03
	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$1,239		\$1,23
	Competitive	Υ	20896	Bergmann Associates	STEP Engineering, Design and C	10/19/2010		\$173,350		\$158,43
	Competitive	Υ	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016		\$59,000	\$12,538	\$50,43
	Competitive	Y	107762	Rosenblum Property Services, LLC	STEP Property Mgmt Services	12/07/2016		\$482,685	\$130,952	\$284,10
	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		\$24,07
	Non-Competitive	N	69174	NYS Office of General Services	OGS Services- GE Exp, 107 Herm	07/16/2015		\$10,032		
SFRUP:Upstate Strat Fuel Res	Competitive	N	48593	Buckeye Terminals, LLC	Upstate NY Strategic Fuels Res	09/25/2014		\$1,356,000		\$1,356,00
Small Wind	Discretionary	Υ	96890	AWS Truepower	AWS Small Wind Explorer	04/25/2016		\$36,000	\$9,000	\$36,00
SMART GRID SYSTEMS	Competitive	Υ	21785-1	Sustainable Energy Advantage, LLC	Renewable Portfolio Standard T	09/12/2013		\$44,670		\$22,23
	Competitive	Υ	30192	Industrial Economics, Incorporated	Flex Energy Tech Analysis 2	11/09/2012		\$767,462	\$30,687	\$734,96
	Competitive	Υ	59850	Cornell University-Office of Sponsored P	Anaerobic Digestion Assistance	03/02/2015		\$750,000	\$52,421	\$287,64
	Non-Competitive	N	123577	Proenergy Consulting LLC	Consulting NY Prize/Greenbank	02/20/2018		\$22,590	\$22,590	\$22,59
Solar Thermal	Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	09/06/2017	\$0	\$28,345	\$24,353	\$24,35
	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$31,748	\$31,748	\$25,802	\$25,80
	Non-Competitive	Υ	ST2446	Clean Power Research	Power Clerk Database for NYSUN	12/20/2011		\$6,500	\$6,500	\$6,50
Standardized Approach to EEfic	Competitive	Y	104535	NMR Group, Inc.	RFQ 3183 NMR Group, Inc.	10/05/2016	\$49,952	\$49,952	\$31,119	\$31,1
STATEWIDE RESIDENTIAL POINT OF SALE	Competitive	Υ	18602	Brand/Cool Marketing	RFQL and RFP 1224	04/05/2010		\$1,186,170		\$1,171,25
	Competitive	Y	27892A	Lockheed Martin Corporation	Products Program	02/17/2016		\$143,213		\$33,02
Strategic Energy Manager	Competitive	Υ	30237	CHA Consulting Inc.	Commercial & Industrial Outrea	11/09/2012		\$81,370	\$29	\$70,70

ategory Initiative		Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
CMT Strategic En	nergy Manager	Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016		\$67,487		\$20,488
		Competitive	Υ	104542	The Cadmus Group, LLC	RFQ3183 Umbrella Agreement	10/05/2016		\$212,803	\$40,397	\$143,196
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$49,270	\$230,270	\$102,182	\$229,302
		Competitive	Υ	117925	CHA Consulting Inc.	Staff Augmentation Services	09/06/2017	\$75,000	\$75,000	\$0	\$0
		Competitive	Υ	117927	EME Consulting Engineering Group, LLC	Staff Augmentation Services	09/06/2017	\$50,000	\$781,547	\$0	\$0
		Competitive	Υ	121104	CHA Consulting Inc.	Outreach Support	11/29/2017	\$98,750	\$98,750	\$62,471	\$62,471
		Competitive	Υ	132468	Kelliher Samets Volk	TWO 23: Industrial Mktg	10/12/2018	\$400,000	\$400,000	\$15,340	\$15,340
Subscription	on/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		
		Discretionary	N	120495	Continental Automated Buildings	Subscription/Data Access	11/10/2017	\$10,000	\$21,700	\$10,000	\$21,700
		Discretionary	N	122877	ACEEE	Subscription/Data Access	01/25/2018		\$50,000	\$31,250	\$31,250
		Discretionary	N	124011	CoStar Realty Information, Inc.	CoStar Subscription	03/01/2018		\$18,887	\$18,886	\$18,886
		Discretionary	N	126300	Greentech Media Inc.	GTM Wind Service Subscription	04/30/2018	\$25,000	\$25,000	\$25,000	\$25,000
		Discretionary	N	132476	Bloomberg, L.P.	Bloomberg Datafeed Access	10/12/2018	\$22,500	\$22,500		
		Discretionary	N	132476-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$22,500	\$22,500	\$22,500	\$22,500
		Discretionary	N	135791	E Source Companies LLC	Subscription/Data Access	01/04/2019	\$39,000	\$39,000	\$39,000	\$39,000
		Discretionary	N	137643	Continental Automated Buildings	market research for NYSERDA	03/04/2019	\$6,900	\$6,900		
		Discretionary	Υ	135794	American Council for an Energy Efficient	Research Support for NYSERDA	01/04/2019	\$50,000	\$50,000		
		Non-Competitive	N	133822	Greentech Media Inc.	Subscription/Data Access	11/09/2018	\$57,500	\$57,500	\$57,500	\$57,500
Talent Pipeli	eline:CE and OJT	Competitive	Υ	130548	Kelliher Samets Volk	TWO 21 WFD Talent Pipeline Mkt	08/27/2018	\$500,000	\$500,000		
Talent Pipeli	eline:Internship Pgm	Competitive	Υ	130548	Kelliher Samets Volk	TWO 21 WFD Talent Pipeline Mkt	08/27/2018	\$100,000	\$100,000		
Technical Se	Services	Competitive	N	137242	Arcadis of New York, Inc.	SA.046_TWO #4 - EPE	02/19/2019	\$84,184	\$84,184		
		Competitive	Υ	35743	Ensave, Inc.	AEEP Implementation Contractor	09/26/2013	\$1,092,660	\$1,092,660	\$10,275	\$10,275
		Competitive	Υ	104532	Apprise, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$63,218	\$63,218		
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$1,980	\$1,980	\$1,853	\$1,853
		Competitive	Υ	107771	CLEAResult Consulting, Inc.	Centralized Services & Support	12/08/2016	\$891,780	\$891,780	\$432,973	\$432,973
		Competitive	Υ	136881	L&S Energy Services, Inc.	Tech Review - OsEM	02/06/2019	\$100,522	\$100,522		
		Competitive	Υ	137243	TRC Energy Services	SA.047_TWO #19 - EPE	02/19/2019	\$89,726	\$89,726		
WEST VALL DEVELOPM	LEY MENT PROGRAM .	Competitive	N	28636	The Logue Group	Facilitation Services	07/26/2012		\$410,349		\$182,136
		Competitive	N	PO9602	The Garrick Co., LLC	Probabilistic Evaluation	06/17/2009	\$44,270	\$574,231	\$6,460	\$523,245
		Competitive	Υ	34224	McMahon and Mann Consulting Engineers	Engineering/Surveying Cont	07/30/2013		\$432,500	\$10,468	\$423,247
		Competitive	Υ	61280	MJW Technical Services, Inc.	Radiation Protection Support	03/24/2015		\$2,874,040	\$185,512	\$2,211,843
		Competitive	Υ	69474	Seven Springs West LLC	Operations and Maintenance Sup	07/22/2015	\$700,000	\$3,110,000	\$298,215	\$2,269,160
		Competitive	Υ	69939	AECOM Technical Services Inc.	Environmental Monitoring Suppo	07/28/2015		\$554,660		\$554,660
	-	Competitive	Υ	104075	Enercon Services Inc	RFP 3305 Licence Consultation	09/21/2016	\$53,897	\$372,676	\$51,187	\$325,577
		Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$50,000	\$88,719	\$55,770	\$85,112
		Competitive	Υ	104264	Arnold & Porter Kaye Scholer LLP	RFP 3300 Outside Counsel Servi	09/27/2016		\$50,000	\$13,226	\$27,418

gory	Initiative	Туре	Term > 1 Year	Contract ID	Contractor	Project Description	Date	Committed this period by Initiative	Committed to Date by Initiative	Amt Paid this Period by Initiative	Amt Paid to Date by Initiative
IT	WEST VALLEY DEVELOPMENT PROGRAM	Competitive	Υ	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$25,606	\$25,606	\$8,004	\$8,004
		Competitive	Υ	104266	Couch White, LLP	RFP 3300 Outside Counsel Servi	09/27/2016		\$11,313		\$7,233
		Competitive	Υ	105183	McMahon and Mann Consulting Engineers	s Engineering Services WV	10/20/2016	\$550,000	\$750,000	\$245,891	\$247,452
		Competitive	Υ	113450	Chenango Contracting, Inc.	RFP 3456	05/04/2017	\$100,000	\$1,238,102	\$16,233	\$1,121,488
		Competitive	Υ	118436	The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM	09/22/2017		\$413,446	\$38,809	\$55,546
		Discretionary	N	31496	Brenda Sayers	Janitorial Services Contract	03/11/2013		\$33,480		\$32,670
		Discretionary	Υ	91278	Brenda Sayers	W/V Office Cleaning	02/24/2016		\$23,880	\$990	\$21,905
		Discretionary	Υ	123699	Brenda Sayers	Janitorial contract	02/21/2018		\$48,720	\$11,990	\$11,990
		Non-Competitive	N	20948	U.S. Nuclear Regulatory Commission	WEST VALLEY DEVELOPMENT PROGRAM	10/26/2010		\$500,000		\$19,307
		Non-Competitive	N	48779	U.S. Department of Energy/Wv	FFY 2015 WVDP Cost Share	09/29/2014		\$7,416,887		\$4,925,610
		Non-Competitive	Υ	53151	GZA GeoEnvironmental of New York	Trench 14 Investigation	11/24/2014		\$575,875	\$133,997	\$550,754
		Non-Competitive	Υ	69939	AECOM Technical Services Inc.	Environmental Monitoring Suppo	07/28/2015	\$581,116	\$1,616,272	\$307,220	\$938,85
		Non-Competitive	Υ	93559	Peter L. Krog	Ashford Office Complex Lease	03/21/2016		\$458,280	\$91,656	\$267,330
		Non-Competitive	Υ	107662	U.S. Nuclear Regulatory Commission	PO Payment of NRC License Fees	12/06/2016		\$250,000	\$80,561	\$188,018
		Non-Competitive	Υ	PO9465	Dr. Michael P. Wilson	WEST VALLEY DEVELOPMENT PROGRAM	08/29/2011		\$8,000		\$3,600
	WORKFORCE DEVELOPMENT	Competitive	Υ	15526	Fort Orange Press Incorporated	Printing Services	06/17/2009		\$23,311		\$23,311
		Non-Competitive	Υ	92212	Green City Force	Career pathways training	03/03/2016		\$367,000	\$135,365	\$354,170
	Workforce Industry Partnership	Competitive	Υ	104544	Research Into Action, Inc.	RFQ3183 Umbrella Agreement	10/05/2016		\$280,616	\$161,168	\$280,560
		Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$400,000	\$434,960	\$198,099	\$198,099
		Competitive	Υ	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016		\$59,320	\$0	\$0
		Discretionary	N	136612	Association of Energy Engineers	Workforce Industry Partnership	01/29/2019	\$2,060	\$2,060	\$1,927	\$1,927
		Discretionary	Υ	121174	Steven Winter Associates, Inc.	NYC Retrofit Demo	11/30/2017		\$49,830	\$34,286	\$34,286
	ZEC:CES ZEC Pgm Non-Rec Exp	Competitive	Υ	104262	Holland & Knight LLP	RFP 3300 & RFP 3776 Outside Co	09/27/2016		\$66,585	\$4,931	\$36,060
	ZEC:CES ZEC System Dev Costs	Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015		\$177,450	\$91,978	\$177,450
nd Tota	al							\$84,912,747	\$414,792,208	\$59,664,581	\$258,057,864

Contractor S	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
7group, LLC 6	600 Grings Hill Road	Sinking Spring	PA	19608	FSBE					
22nd Century Technologies, Inc. 2	220 Davidson Ave., Ste 118	Somerset	NJ	08873	FSBE		Х			
205 Wolf Holdings, LLC	Red Lion Hotel	ALBANY	NY	12205	NYSBE					
ABB, Incorporated 9	901 Main Campus Drive, Ste300	Raleigh	NC	27606	FSBE					
Abt Associates Inc. 6	6130 Executive Boulevard	Rockville	MD	20852	FSBE					
Access Systems, Inc. 4	4260 Henneberry Rd	Manlius	NY	13104	NYSBE					
ACEEE 5	529 14th St. NW, Suite 600	Washington	DC	20045	FSBE					
Action Research Inc. 3	3630 Ocean Ranch Blvd.	Oceanside	CA	92056	FSBE					
Adirondack Area Network 1	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					
Adviser Compliance Associates, LLC	8401 Colesville Road, Suite 700	Silver Spring	MD	20910	FSBE					
AECOM Technical Services Inc. 5	515 South Flower Street, 3rd Floor	Los Angeles	CA	90071	FSBE					
AFP 108 Corp 1	1111 Jefferson Road	Rochester	NY	14623	NYSBE					
Albany Dodge 7	770 Central Avenue	Albany	NY	12206	NYSBE					
Alberto Aceves Cornejo 1	19043 Fieldstone Ct	Salinas	CA	93908	FSBE					
Albright Solutions LLC 2	231 East 76th Street, Apt. 2C	New York	NY	10021	NYSBE					
AlienVault, Inc. 1	1875 S. Grant Street, Suite #200	San Mateo	CA	94402	FSBE					
Allegis Group Holdings Inc 7	7301 Parkway Drive	Hanover	MD	21076	FSBE					
Alliance for Sustainable Energy, LLC	15013 Denver West Parkway	Golden	СО	80401	FSBE					
Alliance to Save Energy 3	3570 Guilderland Avenue	Rotterdam	NY	12306	NYSBE					
Ally Financial Inc. 2	200 Renaissance Ctr	Detroit	MI	48265-2000	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 5	57 Outpost Lane	Hilton Head	SC	29928	FSBE					
AmTrust North America Inc. 8	800 Superior Ave, E Floor 20	Cleveland	ОН	44114	FSBE					
Analysis Group, Inc.	111 Huntington Ave., 14th FI	Boston	MA	02199	FSBE					
Anne Compton Savage 1	101 Lenox Ave	Albany	NY	12203	NYSBE	Х				
Antares Group, Inc. 4	4500 Forbes Blvd., Ste 401	Lanham	MD	20706	FSBE					
APPEXTREMES, LLC F	PO BOX 7839	Broomfield	СО	80021	FSBE					

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Applied Energy Group, Inc.	1377 Motor Pkwy Ste 401	Islandia	NY	11749-5258	NYSBE					
Apprise, Incorporated	32 Nassau Street, Suite 200	Princeton	NJ	08542	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					
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					
AWS Truepower	463 New Karner Rd	Albany	NY	12205-3821	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					
	200 First Federal Plaza, 28 East Main St	Rochester	NY	14614	NYSBE					
BHCC II LLC	225 Water Street	Binghamton	NY	13901	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					
Bloomberg Finance LP	731 Lexington Avenue	New York	NY	10022	NYSBE					
Bloomberg, L.P.	731 Lexington Ave	New York	NY	10022	NYSBE					
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					
Brand/Cool Marketing	2300 East Avenue	Rochester	NY	14610	NYSBE					
Brattle Group Inc.	One Beacon St., Ste 2600	Boston	MA	02108	FSBE					
Brenda Sayers	8870 Route 240	West Valley	NY	14171-0111	NYSBE					

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Bruce Harley Energy Consulting LLC	665 Boulger Road	Stamford	VT	05352	FSBE					
Buckeye Terminals, LLC	One Greenway Plaza	Houston	TX	77046	FSBE					
Building Media, Inc.	12932 SE Kent Kangley Rd, Ste 529	Kent	WA	98030	FSBE					
BuildingGreen, Inc.	122 Birge Street, Suite 30	Brattleboro	VT	05301	FSBE					
Business Environments	106 Despatch Dr., Ste #2	East Rochester	NY	14445	NYSBE					
Business Network for Maryland Offshore W	22 Pennsylvania Avenue	Towson	MD	21204	FSBE					
BW Research Partnership	2725 Jefferson St., Ste13	Carlsbad	CA	92008	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					
Carahsoft Technology Corporation	1860 Michael Faraday Drive	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					
Caroprese & Company	261 Park Avenue	Rutherford	NJ	07070	FSBE					
Carrow Real Estate Services, LLC	Columbia Circle Assoc., LLC	Chicago	IL	60674	FSBE					
CDH Energy Corporation	2695 Bingley Road	Cazenovia	NY	13035	NYSBE					
CDWG, Incorporated	75 Remittance Drive, Ste 1515	Chicago	IL	60675-1515	FSBE					
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			
City and State	61 Broadway, Suite 1315	New York	NY	10006	NYSBE					
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 Power Research	1541 Third Street	Napa	CA	94559	FSBE					
CLEAResult Consulting, Inc.	4301 Westbank Dr., A-150	Austin	TX	78746	FSBE					

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
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					
Coletree Security Corporation	3512 Rosendale Rd	Niskayuna	NY	12309	NYSBE	Х				
Color Methods	400 Mile Crossing Blvd	Rochester	NY	14624	NYSBE					
Commercial Investigations LLC	622 Loudon Rd., Ste 201	Latham	NY	12110	NYSBE	X				
Complete Cabling Solutions LLC	PO Box 594	Fair Lawn	NJ	07410	FSBE					
Compressed Air Challenge, Inc.	1908 Leo Lane	Alexandria	VA	22308	FSBE					
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 382	Washington	DC	20001	FSBE					
Consortium for Energy Efficiency, Inc.	98 North Washington Street	Boston	MA	02114-1918	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					
	341 Pine Tree Road	Ithaca	NY	14850	NYSBE					
Cornell University	373 Pine Tree Rd	Ithaca	NY	14850	NYSBE					
	East Hill Plaza	Ithaca	NY	14850	NYSBE					
Cornell University-Office of Sponsored P	216 Riley-Robb Hall	Ithaca	NY	14853	NYSBE					
Corporate Resolutions Inc	345 Seventh Ave., 10th Floor	New York	NY	10001	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					
CTG:I LLC	1714 Franklin St. #100-286	Oakland	CA	94612	FSBE					
Cullen and Dykman, LLP	100 Quentin Roosevelt Boulevard	Garden City	NY	11530	NYSBE					
Culver Company, LLC	104 Bridge Rd	Salisbury	MA	01952	FSBE					
Currier McCabe Associates	700 Troy Schenectady Rd	Latham	NY	12110-2460	NYSBE	Х				
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.L. English Consulting, Inc.	616 Elm Street	S Dartmouth	MA	02748	FSBE					
Darling Advertising Agency Inc.	181 Christopher Street	New York	NY	10014	NYSBE					

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	мве	SDVOB	SBE	
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					
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				
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					
E Source Companies LLC	1745 38th Street	Boulder	СО	80301	FSBE					
EC Infosystems, Inc.	333 Earle Ovington Boulevard	Uniondale	NY	11553	NYSBE					
Ecology and Environment Engineering, PC	368 Pleasant View Drive	Lancaster	NY	14086	NYSBE					
Efficiency Forward, Inc.	81 Hartwell Ave.	Lexington	MA	02421	FSBE					
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					
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			X		
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.	PO Box 87	San Francisco	CA	94104	FSBE					
Energy Improvement Corporation	2051 BALDWIN RD	YORKTOWN HEIGHTS	NY	10598	NYSBE					
EnergySavvy Inc	159 S. Jackson St., Ste 420	Seattle	WA	98104	FSBE					

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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	Х			
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					
Executive Information Systems, LLC	6901 Rockledge Dr., Ste 600	Bethesda	MD	20817	FSBE					
FARM, LLC	6350 Transit Rd	Depew	NY	14043	NYSBE					
Fiber Technologies Networks, LLC	80 Central Street	Boxborough	MA	01719	FSBE					
First Associates Loan Servicing, 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					
FM Office Express	161 River St	Troy	NY	12180-3807	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				
Freeman Decorating Co	P.O. Box 660613	Dallas	TX	75266	FSBE					
Fried, Frank, Harris, Shriver, Jacobson	One New York Plaza	New York	NY	10004	NYSBE					
Frontier Energy, Inc.	2695 Bingley Rd	Cazenovia	NY	13035	NYSBE					
FTI Consulting Technology LLC	909 Commerce Rd	Annapolis	MD	21401	FSBE					
Fugro Marine GeoServices, Inc.	World Trade Center, 101 West Main Street, Suite 350	Norfolk	VA	23510	FSBE					
Fugro USA Marine, Inc.	6100 Hillcroft	Houston	TX	77081	FSBE					
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					

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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					
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					
GZA GeoEnvironmental of New York	300 Pearl St.,Ste 700	Buffalo	NY	14202	NYSBE					
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					
Hodgson Russ LLP	140 Pearl Street, Suite 100	Buffalo	NY	14202	NYSBE					
Holland & Knight LLP	31 W. 52nd Street	New York	NY	10019	NYSBE					
Honeywell International Inc.	1 Dupont St., Suite 104	Plainview	NY	11803	NYSBE					
Hyatt Corporation as agent for Hyatt Equ	109 E 42nd St.	New York	NY	10017-8500	NYSBE					
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					
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		Х			
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					
Institute for Market Transformation	1776 Massachusetts Ave., NW., Suite 815	Washington	DC	20036	FSBE					
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					

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International Business Machines	299-300 Long Meadow Rd.	Sterling Forest	NY	10979-0700	NYSBE					
International Code Council, Inc.	48 Dublin Drive	Niskayuna	NY	12309	NYSBE					
iPROMOTEu.com Inc.	Souders Brand Marketing LLC	Pittsburgh	PA	15251-0896	FSBE					
ITS-NY	14 Loveland Court	Cranbury	NJ	08512	FSBE					
James McCrea & Associates, LLC	272 Newtown Tpke	Wilton	СТ	06897	FSBE					
Jasper Van den Munckhof		Obbicht		6125 AT	FSBE					
JCB Specialties, Inc.	8 Sand Creek Road	Albany	NY	12205	NYSBE					
JCRA Financial LLC	One Penn Plaza, Suite 1423	New York	NY	10119	NYSBE					
Jeffery B. Greenblatt	2726 Eighth Street	Berkeley	CA	94710	FSBE					
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					
Karpman Consulting, LLC	78 Eastern Boulevard	Glastonbury	СТ	06033	FSBE					
Kearns & West, Inc.	1110 Vermont Ave., NW STE 950	Washington	DC	20005-5331	FSBE					
Kelliher Samets Volk	212 Battery Street	Burlington	VT	05401	FSBE					
KEMA Incorporated	67 South Bedford St., Ste 201 E	Burlington	MA	01803-5108	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					
Lawrence Berkeley National Laboratory	Dept. #34240 P.O. Box 39000	San Francisco	CA	94139	FSBE					
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					
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	345 Park Avenue	New York	NY	10154	NYSBE					
Long Island Progressive Coalition	90 Pennsylvania Avenue	Massapequa	NY	11758	NYSBE					
Low-Level Radioactive Waste Forum, Inc.	1619 12th Street	Washington	DC	20009	FSBE					
Lumsden & McCormick, LLP	369 Franklin St	Buffalo	NY	14202	NYSBE					
M.J. Beck Consulting LLC	111 Rockingham Rd	Cherry Hill	NJ	08034	FSBE					
M/E Engineering, P.C.	433 State St., Ste 410	Schenectady	NY	12305	NYSBE					
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					
MCCK Syracuse Hotel No 2 LP	6301 State Route 298	East Syracuse	NY	13057	NYSBE					
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					
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					
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	1617 Cole Blvd.	Lakewood	СО	80401-3393	FSBE					
Navigant Consulting Inc.	30 S. Wacker Dr.	Chicago	IL	60606-7444	FSBE					
NECEC Institute	250 Summer St., 5th Floor	Boston	MA	02210	FSBE					
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	801 Barton Springs Rd.	Austin	TX	78704	FSBE					
Network Experts of New York, Inc	. 407 Vesper Court	Slingerlands	NY	12159	NYSBE	Х	Х			

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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 FI	New York	NY	10007-2157	NYSBE					
New York Battery and Energy Storage	Technology Consortium, Inc.	Albany	NY	12203	NYSBE					
New York Convention Center Operating Cor	Jacob Javits Convention Center of New York	New York	NY	10001	NYSBE					
New York Geothermal Energy Organization	7523 County House Road	Auburn	NY	13021	NYSBE					
New York Passive House Inc.	334 Douglass Street	Brooklyn	NY	11217	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	44 South Broadway	White Plains	NY	10601	NYSBE					
nfrastructure	5 Enterprise Avenue	Clifton Park	NY	12065	NYSBE					
NGenious Solutions Inc.	30 Knightsbridge Road	Piscataway	NJ	08854	FSBE					
Nixon Peabody LLP	437 Madison Avenue	New York	NY	10022	NYSBE					
NMR Group, Inc.	50-2 Howard Street	Somerville	MA	02144	FSBE					
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					
Novus Engineering, P.C.	25 Delaware Ave	Delmar	NY	12054-1504	NYSBE					
NRG Energy Inc	804 Carnegie Center	Princeton	NJ	08540	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 Economic Development Council	111 Washington Ave FI 6th	Albany	NY	12210-2207	NYSBE					
NYS Office for Technology	1 S Swan St FI 3rd	Albany	NY	12210-2416	NYSBE					
NTS Office for reclinology	State Capital, ESP	Albany	NY	12220-0062	NYSBE					
NYS Office of General Services	1220 Washington Ave	Albany	NY	12226	NYSBE					
NTS Office of General Services	P.O. Box 2117	Albany	NY	12220-0117	NYSBE					
NYS Technology Enterprise Corporation	500 Avery Ln., Ste A	Rome	NY	13441	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					
Omnicap Group, LLC	2286 E Maple Avenue	El Segundo	CA	90245	FSBE					

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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.	400 Kelby St.	Fort Lee	NJ	07024	FSBE					
Passive Buildings Canada	12 St. Andrews Gardens	Toronto	ON	M4W 2E1	FSBE					
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	Χ			
Performance Systems Development	of New York, LLC	Ithaca	NY	14850	NYSBE					
Peter L. Krog	4 Centre Drive	Orchard Park	NY	14127	NYSBE					
Petrecky Consulting LLC	359 Westwoods CT	Schenectady	NY	12303	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					
Politico LLC	PO Box 419342	Boston	MA	02241-9342	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					
Quanta Technology LLC	4020 Westchase Blvd, Ste 300	Raleigh	NC	27607	FSBE					
RAC Holdings Corp.	2400 Yorkmont Road	Charlotte	NC	28217	FSBE					
Rafferty Enterprises, Inc.	1767 Central Avenue	Albany	NY	12205	NYSBE	х				
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					
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					
Decemb Foundation of Olivina	P.O. Box 9	Albany	NY	12201	NYSBE					
Research Foundation of SUNY	SUNY, Stony Brook	Stony Brook	NY	11794-0002	NYSBE					

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Research Into Action, Inc.	3934 NE MLK Boulevard	Portland	OR	97212	FSBE					
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					
Robert O Gurman	245 W 99th Street, Apt 24A	New York	NY	10025	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					
Rocky Mountain Institute	1820 Folsom St.	Boulder	СО	80302	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					
Scotto Brothers Woodbury Restaurant, LLC	d/b/a Fox Hollow	Woodbury	NY	11797	NYSBE					
Sea Risk Solutions LLC	16 Woodland Terrace	High Bridge	NJ	08829	FSBE					
Seek More LLC	2796 State Route 29	Greenwich	NY	12834	NYSBE					
Seven Springs West LLC	7186 Peters Road	Springville	NY	14141	NYSBE	X				
SHI, Inc.	P.O. Box 952121	Dallas	TX	75395	FSBE					
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					
Skadden, Arps, Slate, Meagher & Flom LL	4 Times Sq Fl 24th	New York	NY	10036-6518	NYSBE					
SMG Partners	55 Eagle Street	Albany	NY	12207	NYSBE					
Solar Promotion International GmbH	Kiehnlestrasse 16	Pforzheim	BW	75172	FSBE					
Sperry Energy	39 Central Ave.	Saratoga Springs	NY	12866	NYSBE					
SS&C Technologies, Inc.	80 Lamberton Rd	Windsor	СТ	06095	FSBE					
Steven Winter Associates, Inc.	61 Washington St	Norwalk	СТ	06854	FSBE					
Stewart Energy Consultants, LLC	15 Oak Knoll Street	Summit	NJ	07901	FSBE					
Stichting Energiesprong		Amsterdam		1093 NK	FSBE					
Stony Brook Foundation - Advanced Energy	127 Engineering	Stony Brook	NY	11794	NYSBE					
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					

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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				
Syracuse University	119 Browne Hall	Syracuse	NY	13244-1140	NYSBE				
Systems Management Planning, Inc.	1020 John St	West Henrietta	NY	14586	NYSBE				
T.Y. Lin International	255 East Ave	Rochester	NY	14604	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			
TEKSYSTEMS Global Services, LLC	7437 Race Road	Hanover	MD	21076	FSBE				
TEKsystems Inc	41 State Street, Suite 612	Albany	NY	12207	NYSBE				
Terremark Federal Group, LLC	One Biscayne Tower	Miami	FL	33131-1802	FSBE				
The Bonadio Group	171 Sully's Trail	Pittsford	NY	14534	NYSBE				
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 Real Estate Board of New York, Inc.	570 Lexington Ave., 2nd FI	New York	NY	10022-6837	NYSBE				
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 Research Foundation of SUNY at Bing	Po Box 6000	Binghamton	NY	13902-6000	NYSBE				
The Trustees of Columbia University	1210 Amsterdam Ave	New York	NY	10027-7003	NYSBE				
Thornton Tomasetti, Inc.	51 Madison Avenue	New York	NY	10010	NYSBE				
ThunderCat Technology LLC	1925 Isaac Newton Square	Reston	VA	20190	FSBE			x	
Time Warner Cable	130 Washington Ave Ext	Albany	NY	12203	NYSBE				
Tobi Jo Creative, LLC	28 Main Avenue	Sea Cliff	NY	11579	NYSBE	х			
TRC Energy Services	21 Griffin Rd North	Windsor	СТ	06095	FSBE				

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	МВЕ	SDVOB	SBE
TRC Engineers, Inc.	21 Griffin Rd North	Windsor	СТ	06095	FSBE				
Triad Technology Partners LLC	7910 Woodmont Ave Suite 220	Bethesda	MD	20814	FSBE	X			
Troy Web Consulting, LLC	21 Westover Rd.	Troy	NY	12180	NYSBE				
Tully Rinckey PLLC	441 New Karner Road	Albany	NY	12205	NYSBE			x	
U.S. Department of Energy/Wv	P.O. Box 191	West Valley	NY	14171	NYSBE				
U.S. Geological Survey (Troy).	425 Jordan Rd	Troy	NY	12180-8349	NYSBE				
U.S. Nuclear Regulatory Commission	P.O. Box 979051	Saint Louis	MO	63197-9000	FSBE				
Unique Comp Inc.	2708 42nd Road	Long Island City	NY	11101	NYSBE	Х	Х		
Unique Electric Solutions LLC	34 East Main Street, Suite 302	Smithtown	NY	11787	NYSBE				
Unique Electric Solutions of NYS LLC	199 Lincoln Ave., Ste 308	Bronx	NY	10454-3707	NYSBE				
United Way of Long Island	819 Grand Boulevard	Deer Park	NY	11729	NYSBE				
Upstate Capital Association of New York	171 Sully's Trail, Ste 200	Pittsford	NY	14534	NYSBE				
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				
Vidaris, Inc.	50 Washington St., 6th FI	Norwalk	СТ	06854	FSBE				
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				
Warren Pinnacle Consulting, Inc.	P.O. Box 315	Waitsfield	VT	05673	FSBE				
Watershed Assessment Associates, LLC	1861 Chrisler Ave.	Schenectady	NY	12303	NYSBE	х			
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				

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE	
Wichcraft Operating, LLC	60 E 8th St	New York	NY	10003	NYSBE					
Willdan Energy Solutions	Wall Street Plaza	New York	NY	10005	NYSBE					
William J Dombrowski	110 Bank Street #4A	New York	NY	10014	NYSBE					
William Morlok	2410 Pine Street	Philadelphia	PA	19103	FSBE					
Xerox Corp	800 Phillips Rd	Webster	NY	14580	NYSBE					
Yale University	2 Whitney Avenue, 6th Floor	New Haven	СТ	06510	FSBE					
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
4/1/2018	0000025207	National Grid	Utilities	NYSBE	\$107,222
	0000025804	EMCOR Services Betlem	Program Marketing	NYSBE	\$11,827
	0000026824	Weston Bros.	Program Marketing	NYSBE	\$50,010
	0000026827	WK Mechanical	Program Marketing	NYSBE	\$23,805
	0000028165	NYS Association of Counties	Program Marketing	NYSBE	\$5,600
	0000034218	Long Island Power Authority	Program Implementation	NYSBE	\$103,205
	0000034259	Fort Orange Press Incorporated	Program Marketing	NYSBE	\$9,089
	0000034356	United Parcel Service	Postage and Delivery	FSBE	\$6,614
	0000034360	Verizon Wireless	Telecommunications	FSBE	\$99,309
	0000034437	Frontier	Telecommunications	NYSBE	\$5,507
	0000034530	Time Warner Cable	Telecommunications	NYSBE	\$41,540
	0000034545	Citibank	Miscellaneous Expense	FSBE	\$50,755
	0000034789	Consolidated Edison Company	Program Implementation	NYSBE	\$6,164
	0000035097	Staples, Inc.	Office Supplies & Expense	FSBE	\$25,114
	0000035147	University of Rochester	Program Marketing	NYSBE	\$6,400
	0000035153	NYS Office of General Services	Utilities	NYSBE	\$32,171
	0000035169	Wisconsin Energy Conservation Corp	Program Implementation	FSBE	\$1,179,632
	0000035559	Halcyon, Inc.	Program Implementation	NYSBE	\$7,768
	0000037132	Betlem Service Corporation	Program Marketing	NYSBE	\$32,729
	0000037134	Saratoga County Sewer District	Utilities	NYSBE	\$10,760
	0000037148	NYS Office of General Services	Sponsorships/Exhibit Booth Rnt	NYSBE	\$9,063
	0000037155	Niagara Mohawk Power Corporation	Program Implementation	NYSBE	\$5,331

Annual Report - Section 2: Non-Contract Vendor Payments

Date 4/1/2018

Vendor ID	Contractor	Account Description	Business Type	Amt Paid this Period
0000037575	Plaza Deli of Albany, Inc.	Miscellaneous Expense	NYSBE	\$5,418
0000038913	Meier Supply Company	Program Marketing	NYSBE	\$41,323
0000039473	LCO Buildings LLC	Rent (Real Estate)	NYSBE	\$71,150
0000040842	First Colonie Company	Program Marketing	NYSBE	\$7,744
0000053857	CR Wolfe Heating Corp.	Program Marketing	NYSBE	\$16,179
0000053865	JCB Specialties, Inc.	Program Marketing	NYSBE	\$18,559
0000056708	Geotherm Inc.	Program Implementation	NYSBE	\$8,900
0000058316	West Unified Communications Services Inc	Telecommunications	FSBE	\$30,612
0000059025	Aztech Geothermal, LLC	Program Implementation	NYSBE	\$12,441
0000061519	Concord Servicing Corporation	Program Implementation	FSBE	\$1,225,135
0000064080	Van Hee Mechanical	Program Implementation	NYSBE	\$9,220
0000066255	Lindenmeyr Munroe Divison of	Office Supplies & Expense	FSBE	\$10,838
0000067567	Taylor Group LTD	Program Marketing	NYSBE	\$9,360
0000068796	ABCO Refrigeration Supply Corp.	Program Marketing	NYSBE	\$45,000
0000070344	IHS Global Inc.	Publications	FSBE	\$6,323
0000073785	Stewart Title Insurance Company	Program Implementation	NYSBE	\$66,753
0000074259	Advantage Title Agency, Inc.	Program Implementation	NYSBE	\$400,740
0000076295	WEX Bank	Travel	FSBE	\$7,024
0000078131	Empire State Realty OP, LP	Utilities	NYSBE	\$21,770
0000078633	Alternative Carbon Energy Systems Inc	Program Implementation	NYSBE	\$14,568
0000079532	Columbia Circle Owner, LLC	Utilities	FSBE	\$498,824
0000082172	LF Distribution Holding Inc.	Utilities	FSBE	\$985,277

Annual Report - Section 2: Non-Contract Vendor Payments

Date	Vendor ID	Contractor	Account Description	Business Type	Amt Paid this Period
4/1/2018	0000083754	Buffalo Geothermal Heating	Program Implementation	NYSBE	\$16,312
	0000084183	Dailey Electric Inc	Program Implementation	NYSBE	\$8,900
	0000084427	Sun Dance Pool N Patio Inc.	Program Marketing	NYSBE	\$23,661
	0000085884	Peter Tavino PE PC	Program Implementation	FSBE	\$14,545
	0000086135	Rycor LLC	Program Marketing	NYSBE	\$51,515
	0000086161	Iceberg Mechanical Corp	Program Marketing	NYSBE	\$93,550
	0000086203	Dandelion Energy Inc	Program Implementation	NYSBE	\$52,774
	0000086273	T' F' Obrien	Program Marketing	NYSBE	\$21,606
	0000086686	Family Danz Heating and Cooling LLC	Program Marketing	NYSBE	\$47,169
	0000086712	WaterFurnace International, Inc.	Program Implementation	FSBE	\$10,536
	0000086850	Luce, Schwab and Kase Inc	Program Marketing	FSBE	\$15,000
	0000086883	Phoenix Geothermal Services	Program Implementation	NYSBE	\$22,606
	0000086988	Bishop House Consulting, Inc.	Staff Development	NYSBE	\$8,618
Grand Total					\$5,729,563

Annual Report - Section 2: Contractor Addresses

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode
ABCO Refrigeration Supply Corp.	49-70 31st Street	Long Island City	NY	11101
Advantage Title Agency, Inc.	201 Old Country Rd., Ste 200	Melville	NY	11747
Alternative Carbon Energy Systems Inc	7288 Rush Lima Road	Honeoye Falls	NY	14472
Aztech Geothermal, LLC	5 McCrea Hill Road	Ballston Spa	NY	12020
Betlem Service Corporation	704 Clinton Ave S	Rochester	NY	14620-1499
Bishop House Consulting, Inc.	PO Box 489	Burnt Hills	NY	12027
Buffalo Geothermal Heating	2125 William Street	Cheektowaga	NY	14206
Citibank	Acct# 4046580002668506	The Lakes	NV	88901-6575
Columbia Circle Owner, LLC	P.O. Box 786945	Philadelphia	PA	19178
Concord Servicing Corporation	4150 N Drinkwater Blvd., Ste #200	Scottsdale	AZ	85251-3643
Consolidated Edison Company	Of New York, Inc.	New York	NY	10003
CR Wolfe Heating Corp.	449 E. Main St.	Middletown	NY	10940
Dailey Electric Inc	140 Sheppard Street	Penn Yan	NY	14527
Dandelion Energy Inc	335 Madison Ave., FI 4	New York	NY	10017
EMCOR Services Betlem	704 Clinton Ave S	Rochester	NY	14620
Empire State Realty OP, LP	One Grand Central Place	New York	NY	10165
Family Danz Heating and Cooling LLC	404 N Pearl St	Albany	NY	12205
First Colonie Company	660 Albany Shaker Road	Albany	NY	12211
Fort Orange Press Incorporated	11 Sand Creek Rd # 828	Albany	NY	12205-1442
Frontier	Account # 71694299600609054	Rochester	NY	14602-0550
Geotherm Inc.	335 Kavanaugh Rd.	Honeoye Falls	NY	14472
Halcyon, Inc.	Halco Plumbing & Heating	Phelps	NY	14532

Annual Report - Section 2: Contractor Addresses

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode
Iceberg Mechanical Corp	132 21st St	Brooklyn	NY	11232
IHS Global Inc.	15 Inverness Way East	Englewood	СО	80112
JCB Specialties, Inc.	8 Sand Creek Road	Albany	NY	12205
LCO Buildings LLC	726 Exchange St ,Ste 825	Buffalo	NY	14210-1433
LF Distribution Holding Inc.	4620 Grandover Parkway	Greensboro	NC	27407
Lindenmeyr Munroe Divison of	Central National Gottesman	Franklin	MA	02038
Long Island Power Authority	Attn: Frederick S. Peritore	Hicksville	NY	11801
Luce, Schwab and Kase Inc	9 Gloria Lane	Fairfield	NJ	07007-0779
Meier Supply Company	275 Broome Corporate Parkway	Conklin	NY	13748
National Grid	300 Erie Boulevard West	Syracuse	NY	13202
Niagara Mohawk Power Corporation	d/b/a National Grid	Syracuse	NY	13202
NYS Association of Counties	540 Broadway, 5th Floor	Albany	NY	12207
NYS Office of General Services	1220 Washington Ave	Albany	NY	12226
	P.O. Box 2117	Albany	NY	12220-0117
Peter Tavino PE PC	PO Box 277, 68 South St.	Litchfield	СТ	06759
Phoenix Geothermal Services	7523 County House Road	Auburn	NY	13021
Plaza Deli of Albany, Inc.	264 Washington Avenue Ext	Albany	NY	12203-6352
Rycor LLC	537 State Route 208	New Paltz	NY	12561
Saratoga County Sewer District	Po Box 550	Mechanicville	NY	12118-0550
Staples, Inc.	Store # 1602	Framingham	MA	01702
Stewart Title Insurance Company	47 W Main Street	Rochester	NY	14614
Sun Dance Pool N Patio Inc.	19281 US Route 11	Watertown	NY	13601

Annual Report - Section 2: Contractor Addresses

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	
T' F' Obrien	100 Denton Ave	New Hyde Park	NY	11040	
Taylor Group LTD	d/b/a Apogee Exhibits	Macedon	NY	14502	
Time Warner Cable	130 Washington Ave Ext	Albany	NY	12203	
United Parcel Service	P.O. Box 7247-0244	Philadelphia	PA	19170-0001	
University of Rochester	515 Hylan Building	Rochester	NY	14627	
Van Hee Mechanical	6355 Dean Parkway	Ontario	NY	14519	
Verizon Wireless	PO Box 408	Newark	NJ	07101-0489	
WaterFurnace International, Inc.	9000 Conservation Way	Fort Wayne	IN	46809	
West Unified Communications Services Inc	P.O. Box 281866	Atlanta	GA	30384-1866	
Weston Bros.	99-16 Metropolitan Avenue	Forest Hills	NY	11375	
WEX Bank	d/b/a Wright Express FSC	Carol Stream	IL	60197	
Wisconsin Energy Conservation Corp	431 Charmany Drive	Madison	WI	53719	
WK Mechanical	21 Howells Rd	Middletown	NY	10940	

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.

Annual Program Contracts Report

ANNUAL CONTRACTS REPORT: Section 1 Summary 4/1/2018 to 3/31/2019

Category	Report Type	Туре	Count of Contracts	Committed this period
PGRM	Program	Competitive	2,096	\$2,176,911,237
		Discretionary	36	\$1,605,019
		Non-Competitive	22	\$19,642,445
	Total		2,154	\$2,198,158,702
Grand Total			2,154	\$2,198,158,702

Section 1 Summary - Percentages

% Contract Counts Competitively % of \$Committed this period Competitively

98.49%	98.97%
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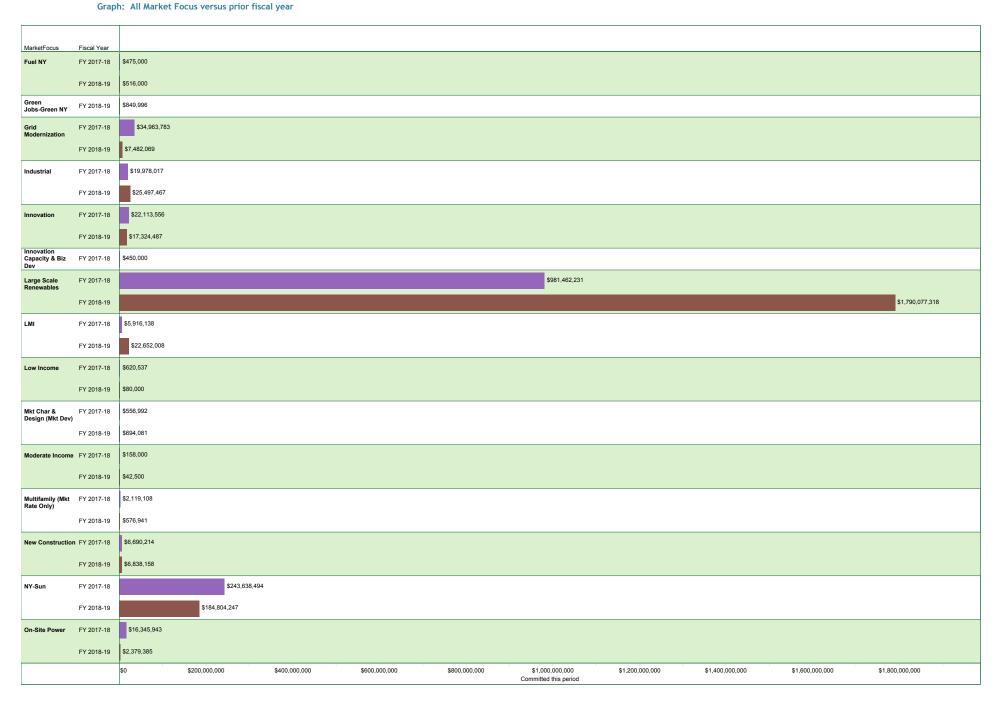
NYSERDA CONTRACTS REPORT - Contracts Executed or Modified For FY 2017-18 & FY 2018-19 Table: All Market Focus versus prior fiscal year

	FY 20	17-18	FY 20	18-19
MarketFocus	Count of Contracts	Committed this period	Count of Contracts	Committed this period
	109	\$4,735,020	191	\$14,271,405
Administration	2	\$82,386	2	\$93,000
Agriculture	24	\$1,312,455	11	\$581,305
Anaerobic Digesters			1	\$2,000,000
Building Innovation	17	\$1,253,006	16	\$5,286,594
Clean Trans (Innov & Research)	25	\$5,005,534	16	\$2,532,515
Codes	2	\$67,500	7	\$736,944
Combined Heat & Power	57	\$14,636,587	42	\$15,921,958
Commercial	215	\$19,878,208	276	\$28,053,558
Communities and Local Governme	40	\$11,912,048	108	\$18,915,158
Energy & EnvironmentalAnalysis	19	\$4,578,256	6	\$1,780,370
Energy Storage	5	\$2,646,493	12	\$10,090,704
Energy-Ritd Environmental Res	13	\$3,507,509	19	\$4,023,536
Evaluation	2	\$150,665	4	\$1,850,571
Fuel Cells			1	\$288,750
Fuel NY	1	\$475,000	1	\$516,000
Green Jobs-Green NY			4	\$849,996
Grid Modernization	34	\$34,963,783	12	\$7,482,069
Industrial	100	\$19,978,017	166	\$25,497,467
Innovation	20	\$22,113,556	21	\$17,324,487
Innovation Capacity & Biz Dev	2	\$450,000		
Large Scale Renewables	20	\$981,462,231	37	\$1,790,077,318
LMI	58	\$5,916,138	128	\$22,652,008
Low Income	3	\$620,537	1	\$80,000
Mkt Char & Design (Mkt Dev)	10	\$556,992	13	\$694,081
Moderate Income	1	\$158,000	2	\$42,500
Multifamily (Mkt Rate Only)	32	\$2,119,108	18	\$576,941
New Construction	82	\$6,690,214	92	\$6,838,158
New Construction	02	Ψ0,030,214	02	Ψ0,000,100

NYSERDA CONTRACTS REPORT - Contracts Executed or Modified For FY 2017-18 & FY 2018-19 Table: All Market Focus versus prior fiscal year

	FY 20	17-18	FY 2018-19		
MarketFocus	Count of Contracts	Committed this period	Count of Contracts	Committed this period	
On-Site Power	27	\$16,345,943	6	\$2,379,385	
Other Program	3	\$218,215	3	\$1,242,543	
Products	4	\$333,050	6	\$639,490	
Renewable Heating and Cooling	47	\$7,599,978	82	\$7,288,994	
Renewables Optimization			10	\$4,766,302	
REV Technical Assistance	1	\$99,016	1	\$473,445	
Saratoga Tech & Energy Park	1	\$26,964	1	\$34,988	
Single Family Residential	12	\$2,495,632	5	\$1,501,444	
Small Wind	16	\$745,872	19	\$1,135,078	
Solar Thermal			1	\$50,000	
Technology to Market	13	\$11,313,550	16	\$12,688,982	
West Valley			1	\$6,000	
Workforce Development	14	\$2,885,863	43	\$2,093,772	
Grand Total	2,648	\$1,430,971,820	2,229	\$2,198,162,063	

MarketFocus	Fiscal Year	
	FY 2017-18	1,735,020
	FY 2018-19	\$14,271,405
Administration	FY 2017-18	12,386
	FY 2018-19	33,000
Agriculture	FY 2017-18	,312,455
	FY 2018-19	81,305
Anaerobic Digesters	FY 2018-19	2,000,000
Building Innovation	FY 2017-18	,253,006
iiiiovatioii	FY 2018-19	5,286,594
Clean Trans	FY 2017-18	5,005,534
(Innov & Research)	FY 2018-19	2,532,515
Codes	FY 2017-18	77,500
	FY 2018-19	36,944
Combined Heat 8	FY 2017-18	\$14,636,587
Power	FY 2018-19	\$15,921,958
Commercial	FY 2017-18	\$19,878,208
	FY 2018-19	\$28,053,558
Communities and	FY 2017-18	511,912,048
Local Governme	FY 2018-19	\$18,915,158
Fnergy & Enviror		4,578,256
Energy & Enviror mentalAnalysis	FY 2018-19	,780,370
Energy Storage		646,493
	FY 2018-19	10,090,704
Energy-Rltd Environmental Res	FY 2017-18	3,507,509
	FY 2018-19	1,023,536
Evaluation	FY 2017-18	50,665
	FY 2018-19	.850,571
Fuel Cells	FY 2018-19	88,750
		\$200,000,000 \$400,000,000 \$600,000,000 \$800,000,000 \$1,000,000,000 \$1,200,000,000 \$1,400,000,000 \$1,600,000,000 \$1,800,000,000 Committed this period
		Committee this period



NYSERDA CONTRACTS REPORT - Contracts Executed or Modified For FY 2017-18 & FY 2018-19 Graph: All Market Focus versus prior fiscal year

MarketFocus	Fiscal Year	\$218,215									
Other Program	FY 2017-18	\$218,215									
	FY 2018-19	\$1,242,543									
Products	FY 2017-18	\$333,050									
	FY 2018-19	\$639,490									
Renewable Heating and	FY 2017-18	\$7,599,978									
Heating and Cooling	FY 2018-19	\$7,288,994									
Renewables Optimization	FY 2018-19	\$4,766,302									
REV Technical Assistance	FY 2017-18	\$99,016									
	FY 2018-19	\$473,445									
Saratoga Tech & Energy Park	FY 2017-18	\$26,964									
	FY 2018-19	\$34,988									
Single Family Residential	FY 2017-18	\$2,495,632									
	FY 2018-19	\$1,501,444									
Small Wind	FY 2017-18	\$745,872									
	FY 2018-19	\$1,135,078									
Solar Thermal	FY 2018-19	\$50,000									
Technology to Market	FY 2017-18	\$11,313,550									
	FY 2018-19	\$12,688,982									
West Valley	FY 2018-19	\$6,000									
Workforce Development	FY 2017-18	\$2,885,863									
	FY 2018-19	\$2,093,772									
		\$0	\$200,000,000	\$400,000,000	\$600,000,000	\$800,000,000	\$1,000,000,000 Committed this period	\$1,200,000,000	\$1,400,000,000	\$1,600,000,000	\$1,800,000,000

NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2018 to 3/31/2019 Graph: All Market Focus Committed this Period

	All Market Focus Committed this Period
MarketFocus	
Large Scale Renewables	\$1,790,077,318
NY-Sun	\$184,804,247
Commercial	\$28,050,197
Industrial	\$25,497,467
LMI	\$22,652,008
Communities and Local Gov	\$18,915,158
Innovation	\$17,324,487
Combined Heat & Power	\$15,921,958
	\$14,271,405
Technology to Market	\$12,688,982
Energy Storage	\$10,090,704
Grid Modernization	\$7,482,069
Renewable Heating and Coo	\$7,288,994
New Construction	\$6,838,158
Building Innovation	\$5,286,594
Renewables Optimization	\$4,766,302
Energy-Ritd Environmental	\$4,023,536
Clean Trans (Innov & Resear	\$2.532,515
On-Site Power	\$2,379,385
Workforce Development	\$2,093,772
Anaerobic Digesters	\$2,000,000
Evaluation	\$1,850,571
Energy & EnvironmentalAna	\$1,780,370
Single Family Residential	
Other Program	\$1,242,543
Small Wind	\$1,135,078
Green Jobs-Green NY	\$649,996
Codes	\$736,944
Mkt Char & Design (Mkt Dev)	\$694,081
Products	
Agriculture	
Multifamily (Mkt Rate Only)	
Fuel NY	
REV Technical Assistance	
Fuel Cells	
Administration	
	\$80,000
Solar Thermal	
Moderate Income	
Saratoga Tech & Energy Park	
West Valley	
	\$0 \$100,000,000 \$200,000,000 \$300,000,000 \$400,000,000 \$500,000,000 \$600,000,000 \$700,000,000 \$800,000,000 \$900,000,000 \$1,000,000 \$1,000,000 \$1,200,000,000 \$1,300,000,000 \$1,400,000,000 \$1,500,000,000 \$1,500,000,000 \$1,600,000,000 \$1,800,000,000
	·

Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
	191	\$14,271,405
Administration	2	\$93,000
Agriculture	11	\$581,305
Anaerobic Digesters	1	\$2,000,000
Building Innovation	16	\$5,286,594
Clean Trans (Innov & Research)	16	\$2,532,515
Codes	7	\$736,944
Combined Heat & Power	42	\$15,921,958
Commercial	275	\$28,050,197
Communities and Local Governme	108	\$18,915,158
Energy & Environmen talAnalysis	6	\$1,780,370
Energy Storage	12	\$10,090,704
Energy-Rltd Environmental Res	19	\$4,023,536
Evaluation	4	\$1,850,571
Fuel Cells	1	\$288,750
Fuel NY	1	\$516,000
Green Jobs-Green NY	4	\$849,996
Grid Modernization	12	\$7,482,069
Industrial	166	\$25,497,467
Innovation	21	\$17,324,487
Large Scale Renewables	37	\$1,790,077,318

Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
LMI	128	\$22,652,008
Low Income	1	\$80,000
Mkt Char & Design (Mkt Dev)	13	\$694,081
Moderate Income	2	\$42,500
Multifamily (Mkt Rate Only)	18	\$576,941
New Construction	92	\$6,838,158
NY-Sun	828	\$184,804,247
On-Site Power	6	\$2,379,385
Other Program	3	\$1,242,543
Products	6	\$639,490
Renewable Heating and Cooling	82	\$7,288,994
Renewables Optimization	10	\$4,766,302
REV Technical Assistance	1	\$473,445
Saratoga Tech & Energy Park	1	\$34,988
Single Family Residential	5	\$1,501,444
Small Wind	19	\$1,135,078
Solar Thermal	1	\$50,000
Technology to Market	16	\$12,688,982
West Valley	1	\$6,000
Workforce Development	43	\$2,093,772
Grand Total	2,228	\$2,198,158,702

REDC Region	County	Count of Contracts	Committed this period
Capital Region	Albany	59	\$13,430,771
rtogion	Columbia	20	\$624,640
	Greene	16	\$3,308,007
	Rensselaer	28	\$1,431,202
	Saratoga	34	\$8,744,963
	Schenectady	38	\$27,853,865
	Warren	16	\$1,054,088
	Washington	10	\$22,284,742
	Total	221	\$78,732,277
Central New York	Cayuga	26	\$3,500,225
TOIR	Cortland	19	\$22,213,310
	Madison	23	\$3,744,439
	Onondaga	54	\$26,874,900
	Oswego	18	\$1,541,538
	Total	140	\$57,874,412
Finger Lakes	Genesee	24	\$243,291,198
	Livingston	12	\$273,968,309
	Monroe	92	\$21,460,654
	Ontario	57	\$5,932,543
	Orleans	9	\$201,054,862
	Seneca	7	\$63,863,236

REDC Region	County	Count of Contracts	Committed this period
Finger Lakes	Wayne	17	\$1,674,284
	Wyoming	12	\$1,239,824
	Yates	3	\$31,130
•	Total	233	\$812,516,040
Long Island	Nassau	55	\$2,450,316
	Suffolk	85	\$7,018,971
	Total	140	\$9,469,287
Mid-Hudson	Dutchess	48	\$6,100,562
	Orange	89	\$45,998,962
	Putnam	10	\$459,565
	Rockland	38	\$1,509,108
	Sullivan	20	\$4,537,629
	Ulster	47	\$64,525,603
	Westchester	90	\$17,206,401
	Total	342	\$140,337,831
Mohawk Valley	Fulton	18	\$50,392,843
valley	Herkimer	12	\$1,402,255
	Montgomery	9	\$119,039,409
	Oneida	49	\$3,569,260
	Otsego	11	\$1,623,564
•	Schoharie	14	\$42,573,238

REDC Region	County	Count of Contracts	Committed this period
Mohawk Valley	Total	113	\$218,600,570
New York City	Bronx	95	\$10,615,417
-	Kings	98	\$10,404,801
	New York	213	\$24,734,162
-	Queens	86	\$3,190,650
	Richmond	28	\$944,472
-	Total	520	\$49,889,501
North Country	Clinton	10	\$4,928,517
-	Essex	16	\$3,936,237
	Franklin	19	\$5,229,743
	Hamilton	3	\$61,077
	Jefferson	27	\$9,273,083
-	Lewis	14	\$128,164,132
	St. Lawrence	25	\$1,459,618
-	Total	114	\$153,052,407
Southern Tier	Broome	26	\$3,510,801
-	Chemung	9	\$3,458,676
	Chenango	17	\$43,837,815
	Delaware	15	\$2,566,077
	Schuyler	8	\$43,602,903
-	Steuben	15	\$410,144,383

REDC Region	County	Count of Contracts	Committed this period	
Southern Tier	Tioga	20	\$24,549,393	
	Tompkins	38	\$6,526,856	
	Total	148	\$538,196,905	
Statewide	STATEWIDE	226	\$119,255,233	
	Total	226	\$119,255,233	
Western New York	Allegany	12	\$540,217	
TOIN	Cattaraugus	20	\$2,683,759	
	Chautauqua	28	\$690,666	
	Erie	97	\$9,508,461	
	Niagara	32	\$6,811,135	
	Total	189	\$20,234,239	
Grand Total		2,386	\$2,198,158,702	

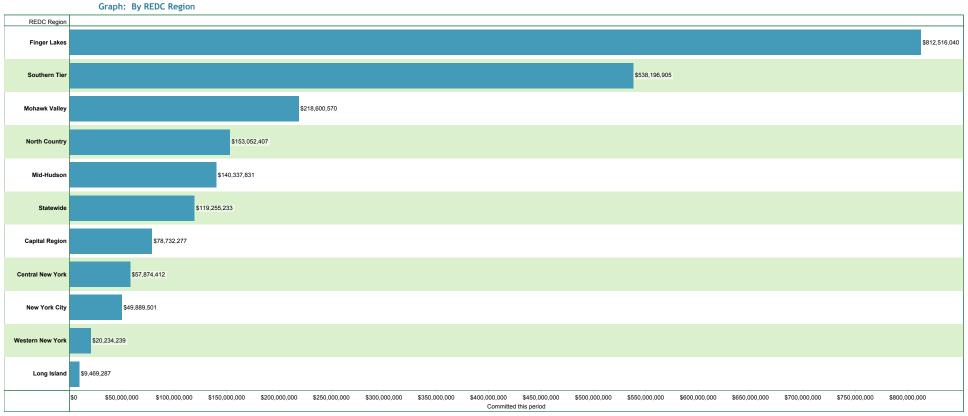
NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2018 to 3/31/2019 Table: By Electric Utility

Electric Utility	Count of Contracts	Committed this period
	3	\$34,252
AKRON	1	\$5,985
BERGEN	1	\$50,000
BOONVILLE	1	\$2,500
Central Hudson Gas and Electric	140	\$84,713,402
CHURCHVILLE	1	\$100,000
Consolidated Edison	561	\$58,767,352
FREEPORT	1	\$81,803
GREENE	2	\$21,167,530
HAMILTON	1	\$50,000
ILION	1	\$100,000
Long Island Power Authority	144	\$9,485,081
MASSENA	1	\$21,000
MOHAWK	1	\$390,000
National Grid	572	\$1,099,983,691
NYS Electric and Gas	333	\$639,195,623
Orange and Rockland Utilities	99	\$41,423,606

NYSERDA CONTRACTS REPORT - Contracts Executed or Modified 4/1/2018 to 3/31/2019 **Table: By Electric Utility**

Electric Utility	Count of Contracts	Committed this period
Rochester Gas and Electric	138	\$121,271,200
SHERRILL	1	\$50,000
SILVER SPRINGS	1	\$34,368
SKANEATELES	1	\$50,000

SHERRILL	1	\$50,000
SILVER SPRINGS	1	\$34,368
SKANEATELES	1	\$50,000
SPENCERPORT	3	\$1,862,293
Statewide	226	\$119,255,233
THERESA	1	\$2,500
WESTFIELD	3	\$61,282
Grand Total	2,237	\$2,198,158,702



Resolution No.	
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RESOLVED, that the Authority's 2018-2019 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 2019)" as presented at this meeting, are approved and adopted.

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Section 1 Summary - 3/16/2019 to 5/15/2019

Category	Report Type	Туре	Count of Contracts	Committed this period
PCMT	Procurement	Competitive	34	\$10,651,712
		Discretionary	5	\$175,402
		Non-Competitive	3	\$454,812
	Total		42	\$11,281,927
PGRM	Procurement	Competitive	9	\$665,485,408
		Non-Competitive	1	\$500,000
	Total		10	\$665,985,408
Grand Total			52	\$677,267,335

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 3/16/2019 to 5/15/2019

ategory	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
СМТ		Non-Competiti.	Y	138090	General Electric International Inc	GE MAPS Software	03/15/2019	\$391,500	\$391,500	\$130,500	\$130,500
	Electric Vehicles - Rebate	Competitive	Υ	137992	Center for Sustainable Energy	TWO #3 - Drive Clean Program	03/12/2019	\$1,331,278	\$1,331,278	\$113,892	\$113,892
	ENERGY ANALYSIS	Competitive	Υ	124951	Harris Wiltshire & Grannis LLP	RFP3776 Outside Counsel Servic	03/28/2018	\$32,550	\$54,550	\$7,650	\$28,048
		Competitive	Υ	137759	Kelliher Samets Volk	TWO 27: 2019 SEP Marketing	03/06/2019	\$250,000	\$250,000		
		Competitive	Υ	138055	Four Points Group, Inc.	TWO #2 - NPP 60+	03/13/2019	\$75,000	\$75,000	\$16,444	\$16,444
	EVALUATION	Competitive	Υ	104536A	DNV GL Energy Insights USA Inc.	RFQ 3183 KEMA, Inc	01/18/2019	\$421,283	\$2,637,211	\$48,978	\$324,251
		Competitive	Υ	104544A	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	04/03/2019	\$283,238	\$283,238		
		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	\$109,662	\$2,035,881	\$633,686	\$1,931,826
		Competitive	Υ	138327	Energy & Resource Solutions, Inc.	. EVALUATION	03/21/2019	\$2,088,363	\$2,088,363		
	K-12 SCHOOLS	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	09/06/2017	\$155,025	\$4,974,082	\$513,768	\$1,649,772
		Competitive	Υ	139043	R.W. Beck Group, Inc.	StakeholderEngagement_Outreach	04/10/2019	\$242,915	\$242,915		
	Large Scale Renewables	Competitive	Υ	104541	Industrial Economics, Incorporated	RFQ3183 Umbrella Agreement	10/05/2016	\$6,727	\$186,477	\$25,281	\$104,177
	NEW YORK GREEN BANK	Competitive	Υ	39066	Nixon Peabody LLP	Green Bank Outside Legal Serv.	01/21/2014	\$8,643	\$780,523	\$12,531	\$499,246
		Competitive	Υ	39069	Loeb & Loeb LLP	Green Bank Outside Legal Couns	01/21/2014	\$3,312	\$586,946		\$583,634
		Competitive	Υ	39073	Davis Polk & Wardwell LLP	Green Bank Outside Legal Couns	01/21/2014	\$287,467	\$287,467	\$287,467	\$287,467
		Discretionary	Υ	138377	Proenergy Consulting LLC	NEW YORK GREEN BANK	03/27/2019	\$50,000	\$50,000	\$17,044	\$17,044
	NY-SUN	Competitive	Υ	106225	Kelliher Samets Volk	Marketing Support for NYSERDA	11/03/2016	\$1,900,000	\$13,874,772	\$592,000	\$4,328,900
	NYSERDA ADMINISTRATION	Competitive	Υ	62858	Marshall & Sterling, Inc.	Property Liability and Other	04/20/2015	\$275,000	\$1,330,038	\$121,422	\$961,124
		Competitive	Υ	85025	Tech Valley Talent, LLC	RFP3143 Umbrella Agreement	12/18/2015	\$98,438	\$6,275,308	\$120,564	\$4,631,995
		Competitive	Y	124908	First Columbia Property Services, LLC	Property Management	03/27/2018	\$290,372	\$519,046	\$90,716	\$271,300
		Competitive	Υ	137565	Systems Management Planning, Inc.	VMWare Airwatch 2019 - 2020	02/27/2019	\$6,439	\$6,439		
		Competitive	Υ	138056	Gartner Inc.	Gartner Services 2019-2020	03/13/2019	\$55,356	\$55,356	\$55,336	\$55,336
		Competitive	Υ	138079	SHI, Inc.	Adobe Creative Cloud Licenses	03/14/2019	\$12,312	\$12,312	\$12,312	\$12,312
		Competitive	Υ	138080	SHI, Inc.	Adobe Acrobat Pro DC - 1 yr.	03/14/2019	\$48,064	\$48,064		
		Competitive	Υ	138418	Randstad North America Inc	TS.004 - Marketing_Coordinator	03/27/2019	\$112,275	\$112,275	\$2,952	\$2,952
		Competitive	Υ	139038	SHI, Inc.	Adobe Enterprise Licensing 1yr	04/10/2019	\$44,512	\$44,512	\$44,512	\$44,512
		Discretionary	Υ	133472	ThunderCat Technology LLC	Atlassian (Jira) - Phase 1	11/02/2018	\$94,567	\$199,875	\$23,840	\$121,202
		Non-Competiti.	Y	114437	IESI NY Corporation	Trash Removal from NYC Office	06/05/2017	\$5,060	\$15,146	\$4,217	\$14,130

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 3/16/2019 to 5/15/2019

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	Off-Shore Wind Master Plan	Competitive	Υ	104258	Sive Paget & Riesel PC	RFP 3300 & RFP 3776 Outside Co	09/27/2016	\$100,000	\$1,014,219	\$42,310	\$732,683
	OTHER PROGRAM AREA	Competitive	Y	104260	Bond, Schoeneck & King, PLLC	RFP 3300 Outside Counsel Servi	09/27/2016	\$38,000	\$298,353	\$20,630	\$241,262
		Competitive	Y	106541	BW Research Partnership	New York Clean Energy Jobs Stu	11/09/2016	\$121,686	\$459,962		\$269,634
		Competitive	Υ	138830	Cornell University	76West TWO 29	04/03/2019	\$182,690	\$182,690		
		Discretionary	Υ	138375	Corey Harrington	National offshore Website	03/27/2019	\$5,988	\$5,988	\$5,987	\$5,987
	Real Time Enrgy Management	Competitive	Υ	117928	Allegis Group Holdings Inc	Staff Augmentation Services	09/06/2017	\$190,409	\$1,182,814	\$99,118	\$457,891
	REV Campus Challenge	Competitive	Y	137653	Rochester Institute of Technology	REV CC ETL_Rd. 2	03/04/2019	\$999,664	\$999,664		
	Rmve Barriers Dist Enrgy Storg	Discretionary	Υ	109141	Tully Rinckey PLLC	outside counsel services	01/18/2017	\$5,000	\$15,000		\$546
	Single Family Mt Rt Trans/2515	Competitive	Υ	139626	Opinion Dynamics Corporation	TWO 11 BPI Survey	04/25/2019	\$28,456	\$28,456		
	Subscription/Data Access	Discretionary	Υ	139095	CoStar Realty Information, Inc.	Subscription/Data Access	04/11/2019	\$19,848	\$19,848	\$19,848	\$19,848
	Technical Services	Competitive	Y	138946	EME Consulting Engineering Group, LLC	SA.036c_TWO#8_EP&E PM	04/08/2019	\$396,850	\$396,850	\$4,988	\$4,988
	WEST VALLEY DEVELOPMENT	Competitive	Υ	61280	MJW Technical Services, Inc.	Radiation Protection Support	03/24/2015	\$440,758	\$3,314,798	\$18,364	\$2,219,163
	PROGRAM	Non-Competiti	Y	53151	GZA GeoEnvironmental of New York	Trench 14 Investigation	11/24/2014	\$58,252	\$634,127	\$35,533	\$586,287
PGRM	>200KW PV	Competitive	Υ	131209	Borrego Solar Systems, Inc.	NY Sun	09/12/2018	\$1,536,500	\$3,288,250		
	CI Carbon Challenge	Competitive	Y	132541	RED Rochester	RED C&I Carbon Challenge	10/15/2018	\$5,000,000	\$5,000,000		
	CLEANER GREENER COMMUNITIES	Competitive	Y	57271	Energy Improvement Corporation	CGC39896 - EIC	01/21/2015	\$286,645	\$4,828,885		\$4,541,566
	FLEXIBLE TECHNICAL ASSISTANCE	Competitive	Y	37376	L&S Energy Services, Inc.	Umbrella Contract	11/15/2013	\$6,900	\$3,071,764	\$64,726	\$2,096,656
	GJGNY REVOLVING LOAN FUND	Non-Competiti	Y	134735	Energy Improvement Corporation	EIC PACE financing program	12/04/2018	\$500,000	\$1,000,000	\$437,173	\$573,632
	REC:CES REC Contracts	Competitive	Y	134570	Calpine Corporation	REC:CES REC Contracts	12/03/2018	\$137,079,080	\$137,079,080		
		Competitive	Y	135312	Watkins Glen Solar Energy Center, LLC	Watkins Glen Solar Energy Cntr	12/18/2018	\$43,413,832	\$43,413,832		
		Competitive	Y	135313	Trelina Solar Energy Center LLC	North Light Energy Center	12/18/2018	\$63,753,997	\$63,753,997		
		Competitive	Y	135315	Excelsior Energy Center, LLC	Excelsior Energy Center	12/18/2018	\$239,959,044	\$239,959,044		
		Competitive	Υ	135429	Invenergy Solar Development North Americ	Horseshoe Solar	12/20/2018	\$174,449,410	\$174,449,410		
Grand Tota	ļ							\$677,267,335	\$723,160,574	\$3,623,788	\$27,880,205

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 3/16/2019 to 5/15/2019

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	мве	SDVOB	SBE	
Akimeka, LLC	901 No. Lake Destiny Drive	Maitland	FL	32751	FSBE					
Allegis Group Holdings Inc	7301 Parkway Drive	Hanover	MD	21076	FSBE					
Bond, Schoeneck & King, PLLC	22 Corporate Woods Blvd., Ste 501	Albany	NY	12211-2503	NYSBE					
Borrego Solar Systems, Inc.	1810 Gillespie Way, #108	El Cajon	CA	92020	FSBE					
BW Research Partnership	2725 Jefferson St., Ste13	Carlsbad	CA	92008	FSBE					
Calpine Corporation	717 Texas Ave Suite 1000	Houston	TX	77002	FSBE					
Center for Sustainable Energy	3980 Sherman St., Ste 170	San Diego	CA	92110	FSBE					
Corey Harrington	832 Durant Court	West Chester	PA	19380	FSBE					
Cornell University	East Hill Plaza	Ithaca	NY	14850	NYSBE					
CoStar Realty Information, Inc.	PO Box 791123	Baltimore	MD	21279-1123	FSBE					
Davis Polk & Wardwell LLP	450 Lexington Avenue	New York	NY	10017	NYSBE					
DNV GL Energy Insights USA Inc.	1400 Ravello Drive	Katy	TX	77449	FSBE					
EME Consulting Engineering Group, LLC	129 West 27th Street	New York	NY	10001	NYSBE					
Energy & Resource Solutions, Inc.	120 Water Street, Suite 350	North Andover	MA	01845	FSBE					
Energy Improvement Corporation	2051 BALDWIN RD	YORKTOWN HEIGHTS	NY	10598	NYSBE					
Excelsior Energy Center, LLC	700 Universe Boulevard	Juno Beach	FL	33408	FSBE					
First Columbia Property Services, LLC	22 Century Hill Dr Ste 301	Latham	NY	12110-2116	NYSBE					
Four Points Group, Inc.	4451 Brookfield Corp Dr.	Chantilly	VA	20151	FSBE					
Gartner Inc.	56 Top Gallant Rd	Stamford	ст	06902	FSBE					
General Electric International Inc	1 River Rd Bldg 2	Schenectady	NY	12345-6000	NYSBE					
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					
IESI NY Corporation	99 Wood Ave., South, Ste 1001	Iselin	NJ	08830	FSBE					
Industrial Economics, Incorporated	2067 Massachusetts Avenue	Cambridge	MA	02140	FSBE					
Invenergy Solar Development North Americ	Horseshoe Solar Energy LLC	Chicago	IL	60606	FSBE					
Kelliher Samets Volk	212 Battery Street	Burlington	VT	05401	FSBE					
L&S Energy Services, Inc.	58 Clifton Country Road	Clifton Park	NY	12065	NYSBE					
Loeb & Loeb LLP	345 Park Avenue	New York	NY	10154	NYSBE					
Marshall & Sterling, Inc.	125 High Rock Ave., Ste 206	Saratoga Springs	NY	12866	NYSBE					
MJW Technical Services, Inc.	243 Root St.	Olean	NY	14760	NYSBE					

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 3/16/2019 to 5/15/2019

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	мве	SDVOB	SBE	
Nixon Peabody LLP	437 Madison Avenue	New York	NY	10022	NYSBE					
Opinion Dynamics Corporation	1000 Winter St	Waltham	МА	02451	FSBE					
Proenergy Consulting LLC	245 West 99th Street	New York	NY	10025	NYSBE					
R.W. Beck Group, Inc.	Leidos Engineering, LLC	Reston	VA	20190	FSBE					
Randstad North America Inc	PO Box 2084	Carol Stream	IL	60132-2084	FSBE					
RED Rochester	1200 Ridgeway Avenue	Rochester	NY	14615	NYSBE					
Rochester Institute of Technology	74 Lomb Memorial Dr	Rochester	NY	14623	NYSBE					
SHI, Inc.	P.O. Box 952121	Dallas	TX	75395	FSBE					
Sive Paget & Riesel PC	560 Lexington Ave., Floor 15	New York	NY	10022-1994	NYSBE					
Systems Management Planning, Inc.	1020 John St	West Henrietta	NY	14586	NYSBE					
Tech Valley Talent, LLC	PO Box 935587	Atlanta	GA	31193-5587	FSBE	x				
The Cadmus Group, LLC	100 5th Ave., Ste 100	Waltham	MA	02451	FSBE					
ThunderCat Technology LLC	1925 Isaac Newton Square	Reston	VA	20190	FSBE			x		
TRC Energy Services	21 Griffin Rd North	Windsor	СТ	06095	FSBE					
Trelina Solar Energy Center LLC	700 Universe Boulevard	Juno Beach	FL	33408	FSBE					
Tully Rinckey PLLC	441 New Karner Road	Albany	NY	12205	NYSBE			х		
Watkins Glen Solar Energy Center, LLC	700 Universe Boulevard	Juno Beach	FL	33408	FSBE					

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 3/16/2019 to 5/15/2019

Categor y		Term > 1 Year		Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
PCMT	Competitive	Υ	20896	Bergmann Associates	STEP Engineering, Design and C	Added New Tasks	10/19/2010	\$31,000	\$204,350
	Competitive	Υ	37380	CDH Energy Corporation	Technical Review and Program S	Added New Tasks	11/15/2013	\$12,000	\$923,255
	Competitive	Υ	39069	Loeb & Loeb LLP	Green Bank Outside Legal Couns	Added New Tasks	01/21/2014	\$85,790	\$672,736
	Competitive	Υ	46973A	DNV GL Energy Services USA Inc.	Outside Technical Eng. Srv.	Added New Tasks	05/06/2015	\$43,010	\$81,730
	Competitive	Υ	62858	Marshall & Sterling, Inc.	Property Liability and Other	Extend Contract Term	04/20/2015	\$71,844	\$1,401,882
	Competitive	Υ	70333	Cornell University	76West Building a Clean Energy	Added New Tasks	08/03/2015	\$15,755	\$4,648,668
	Competitive	Υ	98840	KPMG LLP	Audit Services	Added New Tasks	05/24/2016	\$14,960	\$547,960
	Competitive	Υ	101127	Energy and Environmental Economics Inc.	Tech Assist, REV Pool.	New Agreement	07/15/2016	\$162,720	\$3,521,638
	Competitive	Y	104265	Harris Beach PLLC	RFP 3300 Outside Counsel Servi	Added New Tasks	09/27/2016	\$10,000	\$134,606
	Competitive	Υ	107762	Rosenblum Property Services, LLC	STEP Property Mgmt Services	Added New Tasks	12/07/2016	\$194,000	\$676,685
	Competitive	Υ	117924	Willdan Energy Solutions	Staff Augmentation Services	Added New Tasks	09/06/2017	\$164,409	\$621,968
	Competitive	Υ	117926	TRC Energy Services	Staff Augmentation Services	Added New Tasks	09/06/2017	\$3,840,018	\$8,814,100
	Competitive	Y	117928	Allegis Group Holdings Inc	Staff Augmentation Services	Added New Tasks	09/06/2017	\$183,006	\$1,365,819
	Competitive	Y	117989	Arcadis of New York, Inc.	Staff Augmentation Services		09/08/2017	\$734,525	\$1,381,320
	Competitive	Y	126362	Moelis & Company Group LP	3PC raise advisory Services	Added New Tasks	05/01/2018	\$100,000	\$850,000
	Competitive	Υ	134906	New York Power Authority,	RTEM Data Store	New Agreement	12/07/2018	\$1,500,000	\$1,500,000
	Competitive	Υ	137240	EME Consulting Engineering Group, LLC	SA.038A_TWO #7 - New Con		02/19/2019	\$530,043	\$798,543
	Competitive	Υ	138947	SUNY - ESF	SUNY ESF - Energy Master Plan	New Agreement	04/08/2019	\$18,112	\$18,112
	Competitive	Υ	140105	Industrial Economics, Incorporated	RFQL3685 Round 1		05/09/2019	\$400,000	\$400,000
	Discretionary	Υ	34356	U.S. Geological Survey (Troy).	ALTM Stream Monitoring	Added New Tasks	08/07/2013	\$44,600	\$644,815
	Discretionary	Υ	140000	APPEXTREMES, LLC	Conga Composer 2019-2020		05/07/2019	\$7,200	\$7,200
	Discretionary	Υ	140318	Systems Management Planning, Inc.	ManageEngine Desktop Central		05/15/2019	\$10,419	\$10,419
	Non-Competitive	Υ	29226	Taitem Engineering, P.C.	MEPP Quality Assurance Contrac	Exercising Option to Renew	09/17/2012	\$219,336	\$2,758,875
	Non-Competitive	Υ	41690A	Level 3 Communications, LLC	NYSERDA ADMINISTRATION		03/02/2016	\$49,999	\$329,734
	Non-Competitive	Υ	67434	Pratt Institute Center for Community & E	Pratt Standardized Retrofit	New Agreement	06/18/2015	\$997,932	\$997,932
	Non-Competitive	Υ	125834	Level 3 Communications, LLC	NYSERDA ADMINISTRATION	Added New Tasks	04/17/2018	\$216,000	\$265,999
PGRM	Competitive	Υ	37383	CHA Consulting Inc.	Technical Review and Program S	Added New Tasks	11/15/2013	\$23,000	\$4,539,324
	Competitive	Υ	134731	ELP Stillwater Solar LLC	REC:CES REC Contracts	New Agreement	12/04/2018	\$16,708,475	\$16,708,475
	Competitive	Υ	134732	Hannacroix Solar Facility LLC	REC:CES REC Contracts	New Agreement	12/04/2018	\$5,460,400	\$5,460,400
	Competitive	Υ	135621	Silver Lake Solar LLC	Silver Lake Solar	New Agreement	12/28/2018	\$19,252,800	\$19,252,800
	Competitive	Υ	135627	Empire State Solar, LLC	Manchester Solar	New Agreement	12/28/2018	\$17,134,785	\$17,134,785
	Competitive	Υ	137399	General Electric International Inc	NY Sun		02/21/2019	\$3,500,000	\$6,125,000

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 3/16/2019 to 5/15/2019

Categor y Type	Term > 1 Year Contract ID	Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
Grand Total						\$71,736,138	\$102,799,128

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Section 1 Summary - 3/16/2019 to 5/15/2019

Category	Report Type	Туре	Count of Contracts	Committed this period
PGRM	Program	Competitive	394	\$722,887,509
		Discretionary	2	\$90,000
		Non-Competitive	2	\$705,092
	Total		398	\$723,682,601
Grand Total			398	\$723,682,601

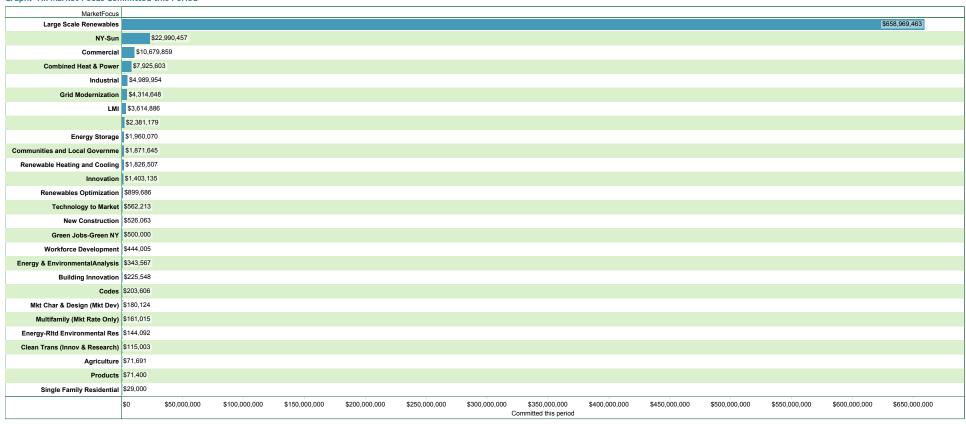
Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
	38	\$2,381,179
Agriculture	9	\$71,691
Building Innovation	3	\$225,548
Clean Trans (Innov & Research)	2	\$115,003
Codes	2	\$203,606
Combined Heat & Power	22	\$7,925,603
Commercial	66	\$10,679,859
Communities and Local Governme	19	\$1,871,645
Energy & EnvironmentalAnalysis	3	\$343,567
Energy Storage	2	\$1,960,070
Energy-Ritd Environmental Res	2	\$144,092
Green Jobs-Green NY	1	\$500,000
Grid Modernization	11	\$4,314,648
Industrial	28	\$4,989,954
Innovation	4	\$1,403,135
Large Scale Renewables	7	\$658,969,463
LMI	23	\$3,614,886
Mkt Char & Design (Mkt Dev)	5	\$180,124
Multifamily (Mkt Rate Only)	7	\$161,015
New Construction	14	\$526,063
NY-Sun	148	\$22,990,457

Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
Products	1	\$71,400
Renewable Heating and Cooling	14	\$1,826,507
Renewables Optimization	4	\$899,686
Single Family Residential	2	\$29,000
Technology to Market	2	\$562,213
Workforce Development	28	\$444,005
Grand Total	467	\$727,404,419

Graph: All Market Focus Committed this Period



REDC Region	County	Count of Contracts	Committed this period
		1	\$77,867
	Total	1	\$77,867
Capital Region	Albany	7	\$198,868
	Columbia	3	\$47,231
	Greene	2	\$11,100
	Rensselaer	7	\$1,006,237
	Saratoga	10	\$557,103
	Schenectady	2	\$216,500
	Warren	7	\$135,775
	Washington	2	\$8,602
	Total	40	\$2,181,417
Central New York	Cayuga	4	\$132,721
TOIK	Cortland	4	\$1,510,954
	Madison	5	\$2,103,460
	Onondaga	10	\$181,545
	Oswego	5	\$80,461
	Total	28	\$4,009,141
Finger Lakes	Genesee	2	\$239,967,707
	Livingston	4	\$174,658,910
	Monroe	24	\$5,300,789
	Ontario	7	\$39,523

REDC Region	County	Count of Contracts	Committed this period
Finger Lakes	Orleans	2	\$1,874,675
	Seneca	2	\$63,762,712
	Wayne	14	\$1,214,808
	Wyoming	3	\$67,309
	Yates	1	\$25,097
	Total	59	\$486,911,529
Long Island	Nassau	5	\$280,525
	Suffolk	6	\$1,329,109
	Total	11	\$1,609,634
Mid-Hudson	Dutchess	8	\$875,061
	Orange	15	\$2,284,593
	Putnam	2	\$63,506
	Rockland	2	\$14,377
	Sullivan	4	\$242,586
	Ulster	11	\$971,409
	Westchester	14	\$940,962
	Total	56	\$5,392,494
Mohawk Valley	Fulton	6	\$1,273,884
	Herkimer	4	\$152,500
	Montgomery	1	\$792,291
	Oneida	8	\$342,143

REDC Region	County	Count of Contracts	Committed this period
Mohawk Valley	Otsego	2	\$255,317
	Schoharie	3	\$15,960
	Total	24	\$2,832,095
New York City	Bronx	28	\$2,056,217
	Kings	19	\$4,392,563
	New York	54	\$5,761,410
	Queens	25	\$2,272,465
	Richmond	5	\$173,117
	Total	131	\$14,655,772
North Country	Clinton	1	\$1,188,388
	Essex	5	\$2,893,743
	Franklin	2	\$65,111
	Jefferson	3	\$104,312
	Lewis	4	\$1,708,942
	St. Lawrence	6	\$839,290
	Total	21	\$6,799,786
Southern Tier	Broome	3	\$29,050
	Chemung	3	\$24,539
	Schuyler	3	\$43,425,082
	Steuben	2	\$239,798
	Tioga	3	\$1,604,635

REDC Region	County	Count of Contracts	Committed this period
Southern Tier	Tompkins	8	\$1,244,031
	Total	22	\$46,567,135
Statewide	STATEWIDE	58	\$155,434,253
	Total	58	\$155,434,253
Western New York	Allegany	1	\$300,000
TOIR	Cattaraugus	3	\$64,198
	Chautauqua	1	\$12,000
	Erie	17	\$541,160
	Niagara	3	\$15,938
	Total	25	\$933,296
Grand Total		476	\$727,404,419

NYSERDA PERIODIC PROGRAM REPORT

3/16/2019 to 5/15/2019 Graph: By REDC Region

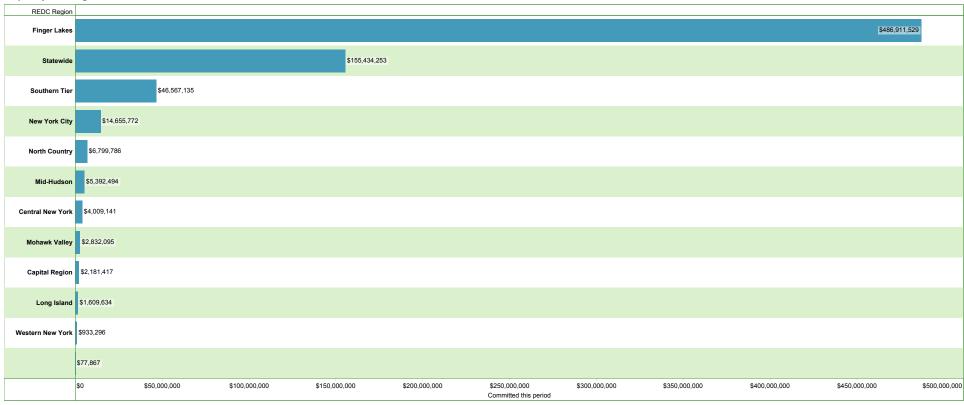
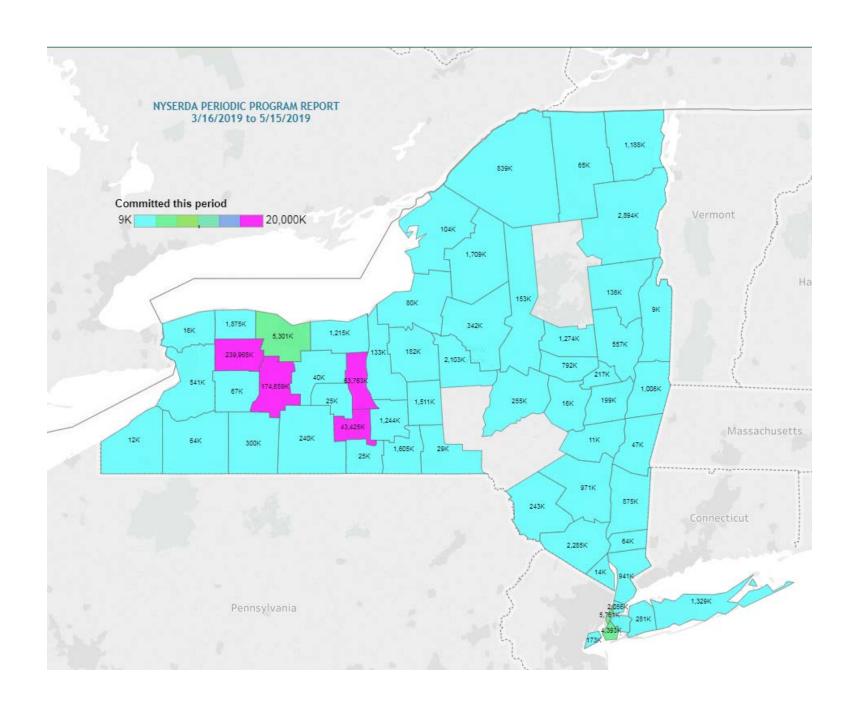


Table: By Electric Utility

Electric Utility	Count of Contracts	Committed this period
	4	\$155,491
Central Hudson Gas and Electric	24	\$1,875,542
Consolidated Edison	140	\$15,473,161
Long Island Power Authority	11	\$1,609,634
Municipal Utilities	1	\$510,000
National Grid	109	\$429,062,915
NYS Electric and Gas	62	\$114,466,730
Orange and Rockland Utilities	15	\$2,293,719
Rochester Gas and Electric	41	\$6,522,974
Statewide	58	\$155,434,253
Grand Total	465	\$727,404,419



Resolution No. ____

RESOLVED, that the Periodic Contracts Report, covering the period March 16, 2019 through May 15, 2019, 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, 2019

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, 2018, through March 31, 2019.

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:
 - 371 procurement contracts goods contracts;
 - 2,153 program contracts.
 - 2.524 Total

During the reporting period, the Authority processed a total of 75,065 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 first 5 exceptions appear to have occurred due to an isolated computer application error. The last exception was the result of an isolated human error made in the processing of one invoice. Given that these exceptions were isolated in occurrence and extremely small in number, and given that in all 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
,						Vendor
1	Center for Internet Security Inc.	\$7,400.00	104	74	\$0.00	waived interest of \$128.82
2	TRC Energy Services	\$3,224.00	65	35	\$0.00	Vendor waived interest of \$26.50
3	Energy Resource Solutions	\$7,435.00	60	30	\$0.00	Vendor waived interest of \$51.50
		\$3,512.50	55	25	\$0.00	Vendor waived interest of \$19.97
4	Olin Corporation	\$23,241.84	56	26	\$0.00	Vendor waived interest of \$132.17
5	Kilowatt Engineering, Inc.	\$1,189.00	55	25	\$0.00	Interest less than \$10
3	Knowatt Engineering, Inc.	\$1,165.00	33	23	\$ 0.00	Vendor waived
6	EcoMarkets LLC	\$184,611.00	89	59	\$0.00	interest of \$2,566.51
	Total				\$0.00	

RESOLVED, that the Annual Prompt Payment Policy Report presented to the Members of the Authority at this June 26, 2019 meeting is adopted and approved as the annual report required by Section 2880 of the Public Authorities Law.

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RESOLVED, that revisions to the "Operating Plan for Investments in New York Under the CO₂ Budget Trading Program and the CO₂ Allowance Auction Program" as presented to the Members for consideration at this meeting, with such non-substantive, editorial changes and supplementary schedules as the President and Chief Executive Officer, in her discretion, may deem necessary or appropriate, are hereby approved;

AND BE IT FURTHER RESOLVED, that the Members direct the President and Chief Executive Officer to develop a revised operating plan incorporating such revisions as soon as reasonably possible.