

# New York State Clean Energy Standard

Results of Renewable Energy Standard and  
Renewable Portfolio Standard Solicitations for  
Long-Term Contracts through December 31, 2018



Final Report | March 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 Clean Energy Standard**

## **Results of Renewable Energy Standard and Renewable Portfolio Standard Solicitations for Long-Term Contracts through December 31, 2018**

*Final Report*

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**New York State Energy Research and Development Authority**

Albany, New York

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# Keywords

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Renewable electricity, clean energy, large-scale renewables, energy programs, procurements.

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# Summary and Background

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This report summarizes procurement activities by the New York State Energy Research and Development Authority (NYSERDA) in implementing the Renewable Energy Standard (RES), a component of the Clean Energy Standard (CES) adopted by the Public Service Commission (Commission).<sup>1</sup> The RES is the successor program to the Renewable Portfolio Standard (RPS) and as the Commission's primary mechanism to achieve the New York State Energy Plan's goal that 50% of the State's electricity requirements are to be served by renewable energy resources by 2030.<sup>2</sup> Given the collective contributions of the RES and RPS to the State's goals, this report includes NYSEDA's ongoing reporting requirements related to projects funded under long-term RPS contracts.

The CES Order, along with additional orders issued in the CES proceeding (collectively, the "Orders"), both established and addressed certain implementation issues regarding the RES. The RES creates a "Tier 1" obligation, wherein load serving entities (LSEs) are required to procure Renewable Energy Credits (RECs) associated with eligible renewable energy resources in increasing quantities toward the State's 2030 goal. The Orders set the annual Tier 1 RES obligations for all LSEs, represented as the percentage of the LSE's load that must be met with RES Tier 1 RECs.<sup>3</sup>

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<sup>1</sup> Case 15-E-0302, Proceeding to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016) (CES Order).

<sup>2</sup> 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, doubling the state's distributed solar goal from 3,000 megawatts to 6,000 megawatts by 2025, and achieving 100% of its electricity from clean resources by 2040. It is anticipated that these proposals will likely lead to additional proceedings at the New York State Public Service Commission, which may amend the requirements currently stated in Orders and described in this document.

<sup>3</sup> Tier 1-eligible generators are new renewable energy facilities that entered commercial operation on or after January 1, 2015 and have been certified as eligible per the terms of the Orders.

The Orders authorize NYSERDA, as central procurement administrator, to award long-term contracts to Tier 1-eligible generators through annual competitive solicitations for the purchase of Tier 1-eligible RECs. These RECs can then be sold to LSEs for use in satisfying their Tier 1 compliance obligations. RECs are issued and exchanged in the form of Tier 1 New York Generation Attribute Tracking System (NYGATS) certificates.<sup>4</sup>

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<sup>4</sup> Renewable Energy Certificates (RECs) represent the environmental attributes, including but not limited to estimated avoided carbon dioxide emissions, of electricity generated by facilities that meet the Tier 1 eligibility criteria established by the Commission in the CES Order.

# 1 RES Tier 1 Solicitations

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Per the Commission’s February 22, 2017 Order,<sup>5</sup> NYSERDA will conduct competitive solicitations, at least annually, for the purchase of Tier 1-eligible RECs from qualifying generation.

## 1.1 Solicitation Results

Solicitation results can be found by visiting NYSERDA’s Clean Energy Standard website.<sup>6</sup>

The projects shown in Table 1 represent active projects awarded under RES solicitations and the project’s current status. Table 2 represents the current status of RES Tier 1 eligible projects awarded under the RPS.

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<sup>5</sup> See Case 15-E-0302, Proceeding to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Approving Phase I Implementation Plan (issued February 22, 2017), and the Final Phase I Implementation Plan filed by NYSERDA on March 24, 2017. Also see Case 15-E-0751 et al, In the Matter of the Value of Distributed Energy Resources, issued on March 9, 2017, which further clarifies the treatment of certain distributed energy resources under the CES and their eligibility to participate in NYSERDA’s long-term procurements for Tier 1-eligible RECs.

<sup>6</sup> [nyserdera.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts](http://nyserdera.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts)

**Table 1. Current Status – RES Awarded Tier 1 Projects**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
RESRFP17-1	Alle-Catt Wind Farm	NY	Wind	Under Development	2021	20	340	339.78	977,474	1,172,968
RESRFP17-1	Baron Winds	NY	Wind	Under Development	2021	20	272	272	748,174	897,808
RESRFP17-1	Blue Stone Solar	NY	Solar	Under Development	2020	20	20	19.99	27,493	32,991
RESRFP17-1	Bluestone Wind	NY	Wind	Under Development	2021	20	122	121.8	392,644	471,172
RESRFP17-1	Branscomb Solar	NY	Solar	Under Development	2021	20	20	19.99	33,271	39,925
RESRFP17-1	Columbia Solar 1	NY	Solar	Under Development	2021	20	60	57	105,606	126,727
RESRFP17-1	Darby Solar	NY	Solar	Under Development	2021	20	20	19.99	36,774	44,128
RESRFP17-1	Daybreak Solar	NY	Solar	Under Development	2021	20	25	25	42,267	50,720
RESRFP17-1	East Point Energy Center	NY	Solar	Under Development	2021	20	50	50	109,631	131,557
RESRFP17-1	Flint Mine Solar	NY	Solar	Under Development	2021	20	100	100	174,412	209,294
RESRFP17-1	Greene County Energy Properties	NY	Solar	Under Development	2021	20	19.9	19.9	26,149	31,378
RESRFP17-1	Grissom Solar	NY	Solar	Under Development	2021	20	20	19.99	33,972	40,766
RESRFP17-1	High River Energy Center	NY	Solar	Under Development	2021	20	90	90	167,141	200,569
RESRFP17-1	Janis Solar	NY	Solar	Under Development	2021	20	20	19.99	35,898	43,077
RESRFP17-1	Java Solar Energy Center	NY	Solar	Under Development	2020	20	1.53	1.53	2,039	2,446



**Table 1 continued**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
RESRFP17-1	Little Pond Solar	NY	Solar	Under Development	2021	20	20	19.99	37,649	45,178
RESRFP17-1	Lyons Falls Mill Redevelopment	NY	Hydroelectric	Under Development	2021	20	3.28	3.28	20,062	24,074
RESRFP17-1	Magruder Solar	NY	Solar	Under Development	2021	20	20	19.99	35,022	42,026
RESRFP17-1	Pattersonville	NY	Solar	Under Development	2019	20	20	19.99	40,503	48,603
RESRFP17-1	Puckett Solar	NY	Solar	Under Development	2020	20	20	19.99	33,271	39,925
RESRFP17-1	Regan Solar	NY	Solar	Under Development	2021	20	20	19.99	35,548	42,657
RESRFP17-1	Rock District Solar	NY	Solar	Under Development	2021	20	20	19.39	32,867	39,440
RESRFP17-1	Sky High Solar	NY	Solar	Under Development	2021	20	20	19.39	35,161	42,193
RESRFP17-1	Tayandenega Solar, LLC	NY	Solar	Under Development	2021	20	20	19.39	35,993	43,191
RESRFP18-1	Bakerstand Solar 1	NY	Solar	Under Development	2021	20	20	19.99	27,703	33,243
RESRFP18-1	ELP Stillwater Solar	NY	Solar	Under Development	2020	20	20	19.99	32,396	38,875
RESRFP18-1	Excelsior Energy Center - Solar + Storage 2	NY	Solar	Under Development	2022	20	280	280	591,615	709,938
RESRFP18-1	Hannacroix Solar Facility	NY	Solar	Under Development	2020	20	4.99	4.99	10,342	12,410
RESRFP18-1	Heritage Wind, LLC	NY	Wind	Under Development	2022	20	147	147	393,100	471,720
RESRFP18-1	High Bridge Wind and Battery	NY	Wind	Under Development	2022	20	99	99	308,737	370,484

**Table 1 continued**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
RESRFP18-1	Horseshoe Solar	NY	Solar	Under Development	2022	20	180	180	368,971	442,765
RESRFP18-1	Manchester Solar	NY	Solar	Under Development	2021	20	20	19.99	40,223	48,267
RESRFP18-1	Mohawk Solar	NY	Solar	Under Development	2020	20	90.5	90.5	204,963	245,955
RESRFP18-1	Morris Ridge Solar	NY	Solar	Under Development	2022	20	170	170	265,227	318,272
RESRFP18-1	North Light Energy Center – Solar	NY	Solar	Under Development	2022	20	80	80	156,629	187,954
RESRFP18-1	Roaring Brook Wind	NY	Wind	Under Development	2020	20	77.7	77.7	249,935	299,922
RESRFP18-1	SED Clay Solar	NY	Solar	Under Development	2020	20	20	19.99	35,022	42,026
RESRFP18-1	SED Dog Corners Solar	NY	Solar	Under Development	2020	20	20	19.99	37,999	45,598
RESRFP18-1	SED Hills Solar	NY	Solar	Under Development	2020	20	20	19.99	37,999	45,598
RESRFP18-1	SED Skyline Solar	NY	Solar	Under Development	2020	20	20	19.99	35,022	42,026
RESRFP18-1	SED Watkins Road Solar I	NY	Solar	Under Development	2020	20	20	19.99	37,999	45,598
RESRFP18-1	Silver Lake Solar Project	NY	Solar	Under Development	2021	20	25	24.99	38,200	45,840
RESRFP18-1	Watkins Glen Solar Energy Center	NY	Solar	Under Development	2022	20	50	50	106,784	128,140
<b>Total</b>							<b>2,707.26</b>	<b>2,702.46</b>	<b>6,197,887</b>	<b>7,437,444</b>

**Table 2. Current Status - RPS Awarded Tier 1 Projects**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
2554	Buffalo BioEnergy	NY	Biogas - ADG	Operational	2017	10	1.24	1.24	4,750	4,750
2985	Arkwright Summit	NY	Wind	Operational	2020	20	78.4	75.58	229,873	229,873
2985	Jericho Rise	NY	Wind	Operational	2019	20	77.7	73.81	206,272	206,272
3084	Ball Hill Wind Farm	NY	Wind	Under Development	2020	20	100	83.18	245,928	245,928
3084	Fulton Unit 2	NY	Hydroelectric	Operational	2018	20	0.45	0.45	3,819	3,819
3084	Morgan Stanley Headquarters	NY	Fuel Cell	Operational	2016	20	0.79	0.75	6,324	6,324
3257	Belfort Unit 3	NY	Hydroelectric	Operational	2016	19	0.36	0.34	1,975	1,975
3257	Eight Point Wind Energy Center	NY	Wind	Under Development	2021	20	101.2	96.14	298,134	298,134
3257	Fulton Unit 1	NY	Hydroelectric	Operational	2018	20	0.87	0.87	6,968	6,968
3257	Glen Park	NY	Hydroelectric	Operational	2016	20	7.18	6.82	32,166	32,166
3257	Hecate Energy Greene County 1	NY	Solar	Under Development	2021	20	49.99	47.49	85,699	85,699
3257	North Division Street Dam Hydroelectric Facility	NY	Hydroelectric	Operational	2018	20	0.58	0.55	1,959	1,959
3257	Number Three Wind Farm	NY	Wind	Under Development	2021	20	105.8	100.51	304,025	304,025
3257	Regen DG Project	NY	Fuel Cell	Operational	2018	20	1.58	1	8,432	8,432
3257	Swinging Bridge	NY	Hydroelectric	Under Development	2019	20	2.18	2.07	4,794	4,794
3257	Tannery Island Hydro	NY	Hydroelectric	Operational	2016	20	0.17	0.16	827	827
<b>Total</b>							<b>528.49</b>	<b>490.96</b>	<b>1,441,945</b>	<b>1,441,945</b>

Collectively through RES and RPS solicitations, a total of more than 3,200 MW through 59 Tier 1-eligible projects are contributing the goals of the CES. Their status and capacity are detailed in Table 3.

**Table 3. Summary of Tier 1 Projects (RES and RPS Solicitations)**

	MW Capacity by Status			Number of Projects by Status		
	MW Operational	MW Under Development	Total MW	Operational	Under Development	Total Projects
Biogas - ADG	1.24	0	1.24	1	0	1
Fuel Cell	2.37	0	2.37	2	0	2
Hydroelectric	9.61	5.46	15.07	6	2	8
Solar	0	1,696.69	1,696.69	0	37	37
Wind	156.10	1,364.28	1,520.38	2	9	11
<b>Total</b>	<b>169.32</b>	<b>3,066.43</b>	<b>3,235.75</b>	<b>11</b>	<b>48</b>	<b>59</b>

## 2 RPS Solicitations

In addition, NYSEDA has existing and previous long-term RPS-funded contracts that are not Tier 1 eligible. The projects are listed in Table 4 and their development status is summarized in Table 5.<sup>7</sup>

**Table 4. Previous RPS Solicitations: Non-Tier 1 Projects**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
916	Bear Creek <sup>b</sup>	PA	Wind	Other	2006	4	-	-	-	-
916	Browns Falls <sup>a</sup>	NY	Hydroelectric	Other	2006	1	-	-	-	-
916	Higley Falls <sup>a</sup>	NY	Hydroelectric	Other	2006	1	-	-	-	-
916	Maple Ridge <sup>c</sup>	NY	Wind	Other	2006	10	-	-	-	-
916	Spier Falls <sup>c</sup>	NY	Hydroelectric	Other	2006	10	-	-	-	-
1037	Allens Falls <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Altona	NY	Wind	Operational	2009	10	102	96.9	179,316	188,282
1037	Bliss <sup>h</sup>	NY	Wind	Other	2008	10	-	-	-	-
1037	Browns Falls <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Chateaugay Wind Farm	NY	Wind	Operational	2009	10	106.5	101.2	204,817	215,058
1037	Clinton Wind <sup>h</sup>	NY	Wind	Other	2008	10	-	-	-	-
1037	Cohocton <sup>d</sup>	NY	Wind	Operational	2009	10	87.5	8.3	21,247	23,372
1037	Colton <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Dutch Hill <sup>d</sup>	NY	Wind	Operational	2009	10	37.5	4.3	8,513	8,513
1037	Eagle <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-

<sup>7</sup> The Delivery Start Date is the date of contractual delivery by Seller to NYSEDA and may differ from the Commercial Operation date of the project. Per the CES Order, Tier 1 eligibility is determined by the Commercial Operation date.

Table 4 continued

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
1037	East Norfolk <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Ellenburg <sup>h</sup>	NY	Wind	Other	2008	10	-	-	-	-
1037	Higley Falls <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Niagara Generating Facility <sup>h</sup>	NY	Biomass	Other	2008	10	-	-	-	-
1037	Norfolk <sup>h</sup>	NY	Hydroelectric	Other	2008	10	-	-	-	-
1037	Norwood	NY	Hydroelectric	Operational	2008	10	0.5	0.5	4,207	4,628
1037	Oswego Falls	NY	Hydroelectric	Operational	2008	10	0.6	0.6	2,688	2,957
1037	Raymondville	NY	Hydroelectric	Operational	2008	10	0.7	0.7	3,291	3,620
1168	AES Greenidge <sup>e</sup>	NY	Biomass	Other	2009	3	-	-	-	-
1168	Cohocton <sup>d</sup>	NY	Wind	Operational	2009	10		26.3	65,700	65,700
1168	Dutch Hill <sup>d</sup>	NY	Wind	Operational	2009	10		11.3	28,200	28,200
1168	Effley	NY	Hydroelectric	Operational	2009	10	0.3	0.3	1,399	1,399
1168	High Falls	QC	Hydroelectric	Operational	2009	10	14.7	14	26,410	26,410
1168	Piercefield	NY	Hydroelectric	Operational	2009	10	0.1	0.1	385	385
1168	Sherman Island	NY	Hydroelectric	Operational	2009	10	4.7	4.5	19,292	19,292
1168	Wethersfield	NY	Wind	Operational	2009	10	126	119.7	314,572	314,572
1681	Hardscrabble	NY	Wind	Operational	2011	10	74	43.7	121,508	121,508
1681	School Street	NY	Hydroelectric	Operational	2011	10	5.2	4.9	21,885	21,885
1681	Stewarts Bridge Hydro (Upgrade)	NY	Hydroelectric	Operational	2011	10	2.9	2.76	11,609	11,609
1851	Albany 1	NY	Biogas - LFG	Operational	2011	10	0.9	0.86	5,625	5,625

**Table 4 continued**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
1851	Hardscrabble Wind Energy Project	NY	Wind	Operational	2011	10	0	26.64	74,141	74,141
1851	High Sheldon	NY	Wind	Operational	2012	10	112.5	106.9	228,200	228,200
1851	Mechanicville	NY	Hydroelectric	Operational	2011	10	4.5	4.28	19,000	19,000
1851	Steel Winds II	NY	Wind	Operational	2012	10	15	14	37,430	37,430
1851	Stuyvesant Falls	NY	Hydroelectric	Operational	2013	10	6	5.7	11,677	11,677
1851	Taylorville Hydro	NY	Hydroelectric	Operational	2011	10	0.1	0.1	684	684
1851	Wappingers Falls	NY	Hydroelectric	Operational	2011	10	0.12	0.11	474	474
2226	Albany 2	NY	Biogas - LFG	Operational	2012	10	3.2	3	22,340	22,340
2226	Black Brook	NY	Hydroelectric	Operational	2011	10	0.64	0.61	1,900	1,900
2226	Chautauqua LFGE	NY	Biogas - LFG	Operational	2011	10	8	2.11	11,209	11,209
2226	DANC	NY	Biogas - LFG	Operational	2011	10	4.8	4	19,178	19,178
2226	Howard	NY	Wind	Operational	2012	10	51.25	46.13	115,184	115,184
2226	Hyland LFGE	NY	Biogas - LFG	Operational	2011	10	4.8	2.2	15,396	15,396
2226	Marble River	NY	Wind	Operational	2012	10	215.25	204.49	581,510	581,510
2226	Modern <sup>9</sup>	NY	Biogas - LFG	Other	2011	10	-	-	-	-
2226	Ontario	NY	Biogas - LFG	Operational	2011	10	6.4	3	17,232	17,232
2226	Orangeville	NY	Wind	Operational	2014	10	92.8	88.16	279,103	279,103
2226	Seneca	NY	Biogas - LFG	Operational	2011	10	12.8	5.85	46,664	46,664
2226	Stewarts Bridge	NY	Hydroelectric	Operational	2013	10	2.6	2.49	10,491	10,491
2389	Black River	NY	Biomass	Operational	2013	10	43.26	41.1	324,045	324,045
2389	Clinton Co.	NY	Biogas - LFG	Operational	2012	10	6.4	1.28	6,275	6,275

**Table 4 continued**

Solicitation Name	Project Name	State	Technology	Project Status	Year of Delivery Start Date	Project Duration (Years)	New Renewable Capacity (MW)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
2389	Community Refuse LFG	PA	Biogas - LFG	Operational	2012	10	6.4	6.08	47,402	47,402
2389	Howard (Expansion)	NY	Wind	Operational	2013	10	4.1	3.9	9,849	9,849
2389	Locust Ridge	PA	Wind	Operational	2012	10	26	24.7	54,093	54,093
2389	Mill Street Dam	NY	Hydroelectric	Operational	2014	10	0.22	0.23	986	986
2554	401 Fieldcrest Dr. Elmsford, NY 10523	NY	Fuel Cell	Operational	2015	10	0.8	0.76	6,325	6,325
2554	ATT Clean Energy Project - Rego Park	NY	Fuel Cell	Operational	2015	10	0.2	0.19	1,686	1,686
2554	Howard	NY	Wind	Operational	2013	10		2.55	6,359	6,359
2554	Marsh Hill	NY	Wind	Operational	2014	10	16.2	15.39	52,526	52,526
2554	Niagara BioEnergy	NY	Biogas - ADG	Operational	2018	10	0.85	0.81	4,750	4,750
2554	Rio	NY	Hydroelectric	Operational	2014	10	0.8	0.76	4,199	4,199
2554	Stop and Shop Clean Energy Project - Mt. Vernon	NY	Fuel Cell	Operational	2015	10	0.26	0.25	2,112	2,112
2554	Zotos International	NY	Wind	Operational	2013	10	3.3	3.14	3,847	3,847
3257	Burt Dam Incremental Hydro	NY	Hydroelectric	Operational	2016	19	0.09	0.08	324	324
<b>Total</b>							<b>1,213.74</b>	<b>1,061.91</b>	<b>3,057,255</b>	<b>3,079,606</b>

*Table notes are on the next page*



**Table 4 continued**

- a Higley and Browns Falls had one-year agreements, thus enabling participation in RFP 1037.
- b Bear Creek windfarm had a four-year contract that expired on January 31, 2010.
- c Maple Ridge and Spier Falls had ten10-year contracts that expired on December 31, 2015.
- d These facilities were awarded contracts for a percentage of output under multiple RFPs. The total new facility capacity is listed once.
- e AES Greenidge had a three-year contract that expired on July 31, 2012.
- f An agreement was awarded as a result of the fifth solicitation for the Marble River Wind Farm was combined with an agreement awarded under the sixth solicitation to reflect an increase in the size of the facility.
- g Modern LFGE had a 10-year contract that was terminated effective January 1, 2016.
- h These facilities had a 10-year contracts which have expired 2018.

**Table 5. Summary of Non-Tier 1 Projects (RPS Solicitations)**

Table 5 reflects only projects with Development Status of *Operational*

	MW Operational	Number of Projects
Biogas - ADG	0.85	1
Biogas - LFG	53.70	9
Biomass	43.26	1
Fuel Cell	1.26	3
Hydroelectric	44.77	18
Wind	1,069.90	19
<b>Total</b>	<b>1,213.74</b>	<b>51</b>

### 3 Project Development Status

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Through RPS or RES solicitations, a total of more than 4,400 MW through 110 projects are under contract and are contributing to overall renewable electric capacity in New York. The associated project’s status and capacity are detailed in Table 6.

**Table 6. Resource Development Status for Active NYSERDA RES and RPS Projects<sup>8</sup>**

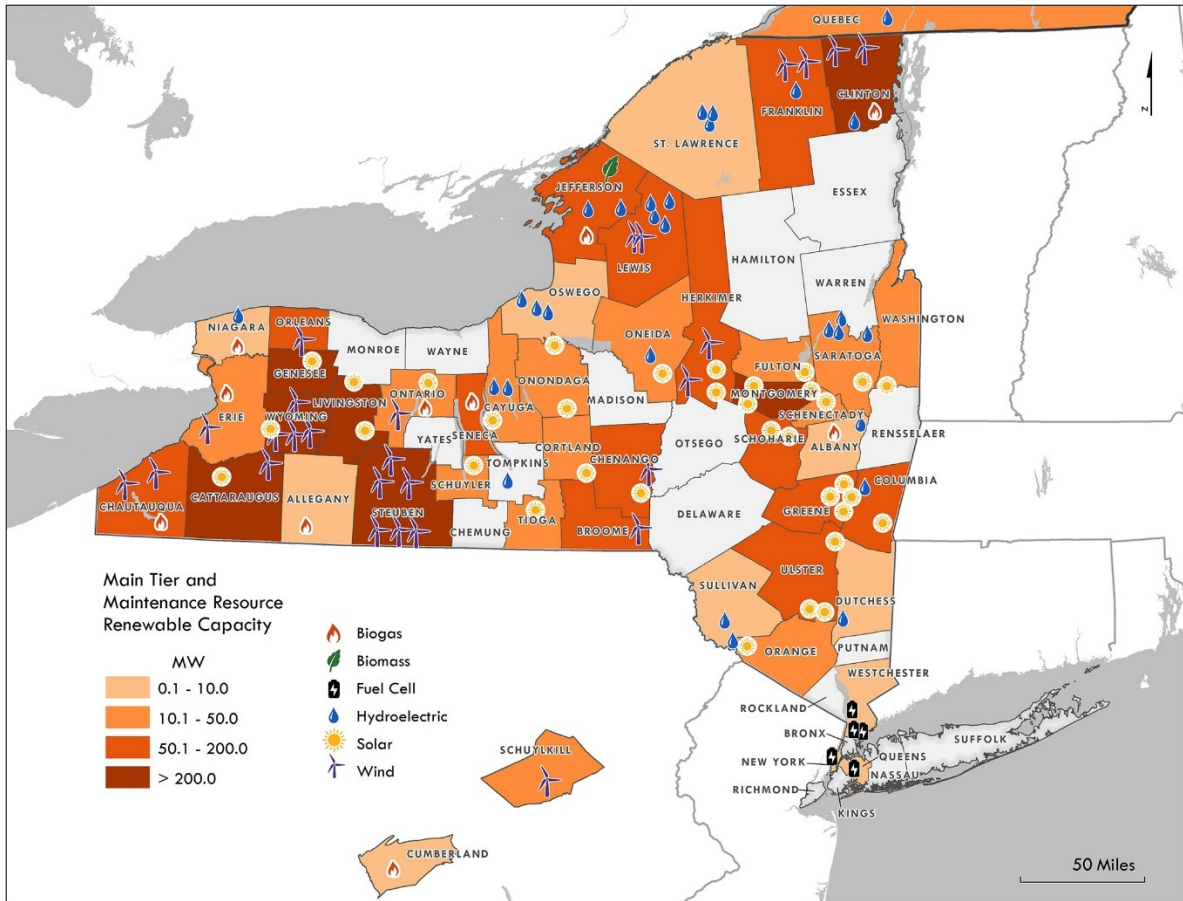
	MW Capacity by Status			Number of Projects by Status		
	MW Operational	MW Under Development	Total MW	Operational	Under Development	Total Projects
Biogas - ADG	2.09	0	2.09	2	0	2
Biogas - LFG	53.70	0	53.70	9	0	9
Biomass	43.26	0	43.26	1	0	1
Fuel Cell	3.63	0	3.63	5	0	5
Hydroelectric	54.38	5.46	59.84	24	2	26
Solar	0	1,696.69	1,696.69	0	37	37
Wind	1,226.00	1,364.28	2,590.28	21	9	30
<b>Total</b>	<b>1,383.06</b>	<b>3,066.42</b>	<b>4,449.49</b>	<b>62</b>	<b>48</b>	<b>110</b>

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<sup>8</sup> This table includes only active contracts.

The location of each facility either under contract or with a pending NYSERDA contract is shown in Figure 1.

**Figure 1. RES and RPS Resources by County**



## 4 Maintenance Resources

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Per the Orders, “Maintenance Resources” are defined as run-of-the-river hydroelectric facilities 10 MW or less, or wind turbine and direct combustion biomass facilities; have been in operation prior to January 1, 2015; and can comply with delivery requirements consistent with those for Tier 1. Additionally, Maintenance Resources must demonstrate financial hardship and show through a formal request to the Commission that, without a maintenance resource contract, the facility will cease commercial operations. The Commission approves funding levels to support designated Maintenance Resources. The status of active Maintenance Resources is detailed in Table 7.

**Table 7. Maintenance Resources**

Solicitation Name	Project Name	State	Project Status	Technology	Year of Delivery Start Date	Project Duration (Years)	Bid Capacity (MW)	Bid Quantity (MWh)	Max Annual Contract Quantity
Maintenance	Azure Mountain	NY	Operational	Maintenance Hydroelectric	2013	10	0.8	2,500	2,500
Maintenance	Finger Lakes	NY	Under Development	Maintenance Hydroelectric	2019	3	.15	625	625
Maintenance	Kayuta Lake Hydro	NY	Operational	Maintenance Hydroelectric	2018	3	.46	1,897	1,897
<b>Total</b>							<b>1.41</b>	<b>5,022</b>	<b>5,022</b>

## 5 Key References and Links

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The Clean Energy Standard Orders, reports, and filings can be found on NYSERDA's website:

- [nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Important-Orders-Reports-and-Filings](https://nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Important-Orders-Reports-and-Filings)

RPS financials and CST progress information are filed separately from this report by NYSERDA.

Information on the Renewable Portfolio Standard, the precursor to the CES, and past Main Tier solicitations can be found on the following NYSERDA websites:

- [nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Portfolio-Standard/RPS-Documents](https://nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Portfolio-Standard/RPS-Documents)
- [nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Portfolio-Standard/Past-Main-Tier-Solicitations](https://nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Portfolio-Standard/Past-Main-Tier-Solicitations)

The Open NY dataset includes information from several NYSERDA-implemented programs, including the Main Tier and Maintenance Resource Program under RPS, and the Tier 1 and Tier 2 Maintenance under the CES and can be found on the following website:

- <https://data.ny.gov/Energy-Environment/Large-scale-Renewable-Projects-Reported-by-NYSERDA/dprp-55ye>



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