



Case 15-E-0302 Clean Energy Standard Final Phase 1 Implementation Plan

Filed by

Staff of the New York State Energy Research and Development Authority

and

Staff of the New York State Department of Public Service

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Contents

1.	Intro	oduction	1
2.	Eligi	ibility of RES Resources	1
2.	1.	Tier 1 Eligibility	2
	a.	Resource Eligibility	2
	i.	Distributed Energy Resources	2
	b.	Vintage	3
	i.	Upgrades	3
	ii.	. Return to Service	4
	iii	i. Repowering	5
	iv	v. Relocated Facilities	5
2.	2.	Tier 2 Maintenance Resource Eligibility	5
	a.	Resource Eligibility, Capacity and Vintage	5
	b.	Demonstrating Eligibility	5
	c.	Procedures to Obtain Maintenance Resource Contracts	6
2.	3.	Geographic Eligibility and Delivery Requirements	7
2.	3.	Eligibility Rule Changes	8
	a.	Commission-Initiated Process	8
	b.	Stakeholder-Initiated Process	8
3.	Cert	tification of Eligible Tier 1 RES Resources	9
3.	1.	Operational Certification	9
	a.	Demonstration of Eligibility	10
	b.	Demonstration of Commercial Operation	10
3.	2.	Provisional Certification	11
3.	3.	Certification Approval Process	11
3.	4.	Verification	12
3.	5.	Suspension & Revocation	13
4.	Tier	1 RES Long Term Procurement	13
4.	1.	Procurement Structure and Approach	13
	a.	2017 Procurement Timetable	14
	b.	NYSERDA REC Purchases	14

i.		Contract Duration	14
ii	i.	Expected Commercial Operation Date	15
ii	ii.	Payment	15
iv	v.	Bid Price	16
v	<i>'</i> .	Maximum Acceptable Bid Price Evaluation Metric	16
4.2.	F	RES Procurement Design	16
a.	F	Roles	16
b.	E	Bid Facilities	16
4.3.	S	Step One	17
a.	F	Resource Type, Location and Vintage	17
b.	٦	Threshold Eligibility Criteria	17
i.		Interconnection	17
ii	i.	Permitting	19
ii	ii.	Site Control	20
iv	v.	Additional Requirements	21
v	<i>'</i> .	Bid Deposit	22
4.4.	S	Step Two: Bid Evaluation	23
a.	ſ	Method	23
b.	I	Initial Evaluation - Generation Facility Evaluation Criteria	23
i.		Price: Ranking and Weighting	23
ii	i.	Economic Benefits: Ranking, Weighting, and Verification	23
ii	ii.	Weighting	24
iv	v.	Expected Economic Benefits Evaluation	24
v	<i>'</i> .	Post-Award Demonstration of Actual Economic Benefits	24
v	۰i.	Project Viability: Ranking and Weighting	25
v	ii.	Operational Flexibility and Peak Coincidence: Ranking and Weighting	26
с.	5	Summary - Initial Evaluation - Generation Facility Evaluation Criteria	26
d.	ļ	Application of Portfolio Risk Assessment	26
4.5.	ļ	Approval of Procurement Results	27
4.6.	(Conditions to be Met Prior to Contracting	27
a.	(Contract Security Requirements:	27

4	.7.	Post-2017 Procurements	27
	a.	Pricing	28
	b.	Threshold Eligibility Requirements	28
	c.	Evaluation Criteria	29
5.	LSE	Demonstration of Compliance	29
5	.1.	Compliance Obligation	29
5	.2.	Compliance Reporting	30
	a.	NYGATS Settlement	30
	i.	Load	30
	b.	Trading and Banking of Compliance Certificates	31
	с.	NYGATS RES Compliance Report	31
	i.	ACP Payments	32
	d.	NYGATS ZEC Compliance Report	32
5	.3.	LSE Compliance Filing	33
	a.	Compliance Filing Requirements	33
	b.	LSE Compliance Filing Schedule	33
	c.	NYSERDA Compliance Filing Review	33
6.	Stat	e Reporting Requirements	34
6	.1.	CES Compliance Reporting	34
6	.2.	RES Procurement Performance	35
6	.3.	RES Program Impact and Evaluation	35

1. Introduction

On August 1, 2016, the Public Service Commission issued an Order Adopting a Clean Energy Standard (CES Order).¹ The Clean Energy Standard (CES) is consistent with the State Energy goal that 50% of the electricity consumed by New Yorkers 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 divided into a Renewable Energy Standard (RES) and a Zero-Emissions Credit (ZEC) requirement. The RES consists of an obligation on every load serving entity (LSE) to serve their retail customers by procuring new renewable resources, evidenced by the procurement of qualifying Tier 1 Renewable Energy Credits (RECs) or by making Alternative Compliance Payments (ACPs). The RES also includes a Tier 2 maintenance program to provide support to those "at risk" eligible facilities that have demonstrated that, if not for the support, they are economically inviable. The ZEC requirement consists of an obligation that LSEs purchase ZECs from NYSERDA in amounts proportionate to load served.

The CES Order indicated that a series of Commission actions in successive orders will be necessary to fully implement the CES. As part of the implementation phase, in order to continue implementation of the requirements of the CES Order for its launch in 2017, on October 31, 2016, Department of Public Service Staff (Staff) and the New York State Energy Research and Development Authority (NYSERDA) submitted a Clean Energy Standard Phase 1 Implementation Plan Proposal including details and processes with regard to RES eligibility, certification, long term procurement for RECs, LSE demonstration of compliance and other reporting requirements. Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on November 16, 2016 [SAPA No. 15-E-0302SP25]. The time for submission of comments pursuant to the Notice expired on January 3, 2017. However, in response to multiple requests, the deadline for submission of comments was extended to January 10, 2017 by Notice of the Secretary issued on December 29, 2016.

The Commission approved the Phase 1 Implementation Plan Proposal by order on February 22, 2017² with certain revisions as described in the body of the Order, and directed the filing of a Final Phase 1 Implementation Plan within 30 days. This document incorporates the changes required by the February 22 Order.

2. Eligibility of RES Resources

NYSERDA will be responsible for implementing many aspects of Tier 1, including eligibility determinations, and the maintenance of a CES web interface with all information necessary for RES resources, obligated LSEs, and other market participants to understand what is expected and required of them. Participating RES facilities will be responsible for understanding RES eligibility criteria and compliance requirements, and for maintaining RES certifications in good standing.

¹ Case 15-E-0302, Proceeding to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting A Clean Energy Standard, issued and effective August 1, 2016.

² Id., Order Approving Phase 1 Implementation Plan, issued and effective February 22, 2017.

2.1. Tier 1 Eligibility

a. Resource Eligibility

Per the CES Order, resources eligible to provide Tier 1 LSE compliance will mirror the eligibility rules currently used for the Main Tier of the Renewable Portfolio Standard (RPS), with the exception that the former 30 MW limit on low-impact run-of-river hydroelectric facilities has been eliminated. The eligible resource categories will include Biogas, Biomass, Liquid Biofuels, Fuel Cells, Hydroelectric, Solar, Tidal/Ocean, and Wind. More detailed requirements as to eligibility of these resources were contained in Appendix A of the CES Order.

i. Distributed Energy Resources

The treatment of the environmental attributes generated by distributed energy resources (DER) under Tier 1 of the RES was determined by a Public Service Commission Order (VDER Order) issued on March 9, 2017³.

In accordance with the VDER Order:

- Behind-the-meter projects will not be eligible to create NYGATS Tier 1 Certificates or to bid in RES Tier 1 solicitations conducted by NYSERDA unless the project: (a) has completed Step 8 (for projects >50kW) or Step 4 (for projects <=50kW) of the Standardized Interconnection Requirements by March 9, 2017, and (b) provides written notice of such completion to the interconnecting utility, by March 17, 2017, and (c) are actually enrolled in Net Energy Metering (NEM) under the pre-existing NEM tariffs, and (d) have not received incentive funding from any state or local program, and (e) the project meets the RES resource eligibility and vintage requirements. Projects that meet these requirements will be eligible to bid in RES Tier 1 solicitations.
- 2. Projects that meet requirements in 1(a) through 1(e) and are successful in securing an award through a RES solicitation by NYSERDA will receive Tier 1 NYGATS Certificates for performance under the RES Agreement with NYSERDA. All other projects will be eligible to receive non-tradable, non-Tier 1 eligible Certificates only.
- 3. DER projects that enroll in Value of Distributed Energy Resources (VDER) Phase One NEM are ineligible to bid in RES Tier 1 solicitations conducted by NYSERDA. Under VDER Phase 1 NEM, NYGATS certificates associated with generation from community distributed generation (CDG) projects are granted by default to the interconnecting LSE unless the customers jointly elect to retain the RECs from the project. For CDG projects that fall into this default scenario, the interconnecting LSE must apply for Tier 1 certification and if deemed eligible the project will create Tier 1 RECs that can only be used to satisfy the utility's RES Tier 1 compliance requirements. Projects that elect to retain the NYGATS Certificates will be eligible to receive non-tradable, non-Tier 1 eligible Certificates only.
- 4. DER projects that enroll in VDER Phase 1 Value Stack compensation are ineligible to bid in RES Tier 1 solicitations conducted by NYSERDA. Under the VDER Phase 1 Value Stack, the Certificates from all projects are granted by default to the interconnecting LSE unless the customer elects to retain the NYGATS Certificates from the project. For projects that fall into this default scenario, the interconnecting LSE must apply for Tier 1 certification and if deemed eligible the project will

³³ Case 15-E-0082, Policies, Requirements and Conditions For Implementing a Community Net Metering Program, issued and effective March 9, 2017, pp. 57-71 and Appendix B.

create Tier 1 Certificates that can only be used to satisfy the utility's RES Tier 1 compliance requirements. Projects that elect to retain the Certificates will be eligible to receive non-tradable, non-Tier 1 eligible Certificates only.

To track progress towards statewide RES goals, generation from DER must be measured and reported for use by the New York Generation Attribute Tracking System (NYGATS). Currently, distribution utility companies report on installed capacity of DER in their service territory as required under the Interconnection Inventory section of the New York State Standardized Interconnection Requirements (SIR).⁴ Reporting under the RES program will use the installed capacity, as reported to the Department of Public Service through the SIR Inventory, to create an estimate of generation from DER using technology-specific capacity factors. The generation associated with certificate retirements resulting from DER system owner activity in NYGATS, as permitted under the VDER Order, will be subtracted from this generation estimate. Since the present metering construct for most DER installations in New York State does not create a record of actual generation from the system, this method of estimating generation provides a reasonable approximation for reporting purposes. In addition, the EDC's must report monthly generation from load modifying facilities on energy and capacity tariffs in their territory to NYGATS for NYGATS tracking and settlement (see Compliance Reporting, below).

b. Vintage

New generators that comply with the technologies listed in Appendix A of the CES Order will be eligible for Tier 1 of the RES program if the first date of commercial operation of the generation facility occurs on or after January 1, 2015 (the "Threshold Eligibility Date" or "TED"). Notwithstanding the TED, all or a portion of the energy production from eligible generation sources with first date of commercial operation prior to January 1, 2015 ("Vintage Generation Facility" or "VGF") will be eligible under the following conditions.

i. Upgrades

To be qualified as an upgraded generation facility, a VGF must demonstrate to NYSERDA that a material capital investment in equipment or facilities has or will be been made to the generation facility on or after January 1, 2015, other than expenditures for routine operations, maintenance and/or repair. Further, the generation facility will need to demonstrate that such investment <u>directly</u> results in one of the following conditions:

- A material increase in the efficiency of its generation process, resulting in an increase in annual energy production of at least five percent (5%) under normal operating conditions and normal resource availability, relative to the weather-normalized annual energy production prior to the upgrade; or
- 2) An increase to generator's nameplate capacity of at least ten percent (10%) also resulting in a minimum five percent (5%) increase in annual energy production under normal operating conditions and normal resource availability, relative to the weather-normalized annual energy production prior to the upgrade.

⁴New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators 5 MW or Less Connected in Parallel with Utility Distribution Systems http://www3.dps.ny.gov/W/PSCWeb.nsf/All/DCF68EFCA391AD6085257687006F396B?OpenDocument

15-E-0302 CES Final Phase 1 Implementation Plan

This provision is not intended to allow for generation from any of the following circumstances to qualify: (i) an unusually high resource period (i.e., a high hydro year); (ii) increased output resulting from a change in generator economics (i.e., an increase on the dispatch of a biomass plant); or (iii) increased output because of increased expenditures on operations or maintenance resulting solely in increased availability. Consistent with the Main Tier of the Renewable Portfolio Standard, the appropriate approach to determining the eligible generation from an upgraded facility differs for intermittent nonfuel generation facilities, and for non-intermittent fuel-based generation facilities.

Non-Intermittent (fuel-based) facilities: The incremental generation from an upgraded nonintermittent VGF will be considered eligible under Tier 1. Only the *incremental output over the historic generation baseline* of an upgraded non-intermittent VGF will be eligible to meet the Tier 1 RES LSE obligation. The historic generation baseline of such an upgraded generation facility will be measured as the average annual electrical production from the generation facility in MWhs, for the three (3) calendar years prior to the TED, 2012 to 2014, or during the first 36 months after the commercial operation date if that date is after January 1, 2012.

Intermittent (non-fuel based) facilities: For intermittent generation, eligible quantities will be calculated using a percentage basis,⁵ with the historical baseline of average annual production based on the ten (10) years prior to the RES Tier1 TED. The percentage deemed eligible, representing the increase in annual energy production under normal operating conditions and normal resource availability, will be applied to the total production in any period to derive the RECs produced deemed RES Tier 1 eligible in that period.⁶ For an upgraded facility with less than ten years of operating history prior to the TED, the entire pre-upgrade operating history and other relevant data will be used to derive a percentage increase in annual production under weather-normalized resource availability conditions. Incremental production that is deemed eligible for Tier 1 RECs need not wait until an annual period has passed to be measured against the historic production for owners to begin receiving Tier 1 REC payments.

A VGF may file a request to be certified as an upgraded generation unit following standard certification filing requirements, supplemented by information specifying and supporting the historic generation baseline, describing the investment, and including an independent engineer's report (and if applicable, independent meteorologist report) describing and certifying the expected resultant increase in production over the Historic Generation Baseline and if applicable, increased capacity.

ii. Return to Service

The entire output of a generating facility that does not meet the TED requirement, including the vintage requirement, can qualify as a Return to Service generation unit and be eligible for Tier 1 if the generation facility can demonstrate to NYSERDA that it has not been in commercial operation for <u>at</u>

⁵ Described in the Main Tier RPS Provisional Certification Exhibit A Eligibility and Certification Guidance.

⁶ For example, if an upgraded hydroelectric facility, based on an independent professional engineer's report, would produce ten percent (10%) more energy per unit of water flow, then ten percent (10%) of the RECs produced in any period would be deemed RES Tier 1 eligible. The report would document (i) the historical baseline of average annual production during the ten years prior to the TED (ii) the post-upgrade expected average annual production resulting from the upgrade; and (iii) the incremental production, expressed as a percentage, of the expected average annual production due specifically to the completed or proposed upgrades/re-powering investments.

15-E-0302 CES Final Phase 1 Implementation Plan

<u>least</u> 48 consecutive months prior to the return to service date upon submission of the certification application.

iii. Repowering

Repowered VGFs will not be RES Tier 1 eligible.⁷

iv. Relocated Facilities

A generation facility will be considered eligible for Tier 1 if it can demonstrate that (1) its Prime Mover (per Table 1, below) was used on or before the TED to generate electrical energy outside of both the New York Independent System Operator (NYISO) Control Area and Control Areas adjacent thereto, (2) its Prime Mover was or will be relocated into one of said Control Areas after the TED, and (3) that it meets all other eligibility requirements.

Table 1 – Prime Mover Definition

Energy Source	Definition of Prime Mover for Energy Source	
Landfill Gas	The entire internal combustion engine or combustion turbine.	
Biomass	The entire boiler.	
Wind	The entire wind turbine, including the generator, gearbox (if any), nacelle, rotor and blades.	
Hydroelectric	The entire turbine and structures supporting the turbine, not necessarily including the building housing the turbine.	
Solar PV	The modules and inverters.	
Digester gas	The entire digester unit and internal combustion engine or combustion turbine as applicable.	

2.2. Tier 2 Maintenance Resource Eligibility

a. Resource Eligibility, Capacity and Vintage

The intent of the RES's Tier 2 Maintenance Resource is to provide support to those "at risk" eligible facilities that have demonstrated that they are economically unviable without such support. Tier 2 Maintenance Resource eligibility will be applicable only to currently operating run-of-river hydroelectric facilities of 5 MWs or less, wind turbines, and direct combustion biomass facilities that comply with eligible fuel source requirements for Tier 1 eligibility. Facilities must have been in commercial operation prior to January 1, 2003 and the output must have been originally included in New York's baseline of renewable resources as of that date.

b. Demonstrating Eligibility

To demonstrate that a facility's continued operations are sufficiently at risk to merit a Tier 2 Maintenance Resource Contract, the Deputy Director of the Office of Clean Energy (OCE Deputy Director) shall examine and consider the following information, as described in Appendix D of the CES Order.

⁷ Case 15-E-0302, <u>supra</u>, Order Approving Phase 1 Implementation Plan (issued February 22, 2017), p. 14.

- An examination of relevant portions of the books and records of the facility (including a documented after-tax cash flow forecast) and, to the extent appropriate, of the generation facility owner/operator and any affiliates;
- The basis for and reasonableness of expected operating and capital costs. This evaluation may include, among other things, a comparison to prior years' costs and a comparison to costs of like generation;
- 3) The existence of any other cash sources available to the generation facility, such as: (1) tax benefits, (2) subsidies, (3) contracts, and (4) other sources, including restructuring financing;
- 4) Whether market rules are increasing the costs of the generation facility and, if so, whether any steps can be taken to reduce such costs;
- 5) Whether the generation facility's real property tax assessment is consistent with the assessments imposed in similarly situated facilities elsewhere, and if not, what action has been taken to address such assessment;
- 6) Whether the generation facility is required to operate as part of a package of assets that is financially viable as a whole;
- 7) Whether the generation facility generates enough revenue, based on expected output, to cover its operating costs;
- 8) Whether the generation facility generates enough revenue to make necessary capital improvements;
- 9) Whether the generation facility generates enough revenue to cover its fixed costs, including:
 (1) debt service, (2) property taxes, (3) security costs, and (4) other costs; and
- 10) Whether the generation facility has attempted to make use of other renewables programs available to it, such as voluntary green markets.

c. Procedures to Obtain Maintenance Resource Contracts

- 1) Any entity seeking Tier 2 maintenance resource eligibility for an RES facility must submit a request to the OCE Deputy Director. The request may be submitted at any time through the duration of the RES Program.
- 2) The request must include the entity's most recent three years' income statements, balance sheets, cash flow statements, and income tax returns related to the facility.
- 3) The request must also identify the type of facility; location; date of commercial operation; list of affiliates; list of contracts; and description of financing arrangements.
- 4) The OCE Deputy Director will review the information within 30 days for compliance with the filing requirements and will notify the applicant of any deficiencies in the filing and how to remedy those deficiencies.
- 5) Once the deficiencies are satisfied, the OCE Deputy Director will issue a Notice of Proposed Rulemaking concerning the request to be published in the State Register pursuant to the requirements of the State Administrative Procedure Act (SAPA).
- 6) After receiving all necessary information to complete the review, the OCE Deputy Director will make a recommendation to the Commission regarding the facility's eligibility for maintenance resource status, taking into consideration each facility's circumstances and the amount of the assistance required. If eligibility is recommended, the recommendation will

include a proposed payment award duration and amount at a level necessary to ensure preservation of the at-risk renewable energy attributes and/or other measures that might be taken and proposed contract terms.

7) If the Commission approves a Maintenance contract, it will certify the terms to the NYSERDA for administration of the contract and will also authorize a method of funding.

2.3. Geographic Eligibility and Delivery Requirements

NYGATS certificates associated with the production from an otherwise Tier 1 eligible RES resource may be used to satisfy Tier 1 RES obligations if the resource is (i) physically located within the jurisdiction of the NYISO or a control area adjacent to the NYISO and (ii) the associated energy is consumed in New York pursuant to the RES delivery requirement. The deliverability requirement best ensures that the resource can provide supply to New York consumers and impact emissions associated with energy consumption in New York State.

To be eligible under Tier 1, the eligible resource must be one that can and does contractually supply energy into the New York market. The electricity associated with the NYGATS certificates used for compliance from Tier 1 RES resources located within New York must either be (i) delivered into a market administered by the NYISO for end-use in New York State, (ii) delivered through a wholesale meter under the control of a utility, public authority or municipal electric company such that it can be measured, and such that consumption within New York State can be tracked and verified by such entity or by the NYISO; or (iii) delivered through a Renewable Energy Resource Dedicated Generation Meter, approved by and subject to independent verification by NYSERDA, to a customer in New York State, should it be deemed eligible.

Generation facilities in control areas adjacent to the NYISO that meet the eligibility requirement for Tier 1 may apply for certification. In order for certified facilities in adjacent control areas to create certificates eligible for Tier 1 compliance, the electricity associated with these certificates must be scheduled, transmitted, delivered to and settled in the NYISO energy market in each hour, and be accompanied with documentation of a contract path between the source of the generation in the control area of origin to the delivery point in New York that, among other things, includes provision of transmission or transmission rights for delivering the generation via the NYISO.

Such electricity must meet all requirements of the NYGATS pertaining to creating certificates associated with energy imports, as they may be altered from time to time. Imported certificates for RES Tier 1 compliance must comply with the NYGATS Operating Rules for Unit-Specific Imports of Energy and Attributes under the Energy Scheduled and Delivered methodology. In order for the certificates from non-NYS Tier 1 certified facilities to be eligible, a Unit-Specific Import of energy must first be scheduled and delivered into the New York Control Area through energy transactions placed through the NYISO.

NYGATS verifies the path of electricity flow using components of the NYISO schedule such as the North American Electric Reliability Corporation (NERC) tag fields Sending and Receiving Control Areas (CA) and Purchasing/Selling Entity (PSE) Name and Number. NYGATS also requires an attestation from the importer that the information contained in the NYISO schedule is accurate and that the electricity associated with the import is being delivered solely from the selected resource.

Under the Energy Scheduled and Delivered process, NYGATS requires that the importer report hourly generation data for the selected resource to demonstrate production of the scheduled number of

15-E-0302 CES Final Phase 1 Implementation Plan

imported MWhs. The amount of Unit-Specific Import Certificates that will be created will be the lesser of the hourly energy schedule of the import, or the hourly meter reading of the selected resource. Additionally, before NYGATS will create certificates for imported Unit-Specific generation, the certificates associated with this generation in the host control area's compatible certificate tracking system must be marked as exported and retired.

The New England Power Pool (NEPOOL) Generation Information System and the PJM Generation Attribute Tracking System are compatible tracking systems in regards to import requirements. Additionally, certificates issued for imported energy from other adjacent control areas will be deemed eligible if they meet the requirements for external generators that are not registered with a compatible tracking system as defined in the NYGATS Operating Rules.⁸ The NYGATS Certificate designates the system of origin and NYGATS maintains a record of the serial number that was assigned in the exporting system.

Further, the imported energy and creation of and title to the associated certificates must be sufficiently verifiable for purposes of New York's Environmental Disclosure Program.

Additionally, certificate retirement in NYGATS is a requirement for renewable electricity exports from NYGATS. Therefore, any certificates that would otherwise be eligible for Tier 1, that are exported into an adjacent tracking system will be marked as exported in NYGATS and therefore will be no longer be eligible towards Tier 1 compliance.

2.3. Eligibility Rule Changes

A public process will be available for the consideration of amendments to the list of eligible RES Resources, vintage, geographic eligibility or delivery requirements.

a. Commission-Initiated Process

The Commission, on its own motion or upon request from NYSERDA and/or Staff, may initiate a notice and comment process to consider the eligibility of an additional RES resource, the modification or removal of a then-eligible RES resource type or vintage, or modifications to the geographic eligibility or delivery requirements.

b. Stakeholder-Initiated Process

Interested parties may also request the inclusion of a new RES resource as eligible for the RES program or a modification of eligibility requirements for a then-eligible RES resource. The process to make these eligibility determinations will involve a petition being submitted to the Commission in compliance with the Commission's filing requirements, which include service on (i) all parties listed on the Commission's official service list for the CES proceeding, and (ii) the list of all RES-obligated LSEs maintained by the Commission. The Commission's Secretary will have the discretion to extend the comment period that will be provided in accordance with the State Administrative Procedure Act (SAPA), offer an opportunity for reply comments, and/or to schedule a technical conference for the parties to discuss the petition.

The economic interests of the petitioner alone are insufficient grounds for commencing a proceeding in response to an eligibility change petition. Any such petition must provide a rationale for the proposed change as meeting or consistent with one or more of the policy objectives delineated in the CES Order

⁸ https://www.nyserda.ny.gov/All-Programs/Programs/NYGATS/Registration-Documents

as well as criteria listed below. The Commission may, at its discretion, determine not to initiate a proceeding resulting from such a petition.

The criteria for evaluating whether an additional or modified resource should be eligible to meet the RES obligation will consist of:

- 1) the extent to which the resource will result in new and incremental renewable energy;
- 2) the origin and composition of the generation fuel (if applicable);
- 3) the nature of the process transforming that fuel into electricity;
- 4) the totality of the environmental and other impacts of the generation process, such as air emissions and waste products;
- 5) the comparability of market access and impact on changing the mix of generation resources consumed in New York;
- 6) the degree of development of the resource and commercial maturity of the technology;
- 7) the potential for deleterious impact to uncontracted Tier 1 RES-eligible resources of the proposed modification on REC prices; and
- 8) the probable cost impact to ratepayers of providing RES support for that resource.

After the opportunity for comments on the notice expires, the Commission in consultation with NYSERDA and Staff will decide on the petition and issue an Order that, if applicable, will modify the eligibility requirements outlined here. NYSERDA will update the RES web interface and the RES eligibility rules following the issuance of a resulting Order to reflect such changes.

3. Certification of Eligible Tier 1 RES Resources

Certification is a prerequisite to generation facility participation in the RES program as a Tier 1 eligible resource. NYSERDA performs all services related to the development, review, approval and ongoing validation of RES certification materials. The process will seek to maintain simplicity where possible, and will be robust where necessary to ensure ongoing compliance with RES requirements. In modifying the current RPS Main Tier certification process to support the RES program, successful models and best practices from other states with LSE obligations have been and will be considered, and measures which may prevent a streamlined implementation will be avoided.

The certification application, review and verification processes must be transparent and efficient. Certification applications will be accepted for generation facilities at any time after they become operational (Operational Certification), or before (Provisional Certification) as described below. Facilities must be either Operationally or Provisionally certified to participate in a NYSERDA RES Tier 1 Request for Proposals and to be considered for a contract award thereunder.

3.1. Operational Certification

NYSERDA has developed a streamlined RES certification process modeled on the RPS Main Tier certification process but adapted to be available on a continuous basis.⁹ NYSERDA has made available on the CES web interface a Certification Application, which will result in issuance by NYSERDA of a Statement of Qualification (SoQ) of RES program Tier 1 eligibility, indicating whether the facility is

⁹ For more information: <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-</u> <u>Generators-and-Developers/RES-Tier-One-Eligibility</u>

15-E-0302 CES Final Phase 1 Implementation Plan

deemed to be Tier 1 eligible. The application will be used by all RES facilities seeking program eligibility, although some fields may not apply to all technologies. Facilities previously certified and delivering under the Main Tier Renewable Portfolio Standard need not re-apply for certification and will automatically receive a SoQ from NYSERDA to be eligible for the RES, although such facilities will not be eligible for Tier 1 RES eligibility if they commenced operation prior to January 1, 2015 or satisfy the VGF requirements.

Facilities located in adjacent control areas will also be required to complete the application process, and will be subject to additional ongoing requirements to demonstrate the delivery of energy and RECs into New York to have their NYGATS certificates deemed Tier 1 RES-eligible.

The Certification Application requires each facility to submit materials sufficient to demonstrate its fulfillment of all program eligibility requirements and achievement of commercial operation, as further described below. Generation facilities must only submit the Operational Certification Application after the facility becomes commercially operational and the facility is registered in NYGATS. To the extent possible, information stored in the NYGATS registry has been used to limit duplicative data requirements.

a. Demonstration of Eligibility

Each facility must submit materials sufficient to demonstrate its fulfillment of all program eligibility requirements. Such information will include:

- 1) Contact information;
- 2) Unit name and NYISO/NYGATS identification numbers;
- 3) Nameplate capacity;
- 4) Fuel type;
- 5) First date of commercial operation;
- 6) Control area;
- 7) Street address and navigational coordinates;
- 8) Whether the facility is applying as part of an aggregation;
- 9) Supplemental details that may be required to verify eligibility; and
- 10) If a facility is seeking certification as a VGF, the additional information required of such facilities.

b. Demonstration of Commercial Operation

Each facility must submit materials sufficient to demonstrate that it is has been constructed and achieved commercial operation. Such information will include:

- 1) Formal letter declaring the date Commercial Operation has been achieved;
- 2) A third-party engineering or vendor commissioning report verifying the facility is fully commissioned and operating;
- Data and information provided to NYSERDA from the NYISO or local utility company verifying the facility is available and capable of producing electricity, or from an internetenabled electric meter for DER generation;

- 4) For DER eligible under the provisions of the VDER Order a copy of the interconnection agreement between the customer and interconnecting utility which demonstrates the information necessary to verify eligibility;
- 5) For fuel-based facilities such as those burning biomass, the applicant must provide procedures on fuel measurements and maintain detailed recordkeeping on the use of both eligible and ineligible fuels and the energy produced by each fuel category; and
- 6) Any other supplemental information that may be necessary to verify that the facility is operating and consistent with the conditions under which Provisional Certification was granted, if applicable.

Applicants using a biomass fuel must also meet all RES feedstock and verification requirements.

The application process and all necessary instructions have been posted on the CES web interface, and applications can be submitted electronically through the interface. The application process will result in an electronic form, signed by an authorized agent of the prospective participant, and supporting documentation, which is electronically transferred to NYSERDA. At NYSERDA's discretion, selected application materials may be submitted by means other than the website interface.

3.2. Provisional Certification

Provisional Certification affirms that a generation facility that has not commenced commercial operation can, based on information known at the time of application, meet the RES Tier 1 eligibility criteria. Generation facilities may seek Provisional Certification at their option at any time.

NYSERDA has developed a RES Provisional Certification process modeled on the RPS Main Tier certification process but adapted to be available on a continuous and streamlined basis. NYSERDA has made available on the CES web interface a Provisional Certification application, which will result in issuance by NYSERDA of an electronic approval letter.

For the Provisional Certification application process, all necessary requirements of the Certification Application process above will be followed, except for the "Demonstration of Commercial Operation" section.

The Provisional Certification process will also specify ongoing reporting requirements, which will vary by technology and for out-of-state generators, energy delivery requirements, discussed in the Verification section below.

Customer-Sited facilities may be aggregated for Provisional Certification if they are of the same technology and tier and first reach commercial operation during the same calendar year and are all located in New York State. The aggregate application must be approved by NYSERDA, subject to the same process as all other facilities.

3.3. Certification Approval Process

The application and approval process will be continuous; facilities seeking Operational Certification and Provisional Certification will be allowed to submit their applications to NYSERDA at any time. NYSERDA's review process and the grant or denial of SoQ's will also occur on a rolling basis.

NYSERDA will grant a SoQ or deny Certification, if applicable, within 30 days of the date the Certification Application is determined to be complete. For generation facilities seeking CES Provisional Certification first, NYSERDA will notify the Generator via e-mail whether the Provisional Certification was granted or denied, within 30 days of the date the Provisional Application is determined to be complete. The facilities granted Provisional Certification will then complete the "Demonstration of Commercial Operation" portion of the Certification Application along with any additional information to confirm that the facility was constructed as Provisionally Certified once commercial operation is achieved.

Facilities for which an Operational Certification Application is approved by NYSERDA will be issued a SoQ, which will include a unique certification number for each facility and specify the Tier(s) for which facility has been certified, if applicable. The SoQ will include all information required to identify such facility as qualified for the RES Program in NYGATS. The SoQ will state that NYSERDA will remain entitled, for the duration of certification, to seek such information from the applicant and to perform such investigations as may be required to allow confirmation that the facility continues to operate in accordance with their Certification. A SoQ is only final when signed by NYSERDA's authorized representative. A signed SoQ will be provided to the applicant's designated contact person, and all necessary info will be sent to the NYGATS administrator. Once a SoQ has been issued, NYGATS certificates minted after the SoQ date will be RES Tier 1-eligible, assuming the associated delivery requirements are met as described in the Eligibility section. For facilities granted an SoQ in 2017, if the SOQ is dated on or before May 31, 2017, the NYGATS certificates minted from January 1, 2017 to the SoQ date will be retroactively made RES Tier 1 eligible, assuming the eligible portion of the facility commenced operation on or before January 1, 2017.

NYSERDA will maintain a RES Certified Projects Report listing all Approved Certification Applications to date. This list will include the facility name and location (city & state), contact information, nameplate capacity, capacity submitted for Certification, resource type, the date on which the application was approved, and the date on which RES-eligible RECs are first produced. Additional information may also be recorded for VGF facilities under the upgrade category related to the portion of a facility's generation deemed eligible based on the historical baseline.

If Certification is denied, then the applicant will be advised of the basis for the denial and may reapply after the identified problems are corrected.

3.4. Verification

For projects seeking Provisional Certification, any information submitted during the application process is subject to verification once the project is complete. Upon commercial operation, a project will submit its actual installed capacity and commercial operation data for inclusion in the RES SoQ Application and NYGATS record. Once operating, all RES-certified projects will submit information, as required by NYSERDA, which may affect its continued eligibility. Such information will include, but not be limited to: (a) any changes in the facility's authorized representative, owner or operator, (b) any changes in the facility's fuel type, capacity, or other descriptive characteristics, and (c) monthly production, as tracked, verified and reported within the NYGATS. With respect to changes from the information provided in the SoQ Application, such change will be reported to NYSERDA within 30 days.

In addition to these requirements, NYSERDA or persons acting on its behalf may conduct audits and/or site visits at NYSERDA's discretion at any time to further assist in verification and ongoing RES

compliance. NYSERDA will have sole discretion to determine if any required ongoing information filings are material to the facility's Certification. If a facility is determined to have experienced a material change, then NYSERDA will have the sole discretion to require the facility to be recertified. The recertification will be conducted using the same process as the initial Certification.

For RES-certified facilities located in adjacent control areas, the portion of total output that qualifies for the RES program will be required to meet all applicable program requirements.

For all facilities, NYGATS certificates applied toward Tier 1 RES compliance will not be used towards compliance with state renewable energy obligations in any other state or toward any voluntary program or market claim.

3.5. Suspension & Revocation

NYSERDA will have the authority to suspend or revoke the RES program certification of facilities that: (i) are found to have provided false information; (ii) fail to notify NYSERDA in the event of a change in eligibility status; or (iii) who otherwise fail to comply with the RES program rules. The owners or representative of the facility will be offered the opportunity to appeal. When suspending certification, NYSERDA will specify the period for which the facility will not produce RES-eligible RECs in the NYGATS. When revoking certification, NYSERDA will specify the period that must elapse and the conditions which must be met before the facility may apply for recertification. NYSERDA will notify the NYGATS administrator of the dates associated with any suspension or revocation. NYSERDA will also have the authority to specify sanctions associated with suspension, revocation, and other forms of non-compliance.

4. Tier 1 RES Long Term Procurement

As the CES Order identifies, a long-term procurement process for Tier 1 RECs is needed to support the financing of facilities necessary to achieve the 50 by 30 RES goal. Long-term procurement will employ the current RPS Main Tier method of competitively selecting fixed-price REC contracts per the following modified approach.

4.1. Procurement Structure and Approach

Per the CES Order, at least once per year, NYSERDA will issue a Request for Proposals ("RFP") for a designated quantity of RES Tier 1 RECs, subject to the parameters described in this section. If supply quantities ultimately procured under such RFP fall short of minimum procurement targets outlined in the CES Order, NYSERDA will conduct a second procurement later that year.

For RES procurements, Staff and NYSERDA will incorporate factors additional to the bid price and economic development scoring that was previously used in Main Tier RPS REC contract solicitations. The primary purpose of these additional factors – which require that participating generation facilities meet a minimal level of maturity – is to maintain robust competition while reducing attrition, thereby increasing the proportion of contracts leading to renewable capacity additions. As required by the CES Order, the following additional factors were considered:

- Viability of the generation facility;
- Time frame for bid acceptance to operation;
- Diversity of resources of the overall portfolio;

- Diversity of owners;
- Alignment with REV goals specified in procurement solicitations;
- Generation facility developer experience; and
- Non-cost economic benefits.

A phased approach to evolving NYSERDA's historical REC central procurement approach is planned. The first phase will incorporate adjustments to the criteria and approach for implementation in 2017 that reflect the limited ability of the resource development pipeline to respond on short notice. Over time, Staff and NYSERDA envision that, with more notice, it may be possible to establish additional criteria or procurement and evaluation processes to further encourage investment and improve the success rate without overly constraining the competitive playing field.

a. 2017 Procurement Timetable

As required in the CES Order, for the 2017 procurement period, NYSERDA established and published on its CES web interface no later than December 1, 2016, a firm schedule of fixed dates for the annual and potential supplemental solicitations for 2017. No less than one solicitation will be conducted during the first half of 2017. If the solicitation acquires less than the minimum procurement target for 2017 as defined in the CES Order, it will be followed by a second solicitation issued within 2017. The 2017 solicitation schedule is available at: https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility

b. NYSERDA REC Purchases

i. Contract Duration

The maximum contract duration offered by NYSERDA will be up to 20 years, subject to the useful life of each facility, based on its resource type and defined in Table 2.

Resource	Useful life (years)
Anaerobic Digestion	20
Biomass/Liquid Biofuel	20
Fuel Cell	20
Hydroelectric (New or Upgrade)	50
Landfill Gas to Electricity	15
Solar PV	20
Tidal/Ocean	10
Wind	20

Table 2 – Generation Facility Useful Life

For generation facilities, not in commercial operation as of the RFP release date, the maximum contract duration will be calculated as the lesser of:

- 1) 20 years, or
- 2) The generation facility's useful life.

15-E-0302 CES Final Phase 1 Implementation Plan

For generation facilities in Commercial Operation as of the RFP release date, the maximum contract duration will be calculated as the lesser of:

- 20 years (240 months) minus the number of months between the month and year of commercial operation and the procurement release date (rounded to the nearest full year), or
- 2) The generation facility's useful life minus the number of months between the month and year commercial operation commenced and the procurement release date (rounded to the nearest full year).

ii. Expected Commercial Operation Date

In order to increase the likelihood of generation facilities with REC contract awards successfully coming to fruition, NYSERDA will modestly extend the maximum duration from bid acceptance to the last potential date of commercial operation before triggering contract termination (i.e., the requirement that Bid Facilities must enter commercial operation by the Commercial Operation Milestone Date (COMD), as it may be extended by virtue of posting additional security or entering into an interconnection agreement). In the 11th RPS Main Tier solicitation, the period from issuance of the RFP until the initial COMD was approximately 2 years, with an additional five calendar quarter's extension possible to the final COMD.

For the RES solicitations, NYSERDA will extend the maximum duration until the initial COMD to equal 2 years from the expected award notification date until the initial COMD, and in addition, to modify the ability to extend the COMD to allow for up to four 6 month extensions, each secured through either posting of additional contract security (as described more fully below) or entering an interconnection agreement.

In aggregate, these changes provide for a more flexible approach allowing viable generation facilities a more realistic timeframe to achieve commercial operation, while creating additional milestones for termination of contracts with generation facilities failing to make sufficient forward progress for its sponsors to place at risk additional contract security funds.

iii. Payment

To receive payments for Tier 1 RECs, a generation facility must successfully register with NYGATS to create NYGATS Certificates. NYSERDA will make payments for RES Tier 1-eligible RECs from contracted facilities based on monthly invoicing, once Tier 1-eligible RECs are transferred to NYSERDA's designated account.

NYSERDA will not pay under circumstances where the generation facility has not transferred the associated NYGATS Certificate to NYSERDA's designated account. Further, the creation of Certificates by NYGATS and all payments may be conditioned on the provision to NYSERDA by the generation facility of additional documentation, including but not limited to the generation data and, if appropriate, fuel data/information necessary for NYSERDA to quantify and verify the existence of Tier 1 RECs. For Fuel-

Based Bid Facilities, the Generation facility will be required to provide additional information as described in the Biomass Power Guide.¹⁰

iv. Bid Price

Bidders will be asked to provide one bid price in the form of nominal dollar which represents a single fixed production payment, expressed in dollars per megawatt-hour (\$/MWh), applicable to each NYGATS certificate offered as performance throughout the term of the contract. This price will be the fixed price for each eligible REC over the contract duration.

v. Maximum Acceptable Bid Price Evaluation Metric

NYSERDA will employ a confidential maximum acceptable Bid Price Evaluation Metric, which will be established in consultation with Staff for each solicitation; NYSERDA will not award a contract for a generation facility whose bid yields a Bid Price Evaluation Metric which is above a maximum acceptable Bid Price Evaluation Metric.

4.2. RES Procurement Design

Staff and NYSERDA will continue the use of a two-step procurement process as described below:

- Step One: Generation facilities are qualified as eligible to participate in a RES solicitation through a threshold review process (including Provisional Certification of Eligible RES Resources and evaluation against other threshold criteria); and
- 2) Step Two: Qualified facilities submit binding bid documents for evaluation, ranking, and ultimate award.

In the Step One application process, bidders will submit information necessary to evaluate their eligibility as well as information relating to the Step Two project viability evaluation. This process is described in more detail below. Future RFPs will be substantially in the form presented here and may be adjusted from time to time.

a. Roles

As defined in the CES Order, NYSERDA will assume the primary responsibility for issuing and executing RES solicitations. NYSERDA staff will execute all Step One eligibility determination activities listed below but will solicit the expertise of a Technical Evaluation Panel (TEP), along with NYSERDA and D

Staff, in the Step Two evaluation process. In competitive procurements for renewable energy supply, it is commonplace in the industry to utilize the expertise of independent evaluators who possess unique proficiency in the evaluation of energy generation projects. Given the criticality and complexity of the Step Two process, NYSERDA and Staff will employ competitively selected confidential independent evaluators to serve on the TEP for the Step Two process for each solicitation.

b. Bid Facilities

NYSERDA will consider single generators as bid facilities, consistent with the RPS Main Tier rules. Aggregation of like facilities, co-located renewable energy generators, and eligible renewable generators

¹⁰ Biomass Power Guide, <u>https://www.nyserda.ny.gov/-/media/Files/Programs/Clean-Energy-Standard/2017-</u> March-Biomass-Power-Guide.pdf

co-located with energy storage facilities. Such groupings may be phased in over time as market rules and the solicitation design evolves.

4.3. Step One

a. Resource Type, Location and Vintage

All generation facilities must demonstrate that they meet RES Tier 1 eligibility criteria by securing Provisional Certification (if not under commercial operation) or Operational Certification (if under commercial operation) as a Tier 1 resource prior to submitting a bid (see Certification). A generation facility must be located within New York State or within a control area adjacent to the NYISO while also meeting specified delivery requirements as described in Section 2, Tier 1Eligibility section above.

The generation facility must also demonstrate that it meets RES Tier 1 vintage criteria, including first reaching commercial operation on or after January 1, 2015, (the "Threshold Eligibility Date" or TED); or if a vintage generator, (i) be upgraded pursuant to applicable Tier 1 eligibility rules on or after the TED (only incremental generation will be eligible); (ii) return to service pursuant to applicable Tier 1 eligibility rules on or after 1 eligibility rules on or after the TED; or (iii) be repowered or relocated pursuant to applicable Tier 1 eligibility rules on or after the TED; or (iii) be repowered or relocated pursuant to applicable Tier 1 eligibility rules on or after the TED.

b. Threshold Eligibility Criteria

All generation facilities seeking NYSERDA REC contracts must be certified as eligible for RES program Tier 1 and must demonstrate that they have achieved a minimal level of development progress to be considered sufficiently mature to be considered. Threshold maturity requirements are intended to provide a minimal level of confidence in a selected generation facility's ability to reach commercial operation if offered a contract and to minimize the potential for speculative bidding by generation facilities of insufficient substance.

Applicants will be required to demonstrate a well-conceived and thoroughly studied generation facility concept, to have completed a fatal flaw analysis, begun key regulatory processes (such as interconnection and permitting), a plan for financing, and be fully aware of all the requirements needed to bring a generation facility to successful completion. This process will be administered by combining the completion of a self-certified checklist with a simultaneous submission of supporting documents that NYSERDA can refer to as necessary to validate the self-certification. The threshold eligibility requirements to be applied to NYSERDA's initial Tier 1 RFP are detailed as follows.

These criteria may be modified from time to time to reflect updated processes or for spurring additional progress toward project maturity at the time of application to NYSERDA.

i. Interconnection

Generation facilities of different types, sizes and interconnection voltages will be subject to different interconnection requirements, and navigating the interconnection process involves a range of timelines and application processes. Of key importance is the time required to complete the appropriate review processes. For very small generation facilities, approval may be secured relatively quickly, while the time required for large generation facilities to secure interconnection certainty may be measured in years. The threshold requirements recognize these differences.

In many circumstances, it is not possible for developers to know for certain which interconnecting jurisdiction their project will be subject to without input from NYISO or the New York Transmission

owners (NYTOs), because of the complexities of clearly delineating between FERC and non-FERC jurisdictional assets. There are no absolute rules, for example, based on line voltages. In all cases, NYSERDA expects applicants to demonstrate that they understand their project's specific interconnection requirements.

A generation facility larger than 20 MW with FERC jurisdictional interconnection points will be subject to the Large Generator Interconnection Process requirements for a valid interconnection request set forth in Section 30.3.3 of Attachment X of the NYISO tariff.¹¹ Small generators in New York (up to 20 MW in size) with FERC jurisdictional interconnections will be subject to the Small Generator Interconnection Process provisions of Attachment Z of the NYISO tariff.¹² A New York-based generation facility of less than 20 MW with non-FERC jurisdictional interconnection points, whether connected in front of, or behind-the-meter, are typically subject to the NY Standardized Interconnection Requirements (SIR).¹³ Fast track processes exist for both FERC jurisdictional and non-FERC jurisdictional interconnections that may allow generators to shorten interconnection approval timelines under some circumstances.

Proposers must demonstrate that they are either already in commercial operation, or are sufficiently advanced in the interconnection process to be considered sufficiently mature for the 2017 REC procurement. The following threshold interconnection requirements, differentiated by size, location and/or interconnecting authority, will provide a level of confidence to NYSERDA. All proposers must self-certify the following actions have been taken and provide appropriate supporting documentation (discussed below).

- Proposer has researched and identified which interconnection requirements are appropriate for their generation facility. For larger generation facilities, the proposer represents that they understand that multiple studies (feasibility, system impact studies and a class year study) may be required and that they understand the cost and time implications of these studies. For new DER generation, proposer certifies that they have read and understood the most recent requirements¹⁴ published by DPS.
- □ For generation facilities above 20 MW, proposer certifies that a valid interconnection request has been submitted and applicable fees have been paid to NYISO.

http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Documents_and_Resources/Interc onnection_Studies/Other_Interconnection_Documents/steps_nyiso_large_facility_interconnection_process.pdf. ¹² These requirements are summarized in Steps in the NYISO Small Generator Interconnection Process, http://www.nyiso.com/public/webdocs/markets_operations/convisions/planning/Documents_and_Resources/Interconnection_process.pdf.

¹¹ An interconnection request under the NYISO Large Facility Interconnection Process requires a \$10,000 application fee, a \$30,000 interconnection study deposit, and a demonstration of site control or an additional \$10,000 deposit. See Steps in the NYISO Large Facility Interconnection Process,

http://www.nyiso.com/public/webdocs/markets operations/services/planning/Documents and Resources/Interc onnection Studies/Other Interconnection Documents/NYISO Summary of SGIP.pdf.

¹³ These requirements are delineated in the New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators 5 MW or Less Connected in Parallel with Utility Distribution Systems,

http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/dcf68efca391ad6085257687006f 396b/\$FILE/05262818.pdf/SIR%20FINAL.pdf

¹⁴ New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators 5 MW or Less Connected in Parallel with Utility Distribution Systems and Case 15-E-0751, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017)

- □ For generation facilities, up to 20 MW in New York:
 - proposer certifies that they are subject to the NYISO Small Generator Interconnection Process, have identified the applicable requirements, and have submitted an interconnection request or prepared drafts of all initial interconnection application documents such that they can submit initial documentation within 3 months following bid submission ^{15,16}; or
 - Proposer certifies that they are subject to NY Standardized Interconnection Requirements, have discussed their project with the relevant utility company, and have identified the applicable requirements. Proposer also certifies that they have submitted an interconnection request or have prepared drafts of all initial interconnection application documents such that they can submit initial documents within 3 months following Bid Submission.
- □ For generation facilities located in adjacent control areas, proposer certifies that Bidder meets the requirements equivalent to the capacity-specific requirements described above.

Supporting documentation for all generation facilities must include evidence of meeting the above requirements and additional information evidencing that the bidder has thoroughly evaluated its interconnection options, including:

- As applicable, provide proof of interconnection application submission, proof of payment, or provide a copy of a draft application. If an application has been submitted, provide the status, and timeline, and/or Interconnection Agreement.
- Details on the Point of Interconnection/Point of Common Coupling.

ii. Permitting

Another indicator of a viable energy generation facility is that the permitting process and requirements for the generation facility are well understood and that the developer has a reasonable schedule for obtaining required permits that is consistent with its expected commercial operation date. Generation facilities of different types and sizes and environmental impact will have potentially very different permitting requirements. Understanding permitting and regulatory compliance requirements for a generation facility is critical to successful generation facility development.

Proposers must demonstrate that they are either already in commercial operation (and thus fully permitted) or that they are well informed of all applicable requirements and sufficiently advanced in planning for the permitting process to be considered sufficiently mature. To ensure that applicants have considered these factors appropriately, all generation facilities will be required to certify the following and provide supporting documentation that validates their claim.

¹⁵ The applicable requirements may, depending on the circumstances, be those of an entity other than the NYISO. ¹⁶ NYSERDA expects that interconnection approval will typically be obtained with 90 days of contract execution for such generation facilities.

- The generation facility has developed a list of all permitting and approvals required by local, state and federal agencies. The list should include conditional use permit/special use permits as applicable, air permits, planning board approvals, U.S. Army Corps of Engineers letters, etc.
- □ The generation facility has performed an initial review of historical/archeological/cultural resource impacts, wetland impacts, and fish and wildlife impacts.
- □ If applicable, the generation facility has developed emissions profiles for the generation facility that are consistent with state/federal emission regulations and RES eligibility requirements. ¹⁷
- If applicable, the generation facility subject to Article 10 must have submitted a Public
 Involvement Plan to the Department of Public Service, or provide to NYSERDA a complete draft of a plan ready for submission.

NYSERDA will also require that a bidder provide (a) a description of the process and requirements for necessary generation facility permits and approvals (b) a critical milestone schedule (c) supporting documentation in support of each of the threshold requirements discussed above, and (d) a summary of the status of all permitting activities.

iii. Site Control

Proposers must demonstrate that they have established a minimal level of control over the site upon which the bidder intends to build its proposed generation facility as well as the land necessary for interconnection. Since site control is one of the critical early threshold issues in project development and consideration will only be given to projects that can demonstrate that sufficient site control is already in place to allow project development to occur along a reasonably predictable trajectory.

Since site control will occur differently for different scales and types of generation facilities, the certifications and accompanying support for meeting this threshold requirement are as follows, as they apply to the generator site. The proposer will certify:

- that it controls the property by virtue of ownership; a valid written leasehold interest for such real property for at least the duration of the time it will take to develop and operate the generation facility for the duration of the REC contract; a valid written option with all terms stipulated unconditionally exercisable by the applicant or its assignee for the purchase or lease of the subject real property; or a duly executed contract for the purchase or lease of such real property; or
- that it has executed an exclusivity agreement or letter of intent with the subject property's owner that includes terms to conclude a legally binding site control agreement within the later of (i) 6 months following Bid Submission, or (ii) 120 days of the award notification date.

A lease or option must be unconditionally enforceable. It must be binding on the owner of the property and provide that the owner cannot unilaterally withdraw, revoke or rescind the obligation to sell or lease the property to the bidder.

For generation facilities requiring more than 15 acres for development, the applicant must demonstrate site control as described above for at least 50% of the total acreage needed for generation facility

¹⁷ <u>https://www.nyserda.ny.gov/-/media/Files/Programs/Clean-Energy-Standard/2017-March-Biomass-Power-Guide.pdf</u>

completion. However, failure to gain control of the total generation facility acreage (as control is defined above) within 120 days of contract award may result in contract termination.

If the interconnection facility does not fall entirely within the site required for generator equipment (such that no additional site control issues are applicable), the bidder must also certify that it:

- □ Has identified all necessary rights-of-way and/or other sites to be secured necessary to complete the generator lead, including alternatives if applicable; and
- Demonstrated exclusivity agreement or letter of intent for 100% of the necessary rights-of-way and/or an executed right-of-way agreement, which provides necessary rights to the developer (if the generator lead facilities will be merchant-owned); or that the right-of-way is controlled by or assignable to the interconnecting utility that will own interconnection facilities.

If site control over for interconnection facilities is not demonstrated at the time of the bid, NYSERDA may waive the requirement; however, failure to gain site control of such interconnection lead line right-of-way within 180 days of award notification date may, at NYSERDA's discretion, result in contract termination.

NYSERDA will require that a bidder provide applicable documentation evidencing site control.

iv. Additional Requirements

All generation facilities seeking long-term NYSERDA REC contracts under RES procurements must demonstrate that they have completed sufficient generation facility planning and due diligence to evidence that the generation facility is reasonably likely to be successfully developed, should it secure a REC contract from NYSERDA. Applicants will be required to check boxes for each item completed and attach supporting documentation. However, NYSERDA will reserve the right to ask for additional information if deemed necessary to evaluate the viability of the generation facility bid. These additional demonstrations of minimum viability may include:

- Experience in developing and financing generation facilities
 - The company or the principals in its development team must have experience successfully developing at least one electrical generation facilities of similar or larger scale.
 - Creation and submittal of a Financing Plan including descriptive narrative and the past financing experience of the Bidder, its affiliates, or a senior executive or finance professional who is a principal of the bidder, for comparable generation facilities.
 - Discussion of the bidder's plan, if any, for hedging the value of energy and capacity produced by the generation facility.
- Site Layout and Equipment, including creation and submittal of:
 - □ A Site Plan, including generation facility fence/boundary/limits-of-work.
 - □ A list of major equipment or alternatives (supplier name, quantities) and a plan to procure major long lead-time equipment sufficient to meet generation facility timelines.
- A Resource Assessment for the generation facility based on generation facility type, applicable to the generation facility's technology. as follows:
 - □ Solar PV System: Provide output from a system performance model preferentially using an industry standard tool such as PVSyst, Helioscope or System Advisor Model (SAM).

- □ Wind System: Provide P(50) production estimate based on at least one year's worth of climatologically-adjusted wind data collected at the generation facility site at the approximate hub height, or at least 6 months of site data with correlation data that has been annually and climatologically adjusted via correlations with a high quality reference station or detailed site-specific modeling by an independent meteorologist.
- □ For biomass, biogas, hydroelectric, ocean or tidal: a feasibility-level resource study by an independent engineer demonstrating adequate resources for life of the project.
- □ For fuel cells: evidence of an informal determination from the gas utility or a feasibility study by a 3rd-party independent professional engineer that gas is available, but further study is required to determine (i) if such service is of sufficient pressure and quantity to operate as proposed, and (ii) the cost to arrange such service.
- Generation facility production
 - □ An estimate of first year annual MWh production.
- Generation facility timeline
 - □ A key milestone table showing completion of critical development objectives such as finalization of site control, completion of necessary permits, interconnection agreement approval, financial close, construction completion, start-up and testing. For example:
 - With respect to interconnection, the table would show a critical path schedule for the proposed generation facility that includes a reasonable schedule for the generation facility to proceed through the applicable interconnection process to obtain an interconnection agreement and for the construction of any applicable interconnection and network upgrade facilities consistent with the expected commercial operation date of the proposed generation facility.
 - With respect to permitting, the table would show a critical milestone schedule for the generation facility up to and including the date of commercial operation that includes all major steps associated with the application for and receipt of all required permits to construct and operate the proposed facility.
- Other
 - Assessment and identification of existing utilities and utility rights-of-way within site limit of work.

v. Bid Deposit

The purpose of the provision of a bid deposit, submitted along with the Step One application package, is to help filter out speculative bids from which bidders might walk away before executing contracts. Higher bid deposits benefit larger developers with greater financial means and could discourage viable generation facilities from smaller developers. Therefore, setting of a bid deposit level is a balancing act between increasing individual bid viability and promoting competition. In the RES solicitations, NYSERDA will benchmark with other similar procurements, and adopt a capacity-based requirement appropriate to meet its objectives. However, the bid deposits for the 2017 solicitations will not exceed the bid deposits required in the 2016 solicitation.

4.4. Step Two: Bid Evaluation

a. Method

The CES Order required Staff, in consultation with NYSERDA, to propose procurement guidelines for consideration by the Commission as part of an implementation plan. Per the February 2017 Order, NYSERDA will institute modifications as described below.

b. Initial Evaluation - Generation Facility Evaluation Criteria

i. Price: Ranking and Weighting

In the Main Tier RPS procurements, 70 percent (70%) of the evaluation weight was accorded to the bid price on a net present value basis, per the proposed contract duration of the bid. Given the stated importance of minimizing costs associated with RES compliance and the direct correlation between a project's bid price and its overall cost to ratepayers, NYSERDA will maintain the relative weighting of price in future procurements and maintain a net present value evaluation method as utilized in the 2016 Main Tier procurement.

ii. Economic Benefits: Ranking, Weighting, and Verification

Under the Main Tier RPS procurements, up to 30 percent (30%) of the available points were awarded to bidders based on verified economic benefits falling into the following five categories:

- a) Long Term Jobs created in New York State;
- b) Payments/Benefits to New York State and/or its Municipalities;
- c) Royalties and/or Payments for Fuel and Resource Access;
- d) In-State Purchases or Consumption of Goods; and
- e) Short Term Employment of New York State Workers.

The objective of including economic benefits criteria was to incent bidders to procure New York goods and services. Evaluation of RPS verified economic benefits in the 2013 Program Review demonstrated that this requirement does effectuate bidder behavior, as firms appeared to make decisions based on these requirements. As out-of-state bidders may still earn points by using New York State sourced goods or services, this requirement is non-discriminatory. Thus this approach is well-suited as a differentiator among bids under the RES, which is open to generators in New York State or adjacent control areas. The Main Tier RPS procurements required that bidders document actual economic benefits within 60 days of the third anniversary of the commencement of contractual deliveries. If the ratio of verified actual economic benefits to expected economic benefits claimed in the bid falls below 85%, then the contract price is reduced by the deficiency percentage for the remainder of the delivery term. This potential for 'claw-back' serves to mitigate the potential for bidders to over-claim such benefits.

The Order required NYSERDA to continue to apply the same approach utilized in the Main Tier RPS with respect to economic benefits unless the approach can be demonstrated to be ineffective. While NYSERDA concludes that the approach, overall, is effective, but may warrant minor changes in categorization. Verification has been time-consuming for NYSERDA, and as a periodic function, verification may not be optimal for NYSERDA staff to perform. NYSERDA therefore will modify the proposal requirements and the process for verification to simplify the process to be less labor-intensive

overall, as well as to assure that the benefits are reported consistently and with improved accuracy, as follows.

iii. Weighting

Under the RPS Main Tier evaluation process, 30 percent (30%) of the evaluation weight was awarded by the TEP to bid proposals based on the degree to which each Bid Proposal demonstrates a contribution to the economic benefits categories listed above. NYSERDA will reduce the relative weighting for economic benefits in the RES procurements to 10 percent (10%) to allow additional criteria to be included in the quantitative scoring criteria as described below.

iv. Expected Economic Benefits Evaluation

The Main Tier RPS solicitations required bidders to submit as part of their bid a description of the incremental economic benefits to New York State created by the generation facility under the five categories listed above, in declining order of relative weight. For each category, the benefits quantified are those which can be demonstrated during the first three years following the award. Bidders must also provide a detailed justification specifying how the claimed Incremental Economic Benefits are eligible for evaluation, including relevant information or documentation which demonstrates the eligible nature of these claims. Finally, bidders must provide a detailed Verification Plan specifying how the economic benefits claimed for evaluation will be documented for contract compliance.

While the process used in current Main Tier RPS solicitations generally achieves its objectives, NYSERDA will streamline the process of bid submission and evaluation to make it less cumbersome on both bidders and the TEP, and to feed into a refined post-award demonstration process. Changes include:

- development of online forms which will guide bidders into preparing submissions in a more consistent manner, and which will streamline TEP member review;
- simplification of the categories listed above; and
- adoption of verification standards which will define best practices in documentation and verification.

These changes will allow a streamlining of the bidder's requirements, and streamline the task of the TEP evaluation.

v. Post-Award Demonstration of Actual Economic Benefits

Under the Main Tier RPS, sellers are required to meet an annual economic benefit reporting requirement for the duration of the contract. The annual report, to be submitted by the seller to NYSERDA within sixty days of each anniversary of the commencement of the contract delivery term, is a detailed report identifying and describing the Incremental Economic Benefits created because of the development, operation and/or construction of the generation facility.

In addition, under current practices, three years following the start of contract deliveries the seller must submit an economic benefits report including third-party documentation demonstrating the actual economic benefits that resulted from the construction and operation of the generation facility. The report includes submission of voluminous supporting records and documents relating to employment, purchases, and other payments necessary to demonstrate the economic benefits created by the generation facility under the categories and within the eligibility requirements. NYSERDA staff must then review the documents to verify the actual expenditures, and determine the percentage ratio of actual verified to claimed economic benefits. This result is then compared against the 85 percent (85%) of

15-E-0302 CES Final Phase 1 Implementation Plan

claimed benefits minimum contractual requirement to determine whether a payment reduction will be applied for the remainder of the contract term to compensate for excessive evaluation points awarded at the evaluation stage.

NYSERDA has found that the verification effort used in the RPS Main Tier solicitation process is generally effective at meeting its objectives but presents challenges for NYSERDA staff from a volume and consistency perspective. NYSERDA will reduce the effort required of both sellers and NYSERDA staff, and improve and streamline the consistency of approach, through the following refinements in the verification process:

- Development and use of verification processes to standardize submission and documentation of best practices. In addition to standardization, such standards will streamline the collection and documentation of economic benefits.
- Reducing and streamlining the annual report requirement. Rather than require an expansive filing in years 1 and 2, NYSERDA will require a 1-page filing detailing the seller's plans for the year 3 verification audit filing. In year 3, the verification filing will replace the annual report requirements. Finally, NYSERDA will eliminate the annual report requirement from all years following the submission of the year 3 economic benefits report.
- Replacement of the NYSERDA verification process with a requirement for independent verification. NYSERDA will require that the seller submit an economic benefit report independently verified by a New York State certified, independent third-party auditor funded at the seller's expense. This change will shift the audit diligence load from NYSERDA to firms that are trained, qualified and staffed for such a function.
- Develop an audit protocol to serve as a requirements document to guide the independent audit. Availability of such a guide will serve several purposes. First, it will standardize the submission process, definition of valid expense claims, and documentation, enhancing the objectivity, consistency and veracity of the benefits claimed. Second, it will allow auditors to understand the process they are asked to perform, and lower the cost to perform the services by stimulating competition in provision of such services. Finally, it will allow NYSERDA to explicitly develop and apply protocols for documentation and audit that can be differentiated to the size of a generation facility, offering a streamlined and lower-cost approach to smaller

generation facilities so as not to unfairly burden their bids with high administrative costs. In addition, making the cost of the audit by a New York firm a claimable economic benefit will allow NYSERDA to monitor the cost of this audit function over time and by generation facility size. Such monitoring will allow NYSERDA to identify opportunities for further streamlining, adjust requirements for different generation facility sizes and types, and identify whether the approach is sufficiently reducing aggregate administration costs.

vi. Project Viability: Ranking and Weighting

Given the importance of feasibility and ultimate project completion toward meeting the RES goals, NYSERDA will utilize a Project Viability criterion with a 10 percent (10%) weighting in the RES solicitations. For each project passing Step One threshold screening, NYSERDA and the TEP will award additional points to generation facilities that have demonstrably exceeded the Threshold Eligibility Criteria relative to other bids.

NYSERDA and the TEP will utilize the information submitted by bidders with their Step One packages and any other information NYSERDA may reasonably request, or independently observe, in evaluating bids against this criterion.

vii. Operational Flexibility and Peak Coincidence: Ranking and Weighting

Generation sources that can be dispatched at the request of the power grid operators or the plant owner are desirable to balance the electric system; to optimize generation dispatch; to minimize operating reserve requirements; and to address grid congestion and constraints. Therefore, a criterion with a 10 percent (10%) weighting will be included to evaluate the related value that a generator provides in this area. Criteria that may be considered include a facility's ability to address: load matching; peak load demands; load following, dispatchability, ability to provide operating reserves/respond up or down to system operator instruction and frequency regulation. NYSERDA and the TEP will utilize information submitted by bidders with the Step One packages and any other information NYSERDA may reasonably request or independently observe in evaluating bids against this criterion. Specific evaluation criteria details will be published in the relevant solicitation.

c. Summary - Initial Evaluation - Generation Facility Evaluation Criteria In summary, the following criteria and weighting will be utilized in the RES solicitations:

> Bid Price: 70 percent (70%) Economic Benefits: 10 percent (10%) Project Viability: 10 percent (10%) Operational Flexibility and Peak Coincidence: 10 percent (10%) Total: 100 percent (100%)

d. Application of Portfolio Risk Assessment

After conducting its review and scoring of each facility's economic benefits claims, project viability and bid price, the TEP will develop a *preliminary* rank order of generation facilities based on each generation facility's score with a tentative cut-off line based on the solicitation's volumetric procurement target.

NYSERDA and DPS will then consider whether to apply the following factors as they may apply to the preliminary award group in making a final award group recommendation, using information provided in the Step One process by the relevant bidders. Such factors will be clearly articulated in the relevant solicitation and the rationale for their application will be appropriately documented in the contracting record both to ensure transparency in the evaluation process and to ensure their objective application.

The following portfolio risk assessment limits center around the ability of the portfolio to be constructed at the proposed locations, at the proposed price, and within the required timeframe. If considering whether to apply any of the limits, NYSERDA and DPS will consider the potential cost impact of such decision (relative to the generation portfolio that otherwise would have been selected), only exercising such a limit should the impact on the generation-weighted average cost of the portfolio increase by less than 10 percent (10%) with the application of the portfolio limits.

Such limits will include:

<u>Diversity of resources</u>: The TEP may constrain any eligible technology to comprise no more than 80 percent (80%) of the award group on an annual generation basis.

Diversity of owners: The TEP may constrain any owner or affiliate of an owner to comprise no more than 80 percent (80%) of the award group on an annual generation basis.

Developer limitation: The TEP may limit awards to a specific project owner to a capacity of no more than five times the renewable capacity that the owner has successfully brought to commercial operation in the past.

4.5. Approval of Procurement Results

Consistent with the regulatory approval process instituted in the RPS Main Tier solicitations, all RES procurement results are subject to the review and approval of the Department of Public Service.

4.6. Conditions to be Met Prior to Contracting

a. Contract Security Requirements:

NYSERDA will retain from the current Main Tier RPS solicitation process the initial requirement for a seller to provide Contract Security to NYSERDA based on the number of MWh per year offered under the bid within 10 days of selection for a contract. NYSERDA also currently requires for Main Tier solicitations provision of additional Contract Security within one year of contract execution. In the most recent 11th RPS procurement, NYSERDA allowed sellers to extend the commercial operation milestone date by five calendar quarters through provision of additional Contract Security, or providing evidence of an executed interconnection agreement with either NYISO or the applicable interconnecting entity.

As noted above, to increase the likelihood of generation facilities with long-term REC contract awards successfully coming to fruition, NYSERDA will modestly expand the opportunity for extending the commercial operation milestone date by posting additional security or entering an interconnection agreement, and advance the date of the step increase in contract security. Consistent with the date extensions discussed above, specifically NYSERDA will replace the single extension of 5 calendar quarters (15 months) used in the 11th RPS RFP, which could be secured by providing additional material contract security, with a revised approach. The revised approach will offer a series of up to four 6-month extensions (up to 24 months in total), with each 6-month extension requiring provision of additional material contract security. At any of these extension opportunities, provision of evidence of an executed interconnection agreement with the applicable interconnection authority may serve as a substitute to provision of additional contract security. At any juncture in which the COMD is not met and an extension is not arranged, a non-performing contract may be terminated, allowing earlier action to replace non-performing projects than under the Main Tier RPS contracts.

4.7. Post-2017 Procurements

With the availability of greater lead time to signal the market of its solicitation requirements and criteria, and the commensurate greater time for developers to respond by advancing generation facilities through the development pipeline, NYSERDA anticipates that future procurements can include revisions to various solicitation parameters. The envisioned changes are intended to encourage more mature projects to apply (after allowing for projects to advance through the development pipeline), increase certainty with respect to procurement outcomes, improve the quality of applications, and increase the chance that generation facilities receiving contracts are ultimately successful; all without materially precluding competition. Some potential changes under consideration are provided below.

a. Pricing

NYSERDA anticipates that future procurements may include requests for generation facilities to provide bid pricing at a more granular level than the current single-fixed production payment offered throughout the contract term. Additional pricing options may include, but are not limited to onpeak/off-peak pricing or seasonally adjusted pricing with quarterly, monthly, or daily granularity to maximize energy value to the system.

b. Threshold Eligibility Requirements

The threshold eligibility requirements are a key component to NYSERDA's evaluation process. Future procurements are expected to include more stringent requirements that further ensure that generation facilities receiving contracts are highly likely to be completed. The goal is to encourage investment in development of proposed clean energy generation facilities and to increase likelihood that contracted generation facilities will be built. However, movement to more stringent threshold requirements will also depend on general market developments. The following changes to the threshold requirements may be considered for the future:

- Interconnection requirements may be tightened to require that generation facilities can document that they are further along in the process of receiving an interconnection agreement than required under the 2017 solicitation(s). For example, larger generation facilities may need to show evidence that a Phase 1 interconnection study has been completed. Smaller generation facilities may need to demonstrate that they have received some initial interconnection guidance or have submitted an application prior to contract award.
- Generation facilities may also need to demonstrate that they are further along in the permitting
 process. For example, generation facilities may be required to have submitted an application for
 a Conditional Use Permit or Special Use Permit, if applicable. For combustion-based generation
 facilities, applicants may be required to show that they have applied for an air permit or a state
 facility permit or permit modification.
- With respect to generation facility viability, applicants may be asked for a greater degree of evidence, or meet a higher standard, with respect to generation facility performance, financial capabilities and details with respect to key generation facility partners. For example, letters may be required from key vendors (PV panel suppliers, Turbine manufacturer, boiler manufacturer, etc.) indicating that they can deliver equipment in accordance with the generation facility development timeline.

Contract terms and conditions may also evolve in future procurements. New requirements may include the following:

- Purchase orders or contracts executed for major equipment procurement to be issued within 12 months of award notification date.
- Contracts for generation facility engineer (Engineer of Record) and/or engineering/procurement/construction contractor must be executed within a specified amount of time from award notification date.
- Additional interim development milestones.

Additional contractual milestones would provide opportunity for terminating and replacing in subsequent procurements generation facilities that are not advancing at a sufficient pace. Such changes

will signal to the market the need to advance generation facilities through the development process and offer more mature generation facilities in response to RFPs. Such changes need to be introduced with care into the solicitation process when NYSERDA's market analysis suggests that the development pipeline has become sufficiently robust such that tighter requirements will still yield competitive results.

c. Evaluation Criteria

Evaluation criteria are also expected to tighten somewhat, with a stronger emphasis on parameters such as past developer performance, more detailed requests with respect to construction experience, and bonding capacity. Examples of additional evaluation criteria considered by NYSERDA for future use include:

- Additional information relating to project development experience, including the experience of vendors, contractors and development partners, and the Bidder's history of collaboration with such entities.
- The financing capability, i.e., credit-worthiness, financial strength, bonding capacity or net worth of the bidder.
- Operating experience.
- Construction experience.
- Equipment quality.
- Reasonableness of schedule.
- Bid security above the minimum required.

NYSERDA may also seek to select projects to meet the locational, strategic and programmatic objectives of the RES, specifically its alignment with the goals of the State Energy Plan and Reforming the Energy Vision ("REV") and the associated framework.

5. LSE Demonstration of Compliance

LSEs must demonstrate compliance with the CES's RES Tier 1 and ZEC programs for each compliance period for which a RES and ZEC LSE compliance target is established. The RES compliance period is the twelve-month period beginning on January 1 and concluding on December 31. The ZEC compliance period is the twelve-month period beginning on April 1 and concluding on March 31.

For the RES and ZEC programs, calculation of LSE compliance obligations and reporting on compliance ZECs and Tier 1 RECs held by an LSE will be accomplished through NYGATS. LSEs are required to register an account in NYGATS in order to transact RECs and ZECs, receive communications, and generate compliance reports. In order for RECs and ZECs to be eligible for meeting compliance obligations they must be issued by and ultimately settled in NYGATS. NYGATS will generate reports on ZECs and Tier 1 RECs held in LSE NYGATS accounts that must be submitted to NYSERDA for demonstration of compliance. LSEs that elect to make ACPs to satisfy all or part of their RES obligation will be required to report those transactions as an attachment to the NYGATS RES Compliance Report. NYSERDA as the CES administrator shall have access to such LSE accounts for compliance verification purposes.

5.1. Compliance Obligation

Compliance obligations of LSEs are determined differently for the RES Tier 1 and ZEC requirements. Because there are a defined number of ZECs generated in a compliance year, they are allocated to LSEs in proportion to their load if appropriate payments have been made to NYSERDA. In contrast, an LSE's Tier 1 RES obligation is determined by multiplying the LSE's annual load times the annual Tier 1 percentage compliance target. The actual LSE compliance obligation for the RES and ZEC programs is calculated five months after the compliance period ends using the load calculated from data reported in NYGATS for the compliance period.

5.2. Compliance Reporting

Under the CES, creation of supporting reports to support compliance reporting for the RES and ZEC programs will be an additional component of the NYGATS settlement process. Preliminary and final compliance reports from NYGATS will create a record of ZEC and Tier 1 REC balances in an LSE's account on the date the report is generated.

a. NYGATS Settlement

NYGATS settlement is an annual process consisting of 1) matching certificates created in NYGATS for production within the year to the LSE's electricity delivered to and consumed in the New York Control Area, 2) allocating RECs acquired by NYSERDA which are not Tier 1 eligible to LSEs per their corresponding load that funds clean energy programs through delivery surcharges, and 3) assigning Residual Mix Certificates to any unfulfilled load. This information is used to create an Environmental Disclosure Label for each LSE as required under the Environmental Disclosure Program (EDP). A new EDP Subaccount is created every calendar year and LSEs must transfer certificates into that EDP Subaccount for label creation. At the end of the settlement period, all certificates of the settled vintage year are retired and are no longer available for transacting in NYGATS, except for certificates in banked subaccounts. Any implications to the EDP program resulting from the CES program will be addressed in the Environmental Disclosure Program proceeding (Case 15-E-0696).

The RES and ZEC programs will use data in NYGATS to calculate LSE load, to calculate compliance obligations, to determine LSE's REC and ZEC balances and to generate compliance reports. To align compliance with NYGATS settlement, the end of trading for Tier 1 certificates of a vintage year will correspond with final RES compliance reporting and settlement will occur after final ZEC program compliance reporting. Since NYGATS certificates from a settled vintage year are no longer transferable within or between accounts, except for banked certificates, NYGATS will use the period between the end of trading and settlement to accommodate any adjustment to certificates deemed legitimate by the NYGATS Administrator. In October of each year, NYGATS data is settled for the prior vintage year and EDP labels are created. Compliance reporting for the RES and ZEC programs will be described in more detail below. Throughout this process, any date that falls on a weekend or holiday will be moved to the next business day.

i. Load

Each LSE's RES Tier 1 compliance obligation is determined based on a calculation of the annual LSE load multiplied by the annual Tier 1 RES obligation percentage. Each LSE's ZEC compliance obligation is determined based on a calculation of the annual load share ratio for the LSE multiplied by the annual ZEC obligation. Pursuant to the NYGATS Operating Rules, load is calculated by using NYISO version 2 generation data and adding generation from load modifiers utilized by distribution utilities. The load modifier data adjusts the total load as well as the total load served by the LSE utilizing the load modifier(s). The adjusted total load served by each LSE is then divided by the adjusted total statewide load to determine the percentage of total load served by each LSE.

Presently, the NYISO generation data is reported by the NYISO to NYGATS on a monthly basis and load modifier data is reported to DPS by the distribution utilities on an annual basis. In order for accurate calculation of load share ratio, upon which accurate calculation of RES and ZEC program targets and obligations are based, commencing in January of 2017, electric distribution utilities must report the total monthly generation data for each load modifier facility directly to NYGATS on a monthly basis.

b. Trading and Banking of Compliance Certificates

Based on the requirements in the CES Order, ZECs are not eligible for trading between LSEs or for banking. ZECs may only be used for demonstration of compliance with the current compliance period LSE obligation. NYGATS will set restrictions on the associated ZEC certificates to restrict their movement to only occur between NYSERDA and the purchasing LSE, where they will be retired for compliance.

Regarding trading and banking of RECs for RES compliance, NYSERDA will be authorized to bank Tier 1 RECs for two subsequent compliance periods. Consistent with the CES Order, Tier 1 RECs purchased from NYSERDA for RES compliance will not be eligible for trading in 2017 but can be banked for future compliance per the conditions below. In 2017, excess Tier 1 compliance RECs originally purchased from NYSERDA may also be sold back to NYSERDA at their cost minus NYSERDA's administrative adder, if applicable. Tier 1 RECs purchased from entities other than NYSERDA are not eligible for the 2017 buyback provision and may be traded.

For meeting the required percentage for Tier 1 of the RES in any compliance period, only an obligated LSE may use NYGATS certificates associated with production during one compliance year in excess of the compliance year obligation for compliance in the two subsequent compliance periods (banked certificates), subject to the following limitations:

- 1) Only obligated LSEs, and no other market participants, may bank excess certificates above the current year's Tier 1 RES LSE obligation for future RES LSE obligation compliance.
- 2) The obligated LSE is in compliance with the RES for all previous compliance periods.
- 3) Banked certificates are in excess of the number of certificates needed in the compliance period in which they were generated, and such excess NYGATS certificates have not previously been used for compliance with the RES, and have not been otherwise transferred to other parties.
- 4) Tier 1 NYGATS certificates banked in 2017 may not exceed sixty percent (60%) of the certificates needed by the obligated LSE for compliance in 2017. This banking limitation may be revised for future compliance years.
- 5) Banked NYGATS certificates were produced by the generation of electrical energy sold to New York retail customers during the compliance period in which they were generated; and have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sale, or used to satisfy obligations in jurisdictions other than New York, or be used to substantiate any voluntary program claims.

c. NYGATS RES Compliance Report

The structure of the compliance report for the 2017 RES compliance period is described below. Compliance reporting for subsequent program periods will continue as described below unless otherwise amended. NYISO version 2 data for the RES compliance period will be available in NYGATS in May of 2018. In June of 2018, LSE loads for the 2017 RES compliance period will be calculated and Preliminary RES Compliance Report will be generated that includes:

- 1) LSE load for January December 2017
- 2) Actual 2017 Tier 1 REC compliance obligation
- 3) Current balance of Tier 1 RECs in the LSE account

After the Preliminary Report, has been generated, a thirty-day reconciliation period commences during which an LSE can finalize Tier 1 REC transactions for the compliance period in order to satisfy their compliance obligation. At the end of this reconciliation period, trading for the vintage year closes in NYGATS. With the closing of trading, LSE's can no longer transfer certificates into or out of their vintage year EDP Subaccount. Tier 1 RECs transferred into vintage year EDP Subaccounts will be used for demonstration of compliance in the RES program for the corresponding compliance period. In July of 2018, a Final 2017 RES Compliance Report will be generated which contains the same elements as the preliminary report, updated to reflect the amount of Tier 1 RECs in the LSE's 2017 vintage year EDP Subaccount(s). After settlement of the 2017 vintage occurs, this final compliance report remains a static record of the quantity of Tier 1 RECs the LSE used for compliance in the 2017 RES compliance period.

i. ACP Payments

LSEs will be able to satisfy their compliance obligation for the RES Program, all or in part, through the provision of Alternative Compliance Payments. LSEs must retrieve their preliminary RES compliance reports from their NYGATS account and determine if they will utilize ACPs to meet their compliance obligation. If they elect to make ACPs for the RES compliance period, these payments will be made to NYSERDA. NYSERDA will provide necessary forms and instructions for this purpose. NYSERDA will accept ACPs from LSEs during the time between the release of the preliminary and final RES compliance reports, typically June 1 through July 1 of each year. No later than two weeks after the release of the final RES compliance report, NYSERDA will provide an ACP payment report to all LSEs that elected this option for the RES compliance period. This report must be attached to the RES Compliance Report generated by NYGATS when submitting compliance documentation to NYSERDA.

d. NYGATS ZEC Compliance Report

The structure of the compliance report for the 2017-2018 ZEC compliance period is described below. Compliance reporting for subsequent program periods will continue as described below unless otherwise amended.

NYISO version 2 data for the ZEC compliance period will be available in NYGATS in August 2018. In September 2018 the actual load share ratio for the ZEC compliance period will be calculated. A Preliminary ZEC Compliance Report will be generated that includes:

- 1) LSE load for April 2017-March 2018
- 2) LSE load share ratio for April 2017-March 2018
- 3) Actual 2017-2018 compliance period ZEC compliance obligation (total ZECs generated by eligible facilities (not to exceed purchase cap) multiplied by LSE load share ratio)
- 4) April 2017-March 2018 vintage ZECs in the LSE account

After the Preliminary Report has been generated, a thirty-day reconciliation period commences during which an LSE can finalize ZEC transactions for the compliance period in order to satisfy their compliance

obligation. At the end of this reconciliation period, a Final 2017-2018 ZEC Compliance Report will be generated which contains the same elements as the preliminary report, updated to reflect the amount of April 2017- March 2018 vintage ZECs in the LSE Account. After settlement of the 2017 data occurs, this compliance reports remains a static record of the quantity of ZECs the LSE used for compliance in the 2017-2018 ZEC compliance period.

5.3. LSE Compliance Filing

An LSE must make an annual CES compliance filing for every compliance period in which it served load that resulted in RES and ZEC compliance obligation. In this filing, an LSE shall delineate how it has met its RES and ZEC program obligations.

a. Compliance Filing Requirements

Annual CES compliance filing(s) will be required of each obligated LSE. NYSERDA shall develop the requirements, forms, and instructions sufficient to verify compliance and share these forms on the CES web interface.

The annual compliance filing shall include, but not be limited to, the following information:

- 1) Final NYGATS RES Compliance Report;
- 2) ACP Report;
- 3) Withdrawal of banked excess compliance, i.e., the use of banked Tier 1 RECs from previous eligible periods, if applicable;
- 4) Statement of excess Tier 1 RECs banked for use in future years;
- 5) Statement of NYGATS certificates used in satisfaction of voluntary market products and claims (which are not used towards RES compliance), on a product basis (if the LSE sold products differentiated by their content); and
- 6) Final NYGATS ZEC Compliance Report.

With respect to substantiating information, the obligated LSE will provide NYGATS reports, reconciled metering data from distribution utilities, and other reports and information specified by NYSERDA. In addition to all required information, the filing entity shall – through an authorized signatory – submit an attestation that the information provided is true, accurate and complete.

Compliance filings will be considered public record unless specifically exempted by NYSERDA. Obligated LSEs may petition for confidential treatment of certain information.

b. LSE Compliance Filing Schedule

Annual compliance filings will be made to NYSERDA no later than thirty (30) calendar days after the final compliance reports for the compliance period are generated by NYGATS. NYSERDA will provide on the CES web interface all necessary forms and instructions. Obligated LSEs shall use the prescribed forms to submit all compliance filing material by the filing deadline. NYSERDA will designate contact information for obligated entities to ask clarifying questions about compliance filing materials.

c. NYSERDA Compliance Filing Review

NYSERDA shall conduct a timely review of all annual compliance filings. Where additional information is required to complete the review, NYSERDA will provide the obligated LSE with specific questions, and clearly outline its expectations for a satisfactory response. Supplemental responses and information

must be provided to NYSERDA within 30 days of the request. Any obligated LSE failing to satisfy the compliance filing requirements through such supplemental response will receive a warning letter, including a stated date by which such failure must be cured. Failure to comply by the letter date will result in license suspension, and a prohibition on enrolling new customers. If the problem is not corrected by the dates in the suspension notice, the Entity's license will be revoked by the Department of Public Service.

6. State Reporting Requirements

6.1. CES Compliance Reporting

Using data in NYGATS, NYSERDA will produce and make available to the public an annual CES Compliance Report that summarizes the information submitted in the annual LSE compliance filings no later than six months after the annual LSE CES compliance filing due date. The annual CES Compliance Report will inform the Commission, Staff and interested parties of the RES and ZEC program's progress in meeting the targets and Commission's renewable policy goals. The Compliance Report will include non-confidential data that provides the following, for both the subject compliance period and each previous compliance period:

- 1) The aggregated retail electric load served in New York State;
- 2) The aggregated RES-obligated load net of all exemptions;
- 3) The aggregated retail electric load served by renewable resources;
- 4) The extent to which the LSEs complied with the RES and ZEC program compliance obligations;
- 5) The extent to which the LSEs used Tier 1 RECs and ACPs in meeting the RES compliance obligation;
- 6) The extent to which the LSEs retired NYGATS certificates in satisfaction of voluntary market products and claims;
- 7) The aggregated amount of NYGATS certificates retired for voluntary purposes;
- The aggregated amount of RES Tier 1-eligible RECs banked towards future RES compliance and withdrawn from past banking towards current year RES compliance, as well as NYSERDA's balance of banked RECs;
- 9) The names, locations and fuel types of RES Eligible Generation Units, from which the LSEs, as an aggregate, obtained the RECs in meeting the RES compliance obligation; and
- 10) The quantities, by location and fuel type, of NYGATS certificates, from which the LSEs, as an aggregate, obtained the RECs in meeting the RES Compliance obligation.

6.2. RES Procurement Performance

The annual RES Procurement Performance report shall include non-confidential data that provides the following, for both the subject compliance period and cumulatively:

- 1) A summary of the results of NYSERDA RES solicitations conducted in the subject RES compliance period;
- 2) Project development status for all active NYSERDA RPS-funded and RES contracts as of the end of the subject RES compliance period;
- 3) Aggregated quantities of NYSERDA-procured RECs as of the end of the subject RES compliance period;
- 4) A summary of the disposition of NYSERDA-procured RECs as of the end of the subject RES compliance period; and
- 5) A summary of ACP funds received and their use.

6.3. RES Program Impact and Evaluation

NYSERDA shall provide a periodic assessment of the RES program's impacts and success to date. The RES Program Impact and Evaluation report may include the following:

- An evaluation of the RES program's economic impacts (potentially including long and short term job creation, property tax or payment in lieu of tax benefits to local governments and school districts, biomass fuel purchases, lease and/or royalty payments to landowners, etc.) to date, both actual and projected;
- 2) An evaluation of the RES program's contribution to greenhouse gas emissions reductions to date;
- An evaluation of the RES program's success and attribution of the CES in achieving the Commission's renewable policy goals and goals set forth in the Commission's Reforming the Energy Vision initiative;
- 4) The progress of New York's RES program as compared with the progress of similar programs in other states; and
- 5) An assessment of the impact on the Commission's renewable policy goals because of the achievements in the voluntary green market.