



NYSERDA

New York's Clean Energy Standard

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Clean Energy Standard - Overview

New York's Clean Energy Standard

- By Order issued August 1, 2016, the New York Public Service Commission adopted the State Energy Plan (SEP) goal that 50% of New York's electricity is to be generated by renewable sources by 2030 as one strategy to reduce GHG emissions 40% by 2030.
- The Clean Energy Standard (CES) anticipates a series of initiatives including, but not limited to, obligations upon LSEs and opportunities for voluntary contributions, all of which will contribute to attaining the 50 by 30 goal.
- The Order provides for two mandated requirements:
 - a Renewable Energy Standard (RES) requirement, and
 - a Zero-Emissions Credit (ZEC) requirement.
- The RES component and the ZEC component are interrelated but the goals are additive.
 - ZECs will not count toward satisfying the 50% by 2030.
- A series of implementation plans will provide further details regarding the design of the program for public comment.

Renewable Energy Standard (RES) Tier 1

Clean Energy Standard

Renewable Energy Standard
(RES)

Zero-
Emissions
Certificate
(ZEC)

Tier 1:
New
Renewables

Tier 2:
Maintenance
Tier

Procurement

- ❖ LSE mandates
- ❖ Compliance through acquisition of RECs (tracked through NYGATS) or Alternative Compliance Payments (ACP)
- ❖ Eligibility:
 - Technological requirements similar to existing RPS Main Tier
 - Behind-the-meter eligibility TBD
 - COD 1/1/2015 or after
 - Adjacent control areas eligible (require energy deliverability)
- ❖ Long term contracting by NYSERDA

LSE Tier 1 Obligation

- The cornerstone of the RES is the obligation placed on all LSEs under the Commission's jurisdiction to acquire an increasing portion of their annual retail load from new (in service after December 31, 2014) renewable resources.
- The Order set, through 2021, the annual goal in total statewide MWh translated as a percentage of each LSEs load:

Year	CES goal	
	MWh	Percentage of LSE Load
2017	974,000	0.6%
2018	1,741,270	1.1%
2019	3,124,100	2.0%
2020	5,302,371	3.4%
2021	7,530,642	4.8%

LSE 2107
Obligation
(0.035%)
Clarified in
November 17,
2016 Order
(next section)

LSE Tier 1 Obligation

- An LSE may satisfy its obligation by one of the following ways:
 - LSEs may purchase RECs from NYSERDA;
 - The Commission directed NYSERDA to conduct Tier 1 REC procurement solicitations at least once annually.
 - LSEs may enter directly into agreements, including long-term power purchase agreements (PPAs), with renewable energy resources;
 - LSEs may pay an alternative compliance payment (ACPs);
- Or some combination of the three.

Renewable Energy Standard Tier 2

Clean Energy Standard

Renewable Energy Standard
(RES)

Zero-
Emissions
Certificate
(ZEC)

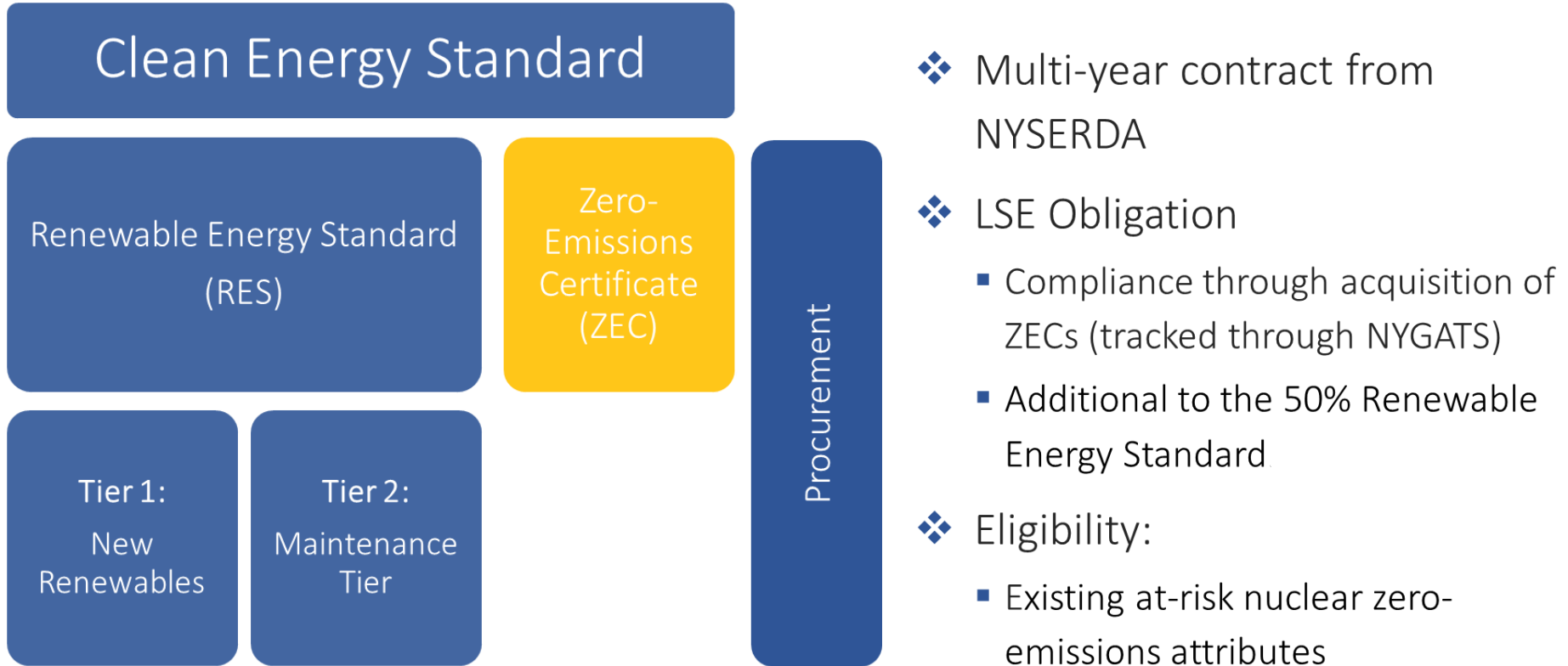
Procurement

Tier 1:
New
Renewables

Tier 2:
Maintenance
Tier

- ❖ Elimination of proposed Tier 2A
- ❖ Extension of current RPS Maintenance Resource Program
- ❖ Financial support, through open book Maintenance Contracts, to facilities at risk of financial failure or retirement
- ❖ No tradable attributes

Zero Emissions Certificate (ZEC) Program



LSE ZEC Obligation

- The LSE ZEC obligation is designed to ensure that enough revenues are in place so that the plants continue to operate and produce carbon-free emission.
- ZEC cap = 27,618,000 per year.
 - Based on July 2015 – June 2016 output.
 - If not all owned by same owner, then separate limits for each owner.
- If fewer MWh are produced, then the level of required ZEC purchases goes down.
- Each LSE will be responsible for purchasing ZECs equal to their load share percentage for the entire State.
- The annual compliance period is April 1 - March 31.

Updates Based on November 17, 2016 Commission Orders

November 17, 2016 Order

Issued in response to NYSERDA Petition for Clarification

- 2017 Tier 1 RES Obligation on LSEs is equal to **0.035%** of total load served by an LSE during 2017.
 - Relates directly to the estimated number of Tier 1 RECs that NYSERDA will offer for sale in 2017 and projected 2017 compliance period load (details covered in a later section).
- The new renewable resources from NYSERDA-funded NY Sun and other Customer Sited Tier projects are counted toward the 50% statewide renewable goal but are not included in the mandated quantity that the LSEs are mandated to procure in 2017.

November 17, 2016 Order

PSC approved:

1. Standard agreements for LSE purchase of RECs and ZECs from NYSERDA
 - Agreements to be executed by LSEs within 30 days of the Order issuance date (by December 19, 2016)
2. NYSERDA administrative budget for 2017
 - REC administration, system builds and cost recovery fee funded through repurposed funds
 - Administrative adder for ZEC purchases (\$0.0594/ZEC)

NYSERDA REC Sales to LSEs

NYSERDA filing regarding 2017 REC Sales

- Filed under Case 15-E-0302 on November 1, 2016
- Available on NYSERDA's website at nyserdera.ny.gov/clean-energy-standard
- Directly correlates with 0.035% Tier 1 LSE RES Obligation clarified in November 17, 2016 Order

2017 Tier 1 RECs to be offered for sale by NYSERDA	2017 Tier 1 REC Price	2017 ACP Price
56,142	\$21.16	\$23.28

CES Phase 1 Implementation Plan

Phase 1 Implementation Plan

- Filed jointly by New York Department of Public Service and NYSERDA on October 31, 2016 for public comment and Commission decision-making.
- Comments due January 3, 2017.
- Proposes the following details and processes regarding:
 - RES Eligibility
 - Certification
 - Long Term Procurement for RECs
 - LSE Demonstration of Compliance
 - Reporting Requirements

Eligibility

Tier 1 Eligibility

- Per the August CES Order, Tier 1 eligibility mirrors the current Renewable Portfolio Standard (RPS) Main Tier with two exceptions:
 - The former 30 MW limit on hydro facilities is eliminated
 - Geographic eligibility is expanded (with delivery of energy) to the control areas adjacent to New York
- Additional details are included in the implementation plan regarding the eligibility of:
 - Upgrades
 - Repowering

Tier 2 Eligibility

- Provide support to those “at risk” eligible facilities which, if not for the support, are demonstrated to be economically inviable without such support.
- Tier 2 Maintenance Resource eligibility:
 - 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.
 - 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.
- Process is similar to RPS Maintenance Resource program.

Project Certification

Renewable Energy Standard Certification

- Certification is a prerequisite to generation facility participation in the RES program as an eligible resource.
- NYSERDA will perform all services related to the development, review, approval and ongoing validation of RES certification materials.
- NYSERDA will develop a RES certification process modeled on the RPS Main Tier certification process but adapted to be available on a continuous basis, with similar provisional and operational certification provisions.

Key Proposed Changes to Procurement - 2017

NYSERDA filing regarding 2017 Long Term Procurement Schedule (November 1, 2016)

2017 Renewable Energy Credit RFP 1 Release	April 2017
RFP 1 Awards	August 2017
NYSERDA/DPS announcement on need for 2017 RFP 2 Procurement	September 2017
2017 Renewable Energy Credit RFP 2 Release (if needed)	October 2017
RFP 2 Awards	February 2018

Step One: Thresholds for Project Eligibility

- Establish project threshold criteria to send clear signal to market participants for project maturity expectations, fortify project pipeline, and minimize “false starts”
 - Must meet minimums (e.g., interconnection, permitting, site control) or face automatic rejection
- Leverage/harmonize existing development best practices to establish minimum maturity levels
- Require project self-certification plus documentation
- Requirements are intended to maintain a robust solicitation response & maintain cycle times

Step Two: Revised Bid Evaluation Criteria

- **Quantitative Ranking**
 - Price – 70% (maintained)
 - Economic Benefits – 10% (reduced from 30%)
 - Project Viability – 10%
 - Operational Flexibility and Peak Coincidence – 10%
 - Obtain Preliminary Rank Order
- **Technical Evaluation Panel (TEP)**
 - Consists of NYSERDA, DPS, and qualified Independent Evaluators
- **Application of Portfolio Risk Assessment**
 - Technical Evaluation Panel recommendation to NYSERDA management
 - Department of Public Service approval of results

Changes to 2018 and Subsequent Procurements

- Extension of Commercial Operation Date post award with additional extensions/security options
- Introduction of phased approach for procurement evolution
 - Increased development maturity
 - More granular pricing (peak/off-peak, seasonal)
 - More rigorous documentation (equipment vendor certifications, project partner details, more financial disclosure, etc.)

Settlement and Reporting

REC and ZEC Banking

- ZECs – No Banking Allowed
- Tier 1 RECs
 - NYSERDA can bank for two years
 - LSE's can bank
 - For up to two subsequent compliance years
 - Banked certificates cannot exceed 30% of the certificates needed by the LSE for compliance in the year in which they were generated
 - LSE's can also sell excess Tier 1 RECs to NYSERDA in 2017 (per Order)
- Borrowing is not permitted

Settlement/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.
 - Separate compliance timelines
 - NYGATS reports used for documentation
- ACP Payments under RES to NYSERDA
- State Compliance Reporting

Value of Distributed Energy Resources

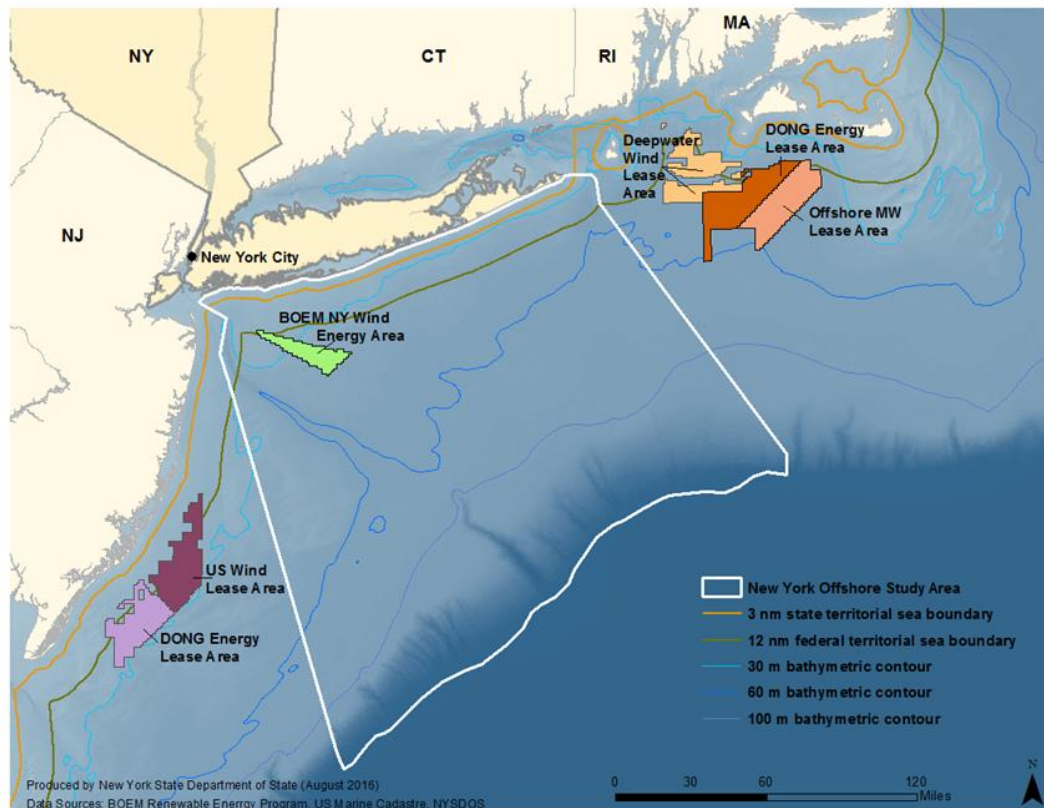


Staff Report and Recommendations in
the Value of Distributed Energy
Resources Proceeding

15-E-0751

October 27, 2016

Offshore Wind



Thank You

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