

Clean Energy Standard

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Policy Highlights



Clean Energy Standard (CES) Overview

- PSC Order in August 2016 adopts the State Energy Plan (SEP) goal that 50% of NY's electricity is to be generated by renewable sources by 2030 as one strategy to reduce GHG emissions 40% by 2030.
- Anticipates series of initiatives including *obligations* upon Load Serving Entities (LSEs) and opportunities for *voluntary* contributions, all of which will contribute to attaining the 50 by 30 goal.
- Two mandated requirements:
 - Renewable Energy Standard (RES) requirement, and
 - Zero-Emissions Credit (ZEC) requirement.



Clean Energy Standard (CES) Overview

- Renewable Energy Standard (RES):
 - Tier 1 New Renewable Resources: obligation on LSEs to financially support new renewable generation resources to serve retail customers
 - Tier 2 Maintenance Resources: similar to maintenance tier in RPS
 - Requirement for regular Tier 1 REC procurement solicitations
- Zero Emissions Credits (ZEC):
 - Obligation on LSEs to invest in zero-emission attributes of nuclear facilities to serve retail customers



Clean Energy Standard (CES) Overview

- Key Differences of Renewable Resource provisions from RPS:
 - LSEs as compliance entity
 - Generation Attribute Tracking System (GATS) as tracking mechanism
 - Alternative Compliance Payments (ACPs) as option
 - Mandatory obligations on LSEs to financially support new renewable resources - targets set for 5 years
 - Procurement target set for 5 years
 - More aggressive pace of development toward a long-term goal



CES Overview: Multiple Strategies to Achieve 50% Goal

- Existing State-owned attributes (e.g., NYPA hydro)
- Aggressive pursuit of cost-effective energy efficiency
- Consumer initiated green energy purchase
- Continued obligation on utility for low-income access to renewables
- Program to maximize the value potential of off-shore wind
- Actions to reduce soft-cost and improve siting and interconnection
- Obligations on LSEs to procure new renewable resources (RECs)
- LIPA/NYPA actions
- State facility action
- Continued participation in Regional Greenhouse Gas Initiative (RGGI)

CESImplementation



NYSERDA REC and ZEC Sales to LSE's

- NYSERDA announced Tier 1 RECs for sale this week
- LSEs sign up to buy and contract for Tier 1 RECs from NYSERDA Nov/Dec 2016
 - LSEs can buy from NYSERDA, pay ACPs, or buy eligible RECs from market
 - LSEs Total Tier 1 New Renewable Resource Obligation = Load x Annual Renewables Obligation %
 - LSE Total Tier 1 New Renewable Resource Obligation starts at 0.6% of load in 2017 and goes up to
 4.8% of load by 2022
- LSEs contract with NYSERDA for ZECs Late 2016-April 2017
- REC Reconciliation Period (for 1-yr compliance period starting Jan 2017) Jan– June 2018
- ZEC Reconciliation Period (for 1-yr compliance period starting April 2017) April— Sept 2018

NYSERDA REC Sales to LSE's

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

- From eligible generation facilities that started/or will start commercial operation after 1/1/2015*
- In addition 705,654 MWh will be generated from NYSERDA-funded Customer-Sited projects and NY Sun



NYSERDA REC Procurement Schedule

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



Phase 1 Implementation Plan

- Filed jointly by DPS and NYSERDA on October 31, 2016 for public comment and Commission decision-making
- Addresses
 - RES Eligibility
 - Certification
 - Long Term Procurement for RECs
 - LSE Demonstration of Compliance
 - Reporting Requirements



RES Tier 1&2 Eligibility and Certifications

- Tier 1 eligibility mirrors the current RPS Main Tier with a few exceptions:
 - 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
 - Commence operation after 1/1/2015.
- Tier 2 eligibility is similar to RPS Maintenance Resource programs.
- Generation facility certification will be available on a continuous basis.



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.



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

Application of Portfolio Risk Assessment



Settlement/Compliance

- LSEs must demonstrate compliance with the CES's RES Tier 1 and ZEC programs for each compliance period.
- Alternative Compliance Payments (ACPs) under RES to NYSERDA
- State Compliance Reporting



CES Next Steps



Next Steps

- NYSERDA to sign contracts with 150+ LSEs to sell ZECs and RECs for upcoming compliance year
- Pending Order clarifying treatment of behind-the-meter resources
- Public comment on 2017 Implementation Plan, followed by Commission Order
- NYSERDA Tier 1 New Renewable Resource REC procurements begin in Spring 2017
- Next Phase Implementation Plan mid 2017
- Off-Shore Wind Master Plan December 2017



Critical work to Support CES Goals

- NY-Sun
- Off-Shore Wind development strategy
- Renewable resource siting initiative under development
- Energy storage market development initiative
- Energy storage+PV initiative under development
- Smart grid and distributed resource integration process, policy, technology
- Energy efficiency work
- Analytical work (e.g., State Resource Plan...)
- R&D and innovation capacity development

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Thank You

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