Case 15-E-0302

Clean Energy Standard

2019 Divergence Test and Target Setting Filing

Filed by

Staff of the New York State Department of Public Service

and

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Introduction

The NYS Public Service Commission's (Commission) Order Adopting a Clean Energy Standard[1] directed Department of Public Service Staff (Staff) to perform an annual divergence test as a safeguard against an oversupply or undersupply of Tier 1 Renewable Energy Credits (RECs). The criteria for the divergence test was detailed in the Final Phase 2 Implementation Plan (Phase 2 Plan) filed by Staff and the New York State Energy Research and Development Authority (NYSERDA) on December 18, 2017, in conformance with the Commission's Order Approving Phase 2 Implementation Plan.[2]

The Phase 2 Plan provides a detailed process for Staff and NYSERDA to determine whether a significant and persistent under- or oversupply condition exists in order to allow for mitigation prior to or during the triannual review. The process consists of three steps: (1) an evaluation of whether current Tier 1 REC supply conditions trigger concern; (2) a forward-looking evaluation to assess whether a course-correction is needed, and (3) if such a course correction appears necessary, the establishment of a course-correcting action.[3]

In accordance with the Phase 2 Plan, the divergence test is to be applied over two consecutive Renewable Energy Standard (RES) compliance years. A potentially problematic undersupply is triggered if the volume of Alternative Compliance Payments (ACPs) is, (1) in the first of those years, in excess of 10 percent of the total megawatt-hour Tier 1 RES obligation for that year, and (2) in the second year, at least 20 percent of the total megawatt-hour Tier 1 RES obligation for that second year. The identification of a potentially problematic oversupply is triggered if banking of Tier 1 RECs by NYSERDA is, (1) in the first of those years, in excess of 10 percent of the total megawatt-hour Tier 1 RES obligation in the first year and (2) at least a 20 percent of the total megawatt-hour Tier 1 RES obligation in the second year.[4]

Additionally, the Final Phase 3 Implementation Plan (Phase 3 Plan), which was filed by Staff and NYSERDA on January 11, 2019 in conformance with the Commission's Order Approving Phase 3 Implementation Plan,[5] indicated that the divergence test process will also inform the setting of the rolling 3-year trajectory of Tier 1 REC obligations and future procurement targets, regardless of whether it shows a problematic supply/demand mismatch.[6]

The 2019 divergence test is the first-such annual analysis to be conduct under the Clean Energy Standard.

2019 Divergence Test

The 2019 divergence test analyzed the 2017 and 2018 RES compliance years to identify potential problematic under- or oversupply conditions. The results of this analysis are presented in Tables 1 and 2.

Table 1 provides the data that was utilized in the analysis to demonstrate if the trigger for a potential undersupply condition was met. The use of ACPs by Load Serving Entities (LSEs) to meet their RES

[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 August 1, 2016) (CES Framework Order), p. 117.
[2] Case 15-E-0302, supra, Order Approving Phase 2 Implementation Plan (issued November 17, 2017).
[3] Case 15-E-0302, supra, Final Phase 2 Implementation Plan, p. 7.
[4] Case 15-E-0302, supra, Final Phase 2 Implementation Plan, p. 7.
[5] Case 15-E-0302, supra, Order Approving Phase 3 Implementation Plan (issued on December 14, 2018).
[6] Case 15-E-0302, supra, Final Phase 3 Implementation Plan, p. 15.

obligations in both 2017 and 2018 RES compliance years exceeded the divergence test criteria. As a result, a forward-looking evaluation was conducted to assess whether course-correction was advisable.

Table 1. Undersupply Analysis

Year	Total Statewide Load (MWh)	RES Obligation Percentage	Tier 1 REC Obligation	ACPs Necessary	ACP %	Meets/Exceeds Divergence Test Criteria	Trigger Met
2017	153,162,158	0.035%	53,601	12,811	24%	Yes	Yes
2018	157,768,527	0.15%	236,574	123,147	52%	Yes	

Table 2 provides the data that was utilized in the analysis to demonstrate if the trigger for a potential over-supply condition was met. NYSERDA banked Tier 1 RECs for the 2017 RES compliance year exceeded the divergence test criteria. Therefore, during the 2017 RES compliance year, both the under- and oversupply divergence test criteria were met.

Table 2. Oversupply Analysis

Year	Tier 1 REC Obligation	NYSERDA Banked Tier 1 RECs	Banking Percentage	Meets/Exceeds Divergence Test Criteria	Trigger Met
2017	53,601	14,088	26%	Yes	No
2108	236,574	2,382	1%	No	

Discussion

As described in the Phase 2 Plan, Staff and NYSERDA performed this divergence test assessment based upon available information[7] to determine whether the undersupply identified by the divergence test was of sufficient concern to recommend mitigation prior to the triannual review scheduled for June 2020.[8]

The assessment reviewed Tier 1 REC availability based on the status of eligible supply already certified, supply contracted for by NYSERDA or others but not yet commercially operational, the status of projects under development in the region, adjacent control area certificate trends across the region, and trends in renewable technology costs. In addition, Staff and NYSERDA also reviewed the level of LSE participation in the NYSERDA quarterly Tier 1 REC sales process and LSEs use of ACPs to meet their RES compliance obligations.

Recommendation

Based on this assessment, Staff and NYSERDA do not believe that the 2017/2018 undersupply situation is problematic, material, or persistent. Staff and NYSERDA recognize that while the Clean Energy Standard is in the early stages of implementation and LSE obligations are still low, there is a large pipeline of projects which will be available in the future to meet increasing LSE obligations. Based on informal discussions, Staff and NYSERDA believe these factors have contributed to the willingness of some LSEs to meet their RES compliance obligations through the use of ACPs at the outset of the

[7] Case 15-E-0302, supra, Final Phase 2 Implementation Plan, p. 7.
[8] Case 15-E-0302, supra, Final Phase 3 Implementation Plan, p. 21.

program. It is anticipated that this situation will ease as New York's renewable energy targets and supply increase in coming years.

2022 LSE Compliance Obligation Calculation

The recently enacted Climate Leadership and Community Protection Act (CLCPA) mandates, in part, that 70% of the electricity consumed in New York will be from renewable resources by 2030. At this time, the energy targets of the CLCPA have not yet been adopted by the Commission. As a result, the calculation of the 2022 LSE compliance obligation and NYSERDA procurement target have been based on the RES program as currently authorized. Future analyses will reflect the goals of the CLCPA once those standards are adopted by the Commission.

The Phase 3 Plan specified that Staff and NYSERDA would develop and include as part of future divergence tests a rolling trajectory of no less than 3 years for the LSE mandated Tier 1 obligations and Tier 1 REC procurement targets. The purpose of such updates is to allow LSEs, renewable developers and other market participants to incorporate the forward view into their planning processes.

Staff and NYSERDA developed the 2022 LSE mandated percentage target and the Tier 1 REC procurement target using a process consistent with the CES Framework Order and the Commission's November 2016 Clarification Order.[9] The aggregate statewide Commission jurisdictional load, for which LSEs are expected to procure RES Tier 1 RECs or make ACPs in fulfillment of their RES compliance obligations, were calculated using the methodology provided in the CES Framework Order and further clarified in the Phase 2 Plan.

The percentage obligation target was derived based on (1) the sum of Tier 1 RECs expected to be generated in each year from projects under contract under RPS Main Tier solicitations conducted through 2016 plus expected Tier 1 RECs procured through RES solicitations by NYSERDA, as they become operational, plus those behind-the-meter (BTM) RECs from new distributed renewable energy resources that are deemed eligible (facilities receiving Tier 1 RECs under the Value of Distributed Energy Resources)[10], divided by (2) the forecasted aggregate statewide Commission jurisdictional load. Forecasted jurisdictional load is based on the load forecast developed by the New York Independent System Operator, Inc. (NYISO) in its Load and Capacity Data Report (Gold Book), minus a projection of additional energy efficiency (beyond those contemplated by the NYISO in its forecast) minus Long Island Power Authority (LIPA) and New York Power Authority (NYPA) allocated load.

[9] Case 15-E-0302, supra, Order Providing Clarification (issued November 17, 2017).

[10] Renewable facilities that receive compensation for the environmental component of the value stack in VDER (the "E-value"), are required to assign the RECs generated by such facilities to the interconnecting utility. The utility may use such RECs to satisfy the Tier 1 obligation.

Table 3 below reflects the mandated LSE Tier 1 obligations, now extended through 2022:

Table 3. LSE Tier 1 Compliance Obligations

Year	Annual Tier 1 LSE Obligation
2019	0.78%
2020	2.84%
2021	4.20%
2022	8.40%

2022 Tier 1 REC Procurement Targets

As referenced above, the 2022 Tier 1 REC procurement target was developed using a process consistent with the CES Framework Order and the Commission's November 2016 Clarification Order. The analysis conducted by Staff and NYSERDA developed the future statewide renewable energy procurements targets necessary to reach the Commission's CES goals. The analysis then allocated a portion of the statewide procurement targets to both LIPA and NYPA - based on each entity's share of the statewide load served.

Table 4 illustrates each procuring entities' anticipated Tier 1 REC procurement targets through 2022.

Table 4. Anticipated Tier 1 REC Procurement Targets (MWh)

Year	Jurisdictional (procured by NYSERDA)	LIPA	NYPA	Total Tier 1 Procurements
2019	1,524,108	256,483	296,969	2,077,560
2020	1,564,863	263,342	304,911	2,133,116
2021	1,605,619	270,200	312,852	2,188,671
2022	1,900,000	280,000	320,000	2,500,000