Case 15-E-0302

Clean Energy Standard

2021 Divergence Test and Target Setting Filing

Filed by

The New York State Energy Research and Development Authority

and

Staff of the New York State Department of Public Service

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Introduction

In the CES Framework Order,[1] the New York Public Service Commission (Commission) 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 Certificates (RECs) procured under the Renewable Energy Standard (RES). The Tier 1 program operates through a demand obligation on each load-serving entity (LSE), which must either procure RECs produced by eligible Tier 1 facilities to serve a specified percentage of its load or make up any shortfall by making Alternative Compliance Payments (ACPs). The LSE obligation is determined based on projections of the sum of: (1) the expected available volume of Tier 1-eligible RECs under contract; and (2) the expected Tier 1-eligible RECs conveyed to investor-owned utilities (IOUs) from projects compensated under the Value of Distributed Energy Resources (VDER) Value Stack. The CES Framework Order set LSE obligation percentages through 2021, while the 2022 obligation was established in the 2019 Divergence Test[2] and the 2023 obligation was established in the CES Modification Order.[3] The Commission directed subsequent obligations to be established on a three-year rolling trajectory.

The divergence test is intended to correct for significant disparities between the demand and supply of Tier 1 RECs, the latter of which is largely a product of New York State Energy Research and Development Authority (NYSERDA) procurements. The 2017 Phase 2 Implementation Plan (Phase 2 Plan) provided a detailed process to determine whether a significant and persistent under or oversupply condition exists in the Tier 1 REC marketplace.[4] The review consists of three steps: (1) an evaluation of whether current Tier 1 REC supply and demand conditions trigger concern; (2) a forward-looking evaluation to assess whether a course-correction is needed; and (3) the establishment of a course-correcting action if mitigation appears necessary.[5] Mitigation is warranted if the evaluation finds evidence that supply and demand are on diverging paths and these conditions are unlikely to self-correct given forecasted market conditions.

The annual divergence test is to be applied over two consecutive RES compliance years. A potentially problematic *undersupply* exists if the volume of ACPs made by LSEs: (1) exceeds

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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, 2019 Divergence Test and Target Setting Filing (filed September 30, 2019).

3 Case 15-E-0302, Order Adopting Modifications to the Clean Energy Standard (issued October 15, 2020) (CES Modification Order).

4 See, Case 15-E-0302, Order Approving Phase 2 Implementation Plan (issued November 17, 2017); and, Case 15-E-0302, supra, Final Phase 2 Implementation Plan (filed December 18, 2017) (Phase 2 Plan).

5 Phase 2 Plan, p. 7.

ten percent of the total Tier 1 obligation in the first compliance year; and (2) is at least 20 percent of the total Tier 1 obligation in the second compliance year. The identification of a potentially problematic *oversupply* is triggered if banking of Tier 1 RECs by NYSERDA: (1) exceeds ten percent of the total Tier 1 obligation in the first compliance year; and (2) is at least 20 percent of the total Tier 1 obligation in the second compliance year.[6]

The 2019 Phase 3 Implementation Plan (Phase 3 Plan) clarified that the divergence test process will also inform the setting of the rolling three-year trajectory of Tier 1 obligations.[7] The 2020 Phase 4 Implementation Plan (Phase 4 Plan) established the ability of NYSERDA and Department of Public Service Staff (DPS Staff) to review and adjust the ACP calculation methodology as part of the annual divergence test in order to ensure that ACP prices are not punitive or burdensome to ratepayers.[8] Lastly, the CES Modification Order directed NYSERDA to revise in the divergence test the average annual amount of renewable generation procured, considering the most recent data for the year, with the goal to make up any shortfalls in the following year's solicitation. The Commission declined to adopt minimum or maximum GWh requirements for each solicitation, instead allowing NYSERDA to adjust annual procurement targets by means of the divergence test based on procurement activities of non-jurisdictional LSEs, updated information on project attrition, changes in project load, and parallel project development amongst offshore wind and distributed solar (Tier 4 excluded) during the biennial review.

<u>2019 and 2020 Divergence Tests</u>

In 2019, DPS Staff and NYSERDA conducted the first annual divergence test as required by the CES Framework Order. The evaluation included a review of Tier 1 REC availability in 2017 and 2018 based on the status of eligible supply already certified, supply contracted by NYSERDA or others but not yet in commercial operation, the status of projects under development in the region, REC trends in adjacent control areas, and trends in renewable energy technology costs. The analysis determined that ACP payments represented 25 percent and 52 percent of Tier 1 obligations in 2017 and 2018, respectively, thereby exceeding in both compliance years the thresholds that indicate a potential REC deficit and prompting an evaluation to assess the need for mitigation measures. NYSERDA and DPS Staff ultimately determined that the REC undersupply situation was not problematic, material, or persistent. This conclusion was based on an assessment that the RES is in its early stages, that the compliance costs were low, and that there was a large pipeline of projects contracted or under development that are expected

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6 Phase 2 Plan, p. 7.

7 Case 15-E-0302, Final Phase 3 Implementation Plan (filed January 11, 2019) (Phase 3 Plan), p. 15.

8 Case 15-E-0302, Final Phase 4 Implementation Plan (filed September 14, 2020) (Phase 4 Plan).

to be available in the future to meet increasing LSE obligations, which contributed to the willingness of some LSEs to meet their RES compliance obligations through the use of ACPs.

In the 2020, NYSERDA and DPS Staff agreed to combine the Divergence Test and the Triennial Review due to concurrent timing and overlapping analysis. The Triennial Review, which included an analysis of the 2018 and 2019 compliance years,[9] found that an undersupply of Tier 1 RECs in 2019 was evident. The Triennial Review also concluded that Tier 1 RECs originating from distributed renewable energy projects under Value of Distributed Energy Resources (VDER) would increase and could help to moderate the supply gap. Based on review of market conditions and Tier 1 REC forecasts, NYSERDA and DPS Staff recommended a course correction of LSE obligation percentages in the White Paper on Clean Energy Standard Procurements to Implement New York's Climate Leadership and Community Protection Act (2020 White Paper).[10] This recommendation was adopted by the Commission's CES Modification Order.

<u>2021 Divergence Test</u>

The 2021 divergence test analyzed compliance years 2019 and 2020 in accordance with the Phase 2 Implementation Plan. As shown in Table 1, the use of ACPs by LSEs to meet Tier 1 obligations exceeded established divergence test criteria in both compliance years evaluated.

Table 1. Undersupply Analysis

Year	Statewide Load (MWh)	RES Obligation Percentage	Tier 1 REC Obligation	ACPs Made*	ACP %	Exceeds Divergence Test Criteria
2019	153,197,417	0.780%	1,194,863	376,825	32%	Yes
2020	147,944,438	2.840%	4,201,544	2,533,720	60%	Yes

* ACPs necessary for 100% compliance

The oversupply analysis in, as set forth in Table 2, confirmed that REC oversupply conditions were not met in either compliance year.

Table 2. Oversupply Analysis

	Tier 1 REC Obligation	NYSERDA Banking	Banking Percentage	Meets/Exceeds Guidance	Trigger Met
2019	1,194,863	3,847	0.32%	No	No
2020	4,201,544	4,661	0.11%	No	

9 Case 15-E-0302, Renewable Energy Standard Program Impact Evaluation and Clean Energy Standard Triennial Review (filed August 2020).

10 Case 15-E-0302, White Paper on Clean Energy Standard Procurements to Implement New York's Climate Leadership and Community Protection Act (2020 White Paper), p. 67.

Discussion

In accordance with the Phase 2 Plan, DPS Staff and NYSERDA performed this divergence test assessment based upon available information to determine whether the undersupply identified by the divergence test was of sufficient concern to recommend mitigation measures. 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, DPS Staff and NYSERDA also reviewed the level of LSE participation in the NYSERDA quarterly Tier 1 REC sales process and their use of ACPs to meet their RES compliance obligations.

As Table 1 illustrates, the analysis indicates that ACP payments constituted 32 percent and 60 percent of Tier 1 obligations in 2019 and 2020, respectively. These percentages surpassed the limits set by divergence test criteria, and, consequently, DPS Staff and NYSERDA conducted a forward-looking evaluation to assess whether any course-correction measures were advisable. This evaluation has determined that the imbalance in 2019 and 2020 was sufficiently problematic to require appropriate mitigation measures. Unlike in the 2019 Divergence Test where the RES obligation was relatively new and the program was just ramping up, DPS Staff and NYSERDA has determined that two additional compliance years of high ACP percentages constitute a persistent REC undersupply situation and therefore warrant recommended mitigation measures to protect ratepayers. As Table 2 indicates, no oversupply situation exists at the present time.

Recommendations

The high rate of ACP purchases to meet LSE obligations is likely the result of ongoing construction delays that many Tier 1 projects are encountering as a result of a variety of factors, including delayed siting approvals, interconnection delays, and supply chain disruptions. DPS Staff and NYSERDA expect that the actions taken pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, including the creation of the Office of Renewable Energy Siting, will significantly alleviate siting delays in the near term. The Commission noted the same when it lowered the LSE obligation in the CES Modification Order in 2020. NYSERDA and DPS Staff therefore expect this undersupply situation to correct itself in the coming years but recommend that mitigation measures are needed in the short term.

To limit the number of ACPs that must be purchased over the coming two years, DPS Staff and NYSERDA recommend that the LSE obligation be lowered. Presently, the 2023 obligation is 8.20 percent, which was established in the CES Modification Order, while the 2024 obligation has yet to be established. DPS Staff and NYSERDA recommend LSE obligation percentages in 2023 and 2024 of 6.16 percent and 6.45 percent, respectively, in addition to the already established 2021 and 2022 obligations of 2.04 percent and 5.61 percent, respectively. These LSE obligation percentages took into consideration the revised anticipated maturation of projects based on their interconnection queue position and known construction issues that are delaying project completion timelines. Table 3 illustrates the revised LSE obligations for 2023 and 2024 along with the existing 2021-22 percentages.

Table 3. Tier 1 Compliance Obligation Percentages

Year	LSE Obligation
2021	2.04%
2022	5.61%
2023	6.16%
2024	6.45%

These LSE obligation percentages were developed consistent with the CES Framework Order, the Clarification Order,[11] and the CES Modification Order. 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 Renewable Portfolio Standard (RPS) Main Tier Solicitations conducted through 2016, plus expected Tier 1 RECs procured through RES solicitations by NYSERDA as they become operational, plus those Tier 1 RECs under VDER; (2) divided by the forecasted aggregate statewide Commission jurisdictional load. Forecasted jurisdictional load is based on the load forecast developed by the New York Independent System Operator (NYISO) in its Load & Capacity Data Report (Gold Book), minus a projection of additional energy efficiency (beyond those contemplated by the NYISO in its forecast), and minus Long Island Power Authority (LIPA) and New York Power Authority (NYPA) allocated load.

DPS Staff and NYSERDA are interested in exploring a different approach to the Tier 1 RES method of allocating costs of the program to LSEs. Currently, LSEs may fulfill their obligation using three different methods: (1) purchasing RECs from NYSERDA; (2) self-suppling RECs by purchasing qualified RECs from other sources; or (3) making ACPs to NYSERDA.[12] Delay in the commercial operation of Tier 1 contracted facilities has lowered REC quantities available under option (1), and the self-supply option is either limited or unavailable to the majority of LSEs. The resulting reliance on ACPs thus places an additional burden on ratepayers. All other CES programs except the Maintenance Tier, determine LSE requirements based on load share, with no resort to market-based purchases or ACPs. Under the Competitive Tier 2 REC program, for example, NYSERDA only collects sufficient funds, after the reconciliation process, necessary for NYSERDA to fund the purchase of Tier 2 RECs from the contracted generators. DPS Staff and NYSERDA will seek informal feedback from stakeholders to determine whether it would be in the State's interest to move the Tier 1 program from the current market-based collection of

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

[12] CES Framework Order, p. 16

funds from LSEs as a cost recovery method to one based on LSE load share. Following that feedback, if DPS Staff and NYSERDA determine that it would be in the State's best interest to modify the way the Tier 1 LSE obligation is calculated to utilize a method based on the LSE load share, DPS Staff and NYSERDA will file a more thorough proposal for such a modification for public comment and Commission consideration.