STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on March 15, 2018

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Gregg C. Sayre
Diane X. Burman
James S. Alesi

CASE 15-E-0302 - Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.

ORDER ADOPTING MEASURES FOR THE RETENTION OF EXISTING RENEWABLE BASELINE RESOURCES

(Issued and Effective March 16, 2018)

BY THE COMMISSION:

INTRODUCTION

By this Order, the Commission modifies Tier 2 of the Renewable Energy Standard (RES) Program to improve the programs capacity to support existing baseline resources when necessary, in a cost-efficient way. Specifically, the Commission: i) expands eligibility to include eligible facilities in operation prior to January 1, 2015,[1] and establishes delivery requirements consistent with those for Tier 1; ii) increases the size of eligible hydroelectric facilities from 5 MW to 10 MW; iii) revises the "to-go-cost" standard as detailed below; iv) provides for a streamlined review process, while maintaining a more detailed review process to suit the various needs of

[1] The previous vintage date for eligible facilities was January 1, 2003.

individual facilities; and v) establishes a standard contract term of three years with the potential for contract renewals. Overall, the changes will help reduce the administrative burden of facilities seeking maintenance support, and better recognize the environmental contribution of baseline resources.

To ensure that the program remains a cost-effective procurement strategy, facilities must demonstrate a financial need whereby the facility would cease operations but for a Tier 2 maintenance contract. Imposition of a hard cap on the cost per MWh of maintenance contracts at the then current Tier 1 REC price also ensures that the program remains a cost-effective tool to reach New York's goal that 50% of all electricity consumed in the State be sourced from renewable energy by 2030 (50 by 30 goal).[2]

BACKGROUND AND PROCEDURAL HISTORY

This Order continues a series of Commission and State actions to increase the use of renewable electric generation, and to ensure that both new and existing renewable resources receive targeted, adequate, and prudent support for their development and operations.

The Commission adopted the Renewable Portfolio Standard (RPS) Maintenance Tier in October 2005,[3] and limited the program to run-of-river hydroelectric facilities of 5 MW or less, wind facilities, and biomass direct combustion facilities. To be eligible, facilities must have begun commercial operation any time prior to January 1, 2003, and have been included in New York's baseline of renewable resources calculated when the

[2] Case 15-E-0302, et al., Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016).

[3] Case 03-E-0188, Retail Renewable Portfolio Standard, Order Approving Modifications to Maintenance Resource Category, (issued October 31, 2005).

former RPS program was first adopted. Over the course of the RPS Program, the Maintenance Tier received ten applications for support resulting in awards by the Commission to four facilities. According to the RPS Annual Performance Report for the year ended December 31, 2016, $38.5 million has been awarded to support approximately 43.8 MWs and 1,852,388 MWhs for an average weighted cost of $20.78 per MWh of baseline resources in the RPS program.

In January 2016, Staff of the Department of Public Service (Staff) issued a white paper on design options for a Clean Energy Standard (CES).[4] The white paper recommended developing new renewable resources under a Tier 1 component and provided an approach to maintain existing renewable resources under a Tier 2 component, which was divided into sub-tiers 2A and 2B. The tier distinctions were intended to recognize different financial needs and opportunities for new and existing facilities. Tier 2A represented existing renewable resources that would be eligible to compete in other states' renewable energy programs. Tier 2B was intended to provide sufficient revenue to maintain New York's renewable baseline facilities not eligible for RPS programs in adjacent control areas.

On August 1, 2016, the Commission issued an Order Adopting a Clean Energy Standard (CES Framework Order), which established two primary programs.[5] The first, the RES, includes a Tier 1 obligation on all load-serving entities (LSEs) to financially support new renewable generation resources to serve their retail customers, and a maintenance program which supports the maintenance of certain at-risk baseline resource attributes

[4] Case 15-E-0302, et al., supra, Staff White Paper on Clean Energy Standard (issued January 25, 2016).

[5] Case 15-E-0302, et al., supra, Order Adopting a Clean Energy Standard (issued August 1, 2016).

from small hydro, wind and biomass generation facilities that demonstrate a financial need and that would cease operations without such support. The second major program, the Zero-Emissions Credit (ZEC) program, includes an obligation on LSEs to financially support the preservation of existing, at-risk nuclear zero-emissions attributes to serve their retail customers.

Rather than adopt a multi-tiered program for existing facilities, the Commission renewed the former RPS Maintenance Tier, including the same eligible technologies, in a single RES program.[6] Each facility seeking support under the program is required to demonstrate that, but for the maintenance contracts, the facility will cease operations and no longer produce positive emission attributes. Maintenance contracts are provided on a case-by-case basis, and relief is tailored to the situation presented. The costs of Tier 2 contracts, which are limited in relation to other CES costs, are to be recovered from delivery customers in the same manner as in the RPS Program Maintenance Tier, or from such other sources as the Commission shall determine.

On December 15, 2016, the Commission issued an Order on Petitions for Rehearing (December 2016 Order) declining to rehear issues related to existing renewable facilities. However, the Commission directed Staff to prepare recommendations for changing the eligibility requirements for existing renewable facilities without waiting for the first triennial review. In addition, the Commission directed Staff to identify how complimentary initiatives such as Community Choice Aggregation (CCA) and other voluntary renewable energy purchases may be able to assist baseline renewable generators.

[6] Case 15-E-0302, supra, Order Adopting a Clean Energy Standard, p. 117.

On June 5 and June 27, 2017, Staff conducted roundtable discussions with stakeholders to receive input on Tier 2 eligibility and repowering of existing facilities, and invited stakeholders to submit written comments after each session.[7] In developing its recommendations, Staff considered those comments as well as those received in response to a Secretary Notice Soliciting Comments regarding Staff's report. Staff filed its report on October 19, 2017 (Staff Report).[8]

Staff Report

The Staff Report makes several recommendations. First, Staff recommends revising the eligible vintage date to allow eligible facilities that were in commercial operation prior to January 1, 2015 to be eligible for Tier 2 support. Specifically, Tier 2 eligible facilities include all non-state owned, run-of-river hydroelectric, wind, and biomass direct combustion facilities, which are not currently under contract to sell the environmental attributes associated with the generated energy, provided the facility was in operation prior to January 1, 2015. Eligible resources would also be required to demonstrate their verifiable unit-specific generation will be delivered to New York during 2014 and for the life of any Tier 2 contract.

Staff also recommends increasing the eligibility size threshold for small hydroelectric facilities from 5 MW up to 10 MW. For all eligible technologies, the evaluation of need would

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[7] Azure Mountain Power (Azure Mountain); Ampersand Hydro, LLC (Ampersand); ReEnergy Holdings, LLC (ReEnergy); the Joint Utilities and Noble Environmental Power, LLC (Noble) and Invenergy Renewables LLC submitted written comments following the June 5 Tier 2 roundtable forum.

[8] Case 15-E-0302, supra, Staff Report Regarding Retention of Existing Baseline Resources Under Tier 2 of the Renewable Energy Standard Program (issued October 19, 2017).

continue using the to-go-costs analysis, but provide for a return on capital for future authorized capital expenditures as well as a 5% risk contingency of forecasted operations and maintenance expenses (O&M). The risk contingency would be included as a projected operating expense in calculating the facility's net income. The return would only apply to capital expenditures necessary to maintain the safe and efficient operation of the facility after Staff verification. The return on investment on new capital expenditures will not be considered in the calculation of the risk contingency.

To minimize any administrative burden associated with applying for a maintenance contract, Staff recommends the provision of a streamlined review process with standardized filing requirements and contract terms. The streamlined review would offer a three-year contract term, standardized inflation factors for forecasts of costs and revenue, and a generic weighted cost of capital. Staff recommends maintenance applications and accompanying financial statements include an attestation by an independent certified public accountant (CPA) that the information included in the financial statements has been audited and accurately represents the operations of the facility seeking maintenance support. Applications proposing capital expenditures must also include bid proposals and engineering reports.

Staff indicates that it would be able to submit for Commission consideration a streamlined review application that is correct, complete and compliant, in an expedited manner. Successful applications would be eligible to receive a support contract price to cover the projected shortfall between total forecasted revenues and total forecasted operating costs necessary to provide a net income of zero, up to a maximum incentive of the then current Social Cost of Carbon (SCC) price

minus the Regional Greenhouse Gas Initiative (RGGI) allowance price for a maintenance contract with a three-year term.

Staff further recommends continuing the case-by-case review for those facilities for which a more comprehensive evaluation of financial statements and a more customized support structure is necessary. The case-by-case review could result in an attribute payment designed to cover the projected shortfall between total forecasted revenues and total forecasted operating costs necessary to provide a net income of zero, up to a maximum payment of the then current Tier 1 REC price, per the most recently published large-scale renewable solicitation. Like the streamlined review, Staff recommends a standard three-year contract term under the case-by-case review. For both the streamlined and the case-by-case review, Staff recommends an opportunity for contract renewal based on a demonstration of continuing need.

Related to repowering of existing renewable facilities, the Staff Report recommends maintaining the existing eligibility rules. Under the current CES rules, an existing renewable facility is permitted to bid any incremental generation above its baseline production that results from capital improvements completed at the facility, into a competitive CES solicitations.[9]

Similarly, the Staff Report does not recommend any changes to the RES or additional programs related to voluntary markets. The Staff Report does recommend that existing

[9] The incremental generation is subject to verification by an independent engineer's report, submitted as part of the CES provisional certification process.

facilities continue to seek guidance from the on-going Value of Distributed Energy Resources (VDER) proceeding.[10]

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on November 8, 2017 [SAPA No. 15-E-0302SP30]. In addition, a Notice Soliciting Comments on Staff Report Regarding Retention of Existing Baseline Resources Under Tier 2 of the Renewable Energy Standard was issued on October 20, 2017. The time for submission of comments pursuant to both notices expired on January 8, 2018. Comments on the Staff Report were received from: the Alliance for Clean Energy New York, Advanced Energy Economy Institute and the Northeast Clean Energy Council (collectively ACE); Ampersand Hydro, LLC; Azure Mountain Power; Brookfield Renewable Partners, L.P.; Environmental Advocates of New York, Natural Resources Defense Council, Pace Energy & Climate Center (collectively Clean Energy Advocates or CEA); Enel Green Power North America; Energy Ottawa Inc.; H.Q. Energy Services (U.S.) Inc. (HQ); Institute for Policy Integrity as New York University School of Law; Joint Utilities;[11] Multiple Intervenors; New York City; Noble Environmental Power, LLC.; ReEnergy Holdings, LLC.; and TerraForm Power, LLC. In addition to the comments, the Sierra Club, NRDC, Pace Energy and Climate Center, Environmental Advocates of New York, and ACE NY, filed a request for an accounting of Tier 2 on December 12, 2017, and

[10] VDER eligibility issues are an ongoing topic of discussion in the Value Stack Working Group in Case 15-E-0751, which uses the Document and Matter Management (DMM) number 17-01276, accessible at http://www.dps.ny.gov.

[11] The Joint Utilities are: Central Hudson Gas & Electric Corporation; Consolidated Edison Company of New York, Inc.; New York State Electric & Gas Corporation; Niagara Mohawk Power Corporation d/b/a/ National Grid; Orange and Rockland Utilities, Inc.; and Rochester Gas and Electric Corporation.

a report titled "Policies to Cost-Effectively Retain Existing Renewables in New York" prepared by Synapse Energy Economics, filed on December 22, 2017. Further, 45 individuals, including employees and State and local officials, submitted comments specifically related to Noble Environmental Power LLC projects in Clinton and Franklin counties.[12] The comments, Synapse report, and the accounting request are addressed below.

Summary of Comments

ACE

In its comments, ACE argues that financial hardship should not be a threshold criterion. ACE further argues that Staff's report fails to properly assess the current and future risk associated with export or retirement of existing baseline resources and states that this view of Staff's report motivated Clean Energy Advocates' request for a detailed accounting related to existing renewable generation facilities. ACE argues that the Synapse report (summarized below) supports creating an obligation on LSE's to support existing renewable resources and such an obligation would be the most cost-effective method for maintaining these facilities.

ACE also notes that most of the proposed changes to the Maintenance Tier are positive. However, ACE claims that these changes could go further and do not obviate the need for a LSE obligation to support existing facilities. ACE suggests that the size threshold for hydropower should be increased beyond 10 MW and that any criteria related to existing hydroelectric generators be consistent with Tier 1 criteria, except the vintage date.

[12] Between September 27 and October 13, approximately 45 letters were filed in support of extending the 10-year RPS contracts for the Noble Environmental Power projects in Clinton and Franklin counties, which are due to expire in 2017 and 2018.

ACE argues that there is no need for a price cap if eligibility for maintenance support continues to be considered on a case-by-case basis. Alternatively, if the Commission does impose a cap, ACE claims it should be the prevailing Tier 1 REC price rather than the social cost of carbon.

ACE also argues that the full output of a repowered facility should be eligible for CES Tier 1. The repowering of existing renewable energy projects, which will attract private investment and modernize New York's electricity generating infrastructure, should be strongly encouraged according to ACE.

ACE submitted three questions regarding a Tier 2 recipient also being able to participate in the VDER tariff. First, would a generator participating in the Maintenance Tier definitively be able to participate in VDER? Second, would a generator participating in the Maintenance Tier also be able to sell their RECs into the voluntary market? Third, would a pre-2015 generator participating in the VDER tariff also be able to sell their RECs into the voluntary market?

Ampersand

Ampersand advocates for providing financial support equivalent to the ZEC attribute payments, arguing that the such a program would be more equitable, economically efficient, and administratively straight-forward than Staff's proposal. Alternatively, Ampersand advocates for modifying Staff's proposal. Ampersand argues financial statement documents are sufficient and requiring audited documents is unnecessary for the streamlined process. Ampersand also states that independent engineering reviews should not be required for smaller capital expenditures and that requiring three years of audited statements may be an unacceptable barrier for some generators. Ampersand further advocates for a minimum contract term of seven years; substituting forward prices for CARIS forecasts for the

initial years of the analysis; and recognizing management fees as an appropriate to-go-cost.

The prohibition against intercompany allocations without an invoice for actual services provided is counterproductive, according to Ampersand. Ampersand argues that this is inconsistent with the way business processes actually work, and contrasts with the use of allocation factors for regulated entities. The Commission should allow allocated costs from affiliates, provided the allocation factor is explained in reasonable detail. Ampersand claims that entities eligible for ZECs were not held to a similar to-go-cost standard and that such standard will force any plant with debt into bankruptcy.

Ampersand states that generators with pending Maintenance Tier petitions should not have to refile in order to attain the benefits associated with Commission approval of Staff's proposal. Ampersand welcomes Staff's risk contingency proposal, but claims a 10% contingency would be more rewarding relative to the risk faced by some generators.

Ampersand claims that voluntary opportunities are not realistic, and argues that it has an ownership right in its emission attributes such that the Commission's failure to provide compensation equivalent to ZECs is an inappropriate taking without compensation.

Azure Mountain Power

Azure Mountain supports broad and inclusive support for existing renewable generators, and argues against a financial need requirement. Azure Mountain agrees with Ampersand that a cost-effective method for retaining existing renewable generators includes a mandate. However, Azure favors a mandate similar to Tier 2A as proposed in the CES Staff White Paper, rather than a ZEC equivalent. Azure Mountain credits the

existing maintenance program with the continuing operation of its facility at St. Regis Falls, NY. The company also credits extreme ingenuity and thrift, uncompensated time and labor from owners and the community to make up for a shortfall in a major construction project not covered by the maintenance tier award.

Azure Mountain encourages the inclusion of borrowing costs as part of a return on capital invested. Azure supports a 25% contingency cost based on the severe variability with run-of-river facilities. Azure Mountain advocates for the simplification of the maintenance tier process and supports the introduction of a streamlined review. Azure Mountain states that it is important that longer term awards be available to facilities that need substantial capital upgrades. Azure Mountain believes that repowered facilities should be compensated for all of their attributes, not just those associated with incremental power.

Azure Mountain believes that all RECs associated with the renewable baseline should be tracked, and only power associated with RECs which can be positively identified as retired on behalf of New York customers should be included when accounting for the 50 by 30 goal. The company also questions the assertion that the State can count production towards the 50-by-30 goal without tracking or securing the RECs is flawed.

Azure Mountain also believes in the potential for unbundled REC purchases by CCA entities to support baseline renewables. Azure Mountain suggests that the incentive be adjusted to encourage CCAs to source RECs from in-state generators regardless of Green-e status. Azure Mountain believes that the larger opportunity lies in the confluence of CCA and the utilization of Value Stack crediting to meaningfully boost the value of production, and encourages Staff and the Commission to work with CCA administrators to break down the

barriers for development by CCAs through simplified or consolidated billing.

Brookfield Renewable Partners, L.P.

The current maintenance program, as well as Staff's recommendations, will lead to inefficient program outcomes and increased ratepayer costs, according to Brookfield. Brookfield argues that all existing renewable generators should be paid, and demonstration of need is unnecessary. Brookfield also argues that repowered plants should be fully recognized under Tier 1. Brookfield also argues that it is difficult to increase the output of an existing hydroelectric plant by at least 15%, so that if repowered plants are considered under Tier 1, a 15% minimum increase in output should not be a requirement. Brookfield urges Staff and the Commission to thoroughly review the Synapse Report, and incorporate its findings into future Commission deliberations and recommendations.

Clean Energy Advocates

Clean Energy Advocates supports an accounting of current and potential REC exports to ensure the State either retains those resources or adjusts Tier 1 targets accordingly. Specifically, Clean Energy Advocates requests an accounting of: (i) the total megawatt-hours and contract end date of New York renewable generation procured through New York's previous RPS programs currently eligible for selling RECs to a neighboring state; (ii) the total MWh, percentage of the 50 x 30 renewables goal, and percentage of current electricity demand represented by projects that previously participated in a New York RPS program but are currently exporting RECs; and (iii) the total MWh of electricity generation from CES-eligible renewable generation technologies that came online prior to 2003 and that are currently exporting energy and/or RECs to other states.

According to the Clean Energy Advocates, without tracking mechanisms, the Commission may fall short of the CES's goals.

Regarding vintage, Clean Energy Advocates agree with revising the date for Tier 2 to include facilities in operation prior to January 1, 2015. Clean Energy Advocates support Staff's recommendations that to-go-costs include a 5% risk contingency and a return on capital for new capital expenditures necessary to maintain safe and efficient operations.

Clean Energy Advocates argue that the Commission should adopt the streamlined review process, and supports eligibility for the entire output of a repowered facility, arguing that such an approach will encourage generators to invest in updating their existing facilities at lower cost than adding new generation.

Enel Green Power North America

Enel supports the increase from 5 MW to 10 MW for hydro and the ability of a facility to seek a renewal of a Tier 2 contract. While Enel supports the addition of a rate of return on future capital expenditures as part of the to-go-cost analysis, it does not support the 5% risk contingency of forecasted operations and maintenance, because it does not sufficiently account for fluctuating real time energy prices, unseasonably dry years, or equipment failure.

Enel requests that the Commission establish a fair and adequate rate of return to allow generators to make necessary capital investments, especially as facilities approach relicensing, and increase the risk contingency percentage to allow a generator to have the revenue certainty needed to continue operating a plant and apply for relicensing.

Enel does not support the recommendation that REC prices be capped, arguing that it is more cost effective and timely to support existing renewable baseline resources rather

than replace them with Tier 1 facilities or risk their export to other markets. Enel also states that hydroelectric facilities provide numerous additional benefits to the State without any compensation or revenue streams from ratepayers.

Energy Ottawa Inc.

Energy Ottawa supports the recommendations in the Synapse report. According to Energy Ottawa, Synapse's report represents the only quantitative analysis on the economic benefits associated with compensating existing resources for their environmental attributes and the risks associated with failing to fairly compensate existing resources including resource retirements and backsliding in relation to the CES goal. Energy Ottawa also supports changing the vintage date and increasing the size threshold for hydroelectric facilities from 5 MW to 10 MW, but encourages a further increase to 20 MW to accommodate at least a dozen more existing facilities. Further, Energy Ottawa supports a return on capital for future capital expenditures; inclusion of a risk contingency component; streamlining the application and review processes; and allowing for renewal of maintenance contracts.

Energy Ottawa urges the Commission not to adopt maximum incentive payments for Tier 2 contracts, and recommends that contract terms for Tier 2 mirror the 10-year policy of the Renewable Portfolio Standard. Energy Ottawa seeks clarification on whether generators will be permitted to apply for maintenance contracts on a portfolio basis due to a lack of plant specific financial data.

H.Q. Energy Services (U.S.) Inc.

HQ argues that current CES regulations largely prohibit its participation in the program, and that New York should examine how large-scale hydropower resources can contribute to state policy goals. Without some form of

recognition within the CES of voluntary actions to procure renewables (such as reducing the LSE's REC obligations, or other adjustment), HQ argues that voluntary actions are unlikely to occur as LSEs cannot support the cost of both the voluntary actions and obligations to purchase RECs and ZECs. These combined policies remove the potential avenues that incent new and existing renewable deliveries from HQ into New York. HQ claims that LSEs should be obligated to purchase Tier 2 RECs from existing renewable resources. HQ requests that the Commission explicitly allow for consideration of the CES contribution of voluntary contracts on a case by case basis.

Institute for Policy Integrity at NYU

The NYU Institute argues that the maximum maintenance payment should correspond to avoided external damages that would otherwise be caused by greenhouse gas emissions from another generator and the caps should therefore not differ between review processes. The NYU Institute supports a more stable support payment based on the social cost of carbon rather than market based REC prices.

The NYU Institute recommends consideration of the parallel initiatives in New York that seek to internalize the generation externalities, including carbon pricing in wholesale markets and the value of distributed generation. The NYU Institute argues that the programs cannot be considered separately.

Joint Utilities

The Joint Utilities support the to-go-cost standard, arguing that market-based compensation, or compensation tied to the cost of building a new resource, would overcompensate existing resources. The Joint Utilities also state that providing a return on capital expenditures should only be for

those capital improvements that are required to maintain safe and reliable operation of the facility.

The Joint Utilities encourage the Commission to direct Staff to work with the Joint Utilities to establish appropriate collection mechanisms for funds to expand the Maintenance Tier, and direct NYSERDA to use existing Maintenance Tier funds before collecting additional monies from utility customers. The Joint Utilities further encourage the Commission to require NYSERDA to file annual reports on the revised Maintenance Tier program, including financial information on funds expended and the sources of funds.

The Joint Utilities support a larger role for voluntary purchases in contributing to the statewide CES goal and argue that facilities receiving maintenance support should also participate in the voluntary market. The Commission should also consider enhancing utility-based voluntary programs.

Multiple Intervenors

Multiple Intervenors oppose Staff's proposal to allow facilities that previously participated in the Main Tier of the Renewable Portfolio Standard to receive maintenance support. Multiple Intervenors argues that such inclusion would amount to paying twice for the same thing which cannot be justified, particularly because these facilities were not required to return or share any part of their profits during periods of high energy prices.

Multiple Intervenors recommend that, once a facility's maintenance contract expires, it should be required to submit a detailed accounting over the lifetime of the maintenance contract. If the maintenance payments were higher than necessary to cover the facilities costs, Multiple Intervenors argue that the facility should be required to return the excess funds to customers. Such provision would protect customers in

the event Staff's proposed 5% adder is unnecessary. Alternatively, Multiple Intervenors state that the proposed 5% adder should be rejected. Multiple Intervenors also recommend detailed documentation requirements for any capital improvements under a maintenance contract and withholding payments until the investments have been made.

The City of New York

New York City supports increasing the threshold size for run-of-river hydroelectric facilities from 5 to 10 MW, but suggests that the Commission expand Tier 2 eligibility to include all forms of hydropower up to 10 MW, including reservoir hydropower. The City argues that the Commission should not wait until the triennial review to determine the needs of existing renewable facilities.

Noble Environmental Power, LLC.

Noble suggests that the Commission reject Staff's recommendations, as its proposal only compensates generators for their O&M, and will not allow existing resources to receive any return for depreciation, debt service costs, or a return on equity. Noble also requests that the Commission recognize the emissions-free attributes generated by existing renewable energy resources within the State. Noble claims that it will sell its generation and associated attributes to the highest bidder, including out-of-state interests, if no long-term agreement is available through NYSERDA.

Noble challenges the assumption that existing facilities should have recovered all or most of their initial capital costs through their RPS contracts. Noble laments that its projects only received a 10-year contract rather than the current 20-year term for Tier 1 RECs. The recommended to-go-cost calculations are inadequate compared with the incentives being provided to similar renewable resources under Tier 1 and

the ZECs being paid for nuclear, according to Noble. Finally, Noble argues that load-serving entities should be allowed to purchase RECs from existing renewable resources, and all of the attributes from a repowered facility should be eligible for purchase under the RES program.

ReEnergy Holdings, LLC.

ReEnergy argues that strict application of the to-go-cost standard does not provide any economic rationale for an owner to bear the risk of continued operations. ReEnergy encourages the Commission to adopt an adder that would provide an operating margin similar to the reliability must run (RMR) adder employed in PJM.

ReEnergy also suggests that price should not be the sole factor in determining policy towards existing renewable facilities. ReEnergy emphasizes that biomass is disadvantaged by high fuel cost and a lack of federal tax incentives, but indicates that biomass and other non-intermittent resources could provide reliability and resiliency benefits.

Terraform Power, LLC.

Terraform encourages the Commission to allow 100% of the output from repowering to qualify for Tier 1 in cases where there are exceptional issues, including: existing facilities currently using equipment that are no longer supported by the manufacturer; repowering incurs significant new capital investment; or the repowering is more environmentally friendly.

Other Comments

Comments were received from 45 individuals or municipal groups, including Nobel employees, New York State Senator Patrick M. Gallivan (59th District), Member of the New York State Assembly Billy Jones (115th District), Town Supervisor of the town of Chateaugay, Town of Clinton Wind Board, Town Supervisor and Town Board of the Town of Eagle, Ellenburg Town Supervisor,

and the Wyoming County Board of Supervisors. The comments urge the Commission to revise the CES to ensure that all renewable energy providers be considered equally under the program. The commenters believe that Noble's existing 10-year RPS Main Tier contracts should be extended for an additional 10 years, to equal the 20-year contracts being offered to the new wind farms.

DISCUSSION

I. Existing Facility Demonstration of Need

Several commenters suggest that the Commission should adopt a program that compensates all existing baseline renewable generation through an obligation on LSE's to procure set amounts of generation attributes from all the renewable energy generators in existence prior to 2015. The level of compensation recommended for these resources ranges from the full Tier 1 REC price, a percentage of the Tier 1 REC price, or something akin to the generator support in the ZEC program. In support of this argument that all existing renewable generation should be supported with an LSE mandate, ACE submitted the Synapse report.

The main thrust of the Synapse report is that a significant amount of New York State's existing baseline renewable generation may erode through sales to more lucrative markets or through retirement. The report and those arguing in favor of across the board support for existing renewables, regardless of need, claim that it is less costly and more efficient to prevent the erosion of existing renewables than to replace it with new renewables through the Tier 1 program.

As a general matter, the Commission agrees with the premise that maintaining existing renewables for less cost than it would take to replace them, all else equal, is beneficial. For facilities at risk of retirement, the maintenance program as

continued in the CES Framework Order and as modified here, establishes a straightforward financial needs test to determine whether ratepayer support is prudent. Under the program, the amount of need can be reasonably determined using the facility's financial records and energy market forecasts. Although the changes approved here expands eligibility, they are not expected to have a significant impact on the number of maintenance applications or contracts awarded.

Erosion of the baseline from exports to other regions could potentially be an issue in later years, but determining the timing and the best way to address it are less straightforward. As shown in Appendix A, between 2014 and 2016 the MWhs exported out of New York State decreased slightly. Important variables in determining the existence of the problem and its magnitude include ever-changing eligibility rules in other markets, local and regional market price dynamics, and whether a facility has access to other markets and the costs associated with such access.

The Synapse report indicates that in 2014, 880 GWh of New York located renewable resources were exported to New England, and such exports are expected to rise to 3,700 GWh by 2025. [13] Synapse claims that its estimates are based on forecasts related to REC prices in New York and other regional states, the levelized cost of new onshore wind generation in the region, and energy prices. However, Synapse's projection of New England Class I REC prices assumes that Massachusetts will double the rate at which the state's renewable requirement increases.[14] Nothing in the Synapse report or elsewhere

[13] See Policies to Cost-Effectively Retain Existing Renewables in New York, Synapse Energy Economics, Inc., December 22, 2017, fn. 26 (indicating confidentiality prevents publishing of actual model outputs).

[14] Ibid., p. 26.

currently supports such an assumption. Rather, the assumption is based on Synapse's own recommendations contained in a report it developed to encourage Massachusetts to expand its RPS.[15] Because of this assumption, the Synapse report cannot be considered particularly informative on the realistic risks of REC exports and the effects on attaining the 50 by 30 goal.

Interestingly, the Massachusetts Synapse report concludes that existing renewable policies in New England will require the addition of new renewable supply that will exceed demand for RECs, resulting in the New England Tier 1 REC price dropping from $16/MWh in 2017 to below $5/MWh between 2025 and 2030.[16] In other words, rather than constituting an enticing market for potentially exporting renewable power located in New York, New England could be a source for low cost renewable power and associated attributes. Moreover, the Synapse report highlights a concern that interstate competition for RECs be based on actual market forces rather than antagonistic policy decisions that unnecessarily raise costs based on inflated fears. The Commission views fair and open competition, as well as policy cooperation and coordination, as better approaches than artificially pitting states against each other. Staff and NYSERDA should continue to monitor other state and federal policies and inform the Commission when significant changes occur that are expected to directly affect New York State and its policies.

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[15] "An Analysis of the Massachusetts Renewable Portfolio Standard" available at http://www.synapseenergy.com/sites/default/files/Analysis-MA-RPS-17-004.pdf. Synapse developed the report for the NECEC Institute, a sister organization for the Northeast Clean Energy Council and Mass Energy Consumers Alliance.

[16] Ibid., p. iv.

Other Maintenance Tier Eligibility Thresholds

The Commission adopts Staff's eligibility recommendations regarding delivery requirements, and modifying the vintage date and increasing the threshold size of run-of-river hydroelectric facilities. The deliverability requirements are consistent with RES Tier 1 regulations, and most importantly ensure that New York receives the environmental and energy benefits of the maintenance support for the life of the contract.

The CES Framework Order continued the existing maintenance program, including limiting eligibility to those facilities that began commercial operation prior to January 1, 2003 and that were included in New York's baseline of renewable resources when the RPS program was first adopted. However, 2014 was considered the threshold in establishing a baseline of renewable resources for the CES and, therefore, Staff's recommendation to change the vintage eligibility for maintenance support to those facilities in operation before January 1, 2015 is logical.

Staff's recommendation also includes facilities that have previously received a RPS Main Tier or maintenance contract if the contract has expired and the facility can demonstrate and meet the financial need criteria discussed below. Multiple Intervenors opposes this inclusion, claiming that providing maintenance support to a previous RPS Main Tier contract recipient amounts to paying twice for the same thing. However, because maintenance contracts are intended to fund operating costs and not capital costs, with limited exception as explained below, the contracts are paying for continued operation and generation of renewable attributes, not capital costs or investment returns. The Maintenance program is designed to ensure continued operations at renewable facilities to avoid the

need and cost of replacing the environmental attributes provided by the existing facility. The short-term nature of the contracts and limiting maintenance rewards at a level up to the Tier 1 REC price, help to ensure the continuing availability of the emission attributes at a reasonable and appropriate cost. Whatever the benefit to the existing facilities, ratepayers gain the benefit of maintaining a facility instead of funding additional new facilities.

The Commission also adopts Staff's recommendation to increase the eligibility threshold for run-of-river hydroelectric from 5 MW to 10 MW. The increase will allow facilities that, similar to those under 5 MW, are limited in operational flexibility and unable to achieve much in the way of economies of scale. These smaller (up to 10 MW) hydroelectric facilities are economically challenged and the increased capacity size will allow more projects to apply for maintenance support. Due to the low level of output, smaller facilities are the most economically challenged since they produce fewer megawatt hours over which to cover their operating costs. Facilities larger than 10 MW have greater operational flexibility to recover these costs and remain ineligible.

Staff indicates that this larger size threshold includes approximately 92% of all non-State-owned hydroelectric units generating in New York as part of the 2014 baseline. Larger facilities, particularly facilities relying on reservoir or impounded water, are less affected by flow rates and generally have better economies of scale and other operational flexibilities not available to the smaller eligible facilities. The City of New York and Hydro Quebec propose to include reservoir-based hydroelectric, but do not make a compelling argument that such facilities are at risk of ceasing operation if they are not eligible for potential maintenance contracts.

Review Process

The Commission adopts Staff's proposal to implement a streamlined review process, while maintaining the more thorough case-by-case review. The Streamlined Review is a prescriptive process that will use a set of predetermined assumptions allowing for expeditious review of a maintenance request. This should address complaints that the maintenance review process was too onerous and time consuming.

Petitions for maintenance contracts should be filed with the Secretary. Each petition will be entered into the Department's Document and Matter Management System (DMM) and made available for public comment, expeditiously, pursuant to the State Administrative Procedures Act (SAPA) §202(1). The Streamlined Review process will rely on an independent, third party verification of financial records, including a report prepared by an independent CPA that provides the auditor's attestation that the information included in the financial statements has been audited and accurately represents the operations of the facility seeking maintenance support. This verification is the responsibility of the applicant and must be submitted as part of the application for the application to be considered complete. Although some commenters suggest other levels of financial documents, the Commission insists on verified financials as an appropriate ratepayer protection. The verified documents should facilitate Staff's review, while a lesser standard could be vulnerable to gaming or otherwise manipulated. However, in recognition of the small-scale nature of some of these generators, and the possibility that certain capital costs may not be large in absolute terms, the Commission will allow a developer to submit an explanation with its application on why audited statements or an engineering report is unreasonable.

In addition to the Streamlined Review, an applicant may choose to open its books and records for a more detailed review. The Case-By Case Review is a more customized review for those facilities for which Staff's standardized assumptions may be less appropriate.

Regarding proposed capital improvements, an applicant must provide bid proposals and engineering reports to support any proposed capital additions, including a description of why each capital addition is necessary for the continued safe and efficient operation of the facility, and changes to the generation output resulting from those additions during the contract term. The Commission notes that Staff's proposal will require the information suggested by Multiple Intervenors for new capital projects. Multiple Intervenors recommends detailed documentation for any capital improvements under a maintenance contract, and withholding payments until the investments have been made. To verify that the capital projects are for safety, the bid proposals and engineering reports, in conjunction with the detailed information required in Appendix D of the CES Framework Order, will be sufficient for Staff to verify such outlays. Staff shall also request additional documentation if needed. Maintenance contracts involving capital improvements will be contingent upon completion of the capital project as determined by Staff.

In recent maintenance applications, Staff has relied on the use of the Congestion Assessment and Resource Integration Study (CARIS) energy price forecasts developed by the NYISO. CARIS assesses both historic and projected congestion on the New York bulk power system, and among other things, provides long-term estimates of zonal wholesale energy prices in New York. Staff has relied on the CARIS to forecasted energy prices in its analysis of maintenance tier requests because it is a

public, independent report prepared by the energy markets administrator in New York.

As with any forecast, with time, there may be a divergence between the forecasted energy price and the actual energy price paid in the market. As a result, in calculating forecasted revenues in recent maintenance tier applications, Staff has adjusted the CARIS forecasted energy price to account for this variance. To calculate a facility's future energy sales revenues, Staff adjusts the CARIS forecasted energy prices, for the maintenance tier contract term, by applying the average variance between the historic real-time zonal price (for the NYISO designated zone where the facility is located) and the corresponding historic CARIS zonal forecast for the most recent three-year historic period. This adjustment process will continue.

Eligible Maintenance Costs

The Commission continues to support the to-go-cost standard because it is well-established, fair, and widely used. The use of forecasted revenues and expenses results in a risk that the maintenance support level calculated and offered may be insufficient to incent a developer to continue operations. To address this concern, Staff recommends some modifications to the application of the to-go-cost standard to make it work better for a larger group of existing facilities.

First, Staff proposes to include, as a to-go-cost, a risk contingency component equal to 5% of the eligible forecasted O&M developed in the review process. This approach is reasonable as the expense is expected to be minimal and should increase the overall effectiveness of the program in retaining existing facilities otherwise at risk of retirement. Commenters including ReEnergy proposed something similar but referred to it as an application adder. This risk contingency

will be included as a projected operating expense in the calculation of the facility's net income.

In addition, as explained above, Staff proposes to provide, as a component of the to-go-cost, a return on capital limited to new capital expenditures required to maintain safe, efficient operation of the facility. The return on investment on new capital expenditure will not be considered in the calculation of the risk contingency, proposed above. The rate of return to be applied to these new capital expenditures will be a generic weighted cost of capital as calculated by Staff and updated on an annual basis. The rate of return will be posted on the Commission's website.

Several parties object to the use of to-go-costs, stating that the final calculation can result in revenue levels that are below those needed for facilities to remain in operation. The Commission believes that the 5% risk contingency and provision for capital expenses related to safe and efficient operation of the facility, establishes the correct balance of ratepayer cost and the emission benefits provided by the maintenance program. The Commission finds a 25% risk contingency to be excessive.

Some parties maintain that all costs, including sunk costs, should be included in the calculation. Furthermore, some suggest that at-risk facilities should get a rate of return on their investment. The maintenance program is intended to meet only the shortfall between total projected future revenues and projected future expenses so that the facility continues to operate. Once the facility continues to operate and provide environmental attributes, ratepayers have no financial interest in paying the facility more.

Maintenance Compensation Limits

Some commenters argue that no limits should be placed on the amount of maintenance support. However, the Commission sees no reason to pay in excess of the Tier 1 price. The main objective of the maintenance program is to avoid the cost of replacing an existing facility with a new facility. Paying more to maintain an existing facility than the cost of a new facility contravenes this cost savings objective.

NYU Institute argues that the caps should not differ between review processes. Some commenters argue that the SCC minus RGGI calculation should not be used in the Streamlined Review process, and instead the REC price as used in the Case-by-Case Review process should be used instead.

The Commission agrees that the caps should be similar for both the Streamlined Review as well as the Case-by-Case Review. The amount of the cap is not particularly relevant to the review process, and a consistent cap eases administration of and participation in the program. Therefore, successful applications would be eligible to receive a support contract price to cover the projected shortfall between total forecasted revenues and total forecasted operating costs necessary to provide a net income of zero, up to a maximum incentive of the most recent Tier 1 price.

Some commenters suggest additional clarity on maintenance facilities access to VDER. A facility receiving maintenance support under Tier 2 does not necessarily preclude it from receiving compensation under the VDER tariff. Nevertheless, the Commission continues to believe that it would be inappropriate to extend maintenance support to resources located behind customers' consumption meters and that serve to both reduce net consumption and, at times, inject into the distribution system. The RPS Maintenance Tier was not designed

to address these resources. Tier 2 support is for resources that are used exclusively to generate and inject into the electric system. However, the precise compensation and components of the Value Stack that may be available to an existing baseline facility are still being examined by Staff and stakeholders in the VDER proceeding. Staff recommends that facilities continue to seek guidance from the working groups in the VDER proceeding to advance these issues.

Contract Term

Staff is proposing a three-year standard contract term whether the facility opts for the streamlined or the case-by-case review process. Some commenters argue that maintenance contracts should be offered for longer terms, as long as 20 years. The maintenance program is not intended to be a long-term support program. Rather it is intended to minimize ratepayers risk and cost by providing short-term financial support through disruptive events and/or unusually low energy prices to otherwise viable renewable energy facilities. The short-term nature of this support also recognizes the rapidly falling cost of new renewables. Long term maintenance contracts could obligate ratepayers to support facilities which no longer require ongoing maintenance support or for facilities with cost well above new Tier 1 generation.

The Commission adopts Staff's proposal of a three-year term. Ratepayer supported interventions of this kind, which are intended to mitigate short-term distress by developers, should be as short as possible, and should reflect the current short to mid-term market environment so that excessive or inappropriate support is minimized.

Contract Renewal

The Commission adopts Staff's proposal to provide maintenance support only to those facilities not currently under

an RPS or CES contract awarded in a competitive solicitation. The Commission also supports allowing a facility to apply for renewal of an existing maintenance tier contract and that such application may be made in the final year of a contract, to become effective upon expiration of the existing contract. The application must demonstrate that the financial need that predicated the initial award persists at the time of the renewal.

Developers will be permitted to refile as needed, so commenters' argument that refiling results in a delay that could harm the financial viability of the facilities is unfounded. Applications for maintenance pending at the time this Order is issued will be considered under the program rules adopted here.

II. Repowering

Under the current CES rules, an existing renewable facility is permitted to bid any incremental generation, above its baseline production that results from capital improvements completed at the facility, into a competitive Tier I CES solicitations. Some commenters including ACE and Terraform argue that all of the output from a repowered facility should be eligible for Tier I and that any less will discourage repowering. However, we share Staff's concerned that allowing an existing facility to be compensated for the entire output of a repowered facility, including generation included in the baseline, as part of a Tier 1 bid, could circumvent the financial needs test that the Commission requires for maintenance support under Tier 2.

To the extent a facility requires a significant capital expenditure to continue operating, the newly adopted provisions including such capital expenditure in a maintenance tier application and contract award will provide an avenue for

the facility to stay in or return to operation. To the extent that the capital addition necessary to maintain safe and reliable operations result in incremental output, that tangential incremental output will be consider as part of the calculation of a maintenance tier award.

III. Voluntary Market

Fostering growth of voluntary markets has always been an integral component of New York's renewable energy policies, beginning with the initial RPS program in 2004, when the Commission allocated a portion of the RPS goal to the voluntary market. The CES Framework Order affirms the objective of encouraging voluntary actions to contribute to the State's renewable energy objectives and discusses initiatives and efforts under the Reforming Energy Vison (REV) proceeding to spur that growth.

As an example, in 2016 the Commission approved the CCA program that provides a framework to enable municipalities, and the communities they serve, to make community choices regarding their energy supply and supplier. Businesses and non-profits are increasingly interested in seeking the role of CCA administrators to help advance the goals of municipalities, which often seek a cleaner and cheaper energy supply, but also have an interest in supporting local renewable generation facilities. NYSERDA, through the Clean Energy Fund, has programs to assist communities in developing a CCA program and other initiatives to promote clean energy.

Commenters offer a number of suggestions in spurring the voluntary market. The Joint Utilities suggest that the Commission should consider ways that utility-based voluntary programs could be enhanced, for example, by allowing utilities to propose marketing budgets to better support their green energy offerings for full-service supply customers. Azure

Mountain notes that in order to qualify under the NYSERDA Clean Energy Communities Program, a CCA must purchase and retire Green-e certified RECs on behalf of its customers (renewable baseline facilities do not qualify for Green-e certification as a result of vintage restrictions). HQ argues that without some form of recognition of voluntary actions to procure renewables (such as reducing the LSE's REC obligations, or other adjustment), voluntary actions are unlikely to occur as LSEs cannot support the cost of both the voluntary actions and obligations to purchase RECs and ZECs. Commenters note that Staff's confidence that programs like CCA and other third party voluntary purchases are available is inconsistent with practical realities since search costs are high for small producers to even uncover CCA opportunities, and few exist, according to Ampersand.

The Commission is aware of the issues that Azure Mountain discussed regarding the Green-e program and CCAs Many baseline facilities do not qualify for Green-e certification because of vintage restrictions. According to "Fact Sheet: Green-e Energy Certification Program" Center for Resource Solutions (November 8 2012) as cited in Ampersand's comments, Green-e energy must come from qualifying sources of generation like wind, solar, low-impact hydropower, and certain types of biomass, that were built (or significantly upgraded) within the last 15 years. Many of New York's baseline resources were built before then. The Commission directs Staff to work with NYSERDA to resolve this issue.

IV. Tracking and Accounting

Some commenters argue that all RECs associated with the renewable baseline should be tracked to ensure that New York either retains those resources or adjusts Tier 1 targets

accordingly. Without tracking mechanisms for existing renewables and clear direction that existing resources delivering into other regions will not be counted, the Commission risks falling short of the CES's goals, according to these commenters. The Commission notes that the New York Generation Attribute Tracking System (NYGATS) began tracking all generation within New York State beginning with 2016 generation. With NYGATS in place, New York has a solid foundation upon which to accurately and timely track energy and RECs, and should be able to accurately track and account for any renewable resources that are transferred out of State.

The majority of the current information requested by the Sierra Club, NRDC, Pace Energy and Climate Center, Environmental Advocates of New York, and ACE NY in seeking an accounting is contained in Appendix A.

The Commission orders:

1. The following changes shall be implemented to the existing renewable maintenance program: i) expansion of eligibility to include eligible facilities in operation prior to January 1, 2015, and establishment of delivery requirements consistent with those for Tier 1; ii) size increase of eligible hydroelectric facilities from 5 MW to 10 MW; iii) revision of the to-go-cost standard; iv) establishment of a streamlined review process, in addition to maintenance of a more detailed review process to suit the various needs of individual facilities; v) establishment of a standard contract term of three years with the potential for contract renewals.

2. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, must include a justification for

the extension, and must be filed at least one day prior to the affected deadline.

3. This proceeding is continued.

By the Commission,

(SIGNED) KATHLEEN H. BURGESS
Secretary

APPENDIX A. TRACKING BUNDLED ENERGY AND REC

The New York Generation Attribute Tracking System (NYGATS) began tracking all generation within New York State beginning with 2016 generation. As required in the authorizing legislation, in addition to tracking New York based renewable and other generation and associated renewable energy credits (RECs), it also tracks the same from adjacent control areas that is imported and consumed in New York. Additionally, it tracks exports of energy and associated RECs out of New York and in doing so, ensures that any such exports are not included in any baseline renewable calculations. These features address the concerns expressed by Azure Mountain that production towards the 50 by 30 goal is being undertaken without tracking. The NYGATS also addresses the requirement stated by Clean Energy Advocates (CEA) that New York should be able to accurately track and account for any renewable resources that are transferred out of state. With NYGATS in place, New York has a solid foundation upon which accurate and timely tracking of energy and RECs transpires.

The Table below illustrates bundled energy and REC exports out of New York into adjacent control areas PJM and NEPOOL for 2016 and 2014. 2014 was the initial CES baseline calculation and 2016 was the first year of NYGATS operation with its enhanced reporting (i.e., recording unbundled exports.) 2015 is not included because those numbers were tracked manually under the preexisting Environmental Disclosure Program.

2016 Exports	**NEPOOL**	**PJM**	**TOTAL**
Renewable Biogas	512,097	0	512,097
Hydro Exports	540,570	1,187,349	1,727,919
Wind Exports	245,714	0	245,714
TOTAL	**1,298,381**	**1,187,349**	**2,485,730**

2014 Exports	**NEPOOL**	**PJM**	**TOTAL**
Renewable Biogas	616,106	0	616,106
Hydro Exports	499,963	1,149,876	1,649,839
Wind Exports	324,199	0	324,199
TOTAL	**1,440,268**	**1,149,876**	**2,590,144**

On December 12, 2017, the Alliance for Clean Energy New York, Environmental Advocates of New York, Natural Resources Defense Council, Pace Energy and Climate Center, and the Sierra Club requested the following information relating to existing baseline renewable generation:

1. The total megawatt-hours (MWhs) and contract end date of New York renewable generation procured through the Main Tier that is eligible for selling Renewable Energy Credits (RECs) to a neighboring state;

2. The total MWhs, and percentage of the CES 50x30 goal, and percentage of current electricity demand represented by prior Main Tier projects currently exporting RECs and no longer contributing to the CES 50x30 goal; and

3. The total MWh of electricity generation from CES eligible renewable generation technologies that are currently exporting energy and/or RECs to other states but that came online prior to 2003.

The information requested follows.

1. **The total MWhs and contract end date of New York renewable generation procured through the Main Tier that is eligible for selling Renewable Energy Credits (RECs) to a neighboring state.**

The following table shows all New York generating facilities currently operating with Renewable Portfolio Standard (RPS) contracts that could export RECs from NYS. The table shows the expected annual generation currently under contract through the RPS; it does not include generation from capacity at these facilities not under an RPS contract. It should be noted that the actual generation from each facility will likely differ from the contractual amount.

No representation is made regarding the eligibility of the generation from existing renewable generating facilities in any programs operating in any state other than New York.

The total megawatt-hours (MWhs) and contract end date of New York renewable generation procured through the Main Tier

Staff makes no representation regarding the eligibility of the generation from existing renewable generating facilities in any programs operating in states other than New York.

Solicitation	Project Name	Number of Years	Contract End Date	MWh Expected Production
RFP 1037	Allens Falls	10	12/31/2017	1,675
RFP 1037	Bliss	10	5/31/2018	191,720
RFP 1037	Browns Falls	10	12/31/2017	1,277
RFP 1037	Clinton Wind	10	5/31/2018	180,747
RFP 1037	Colton	10	12/31/2017	4,851
RFP 1037	Eagle	10	12/31/2017	3,181
RFP 1037	East Norfolk	10	12/31/2017	6,207
RFP 1037	Ellenburg	10	5/31/2018	167,381
RFP 1037	Higley Falls	10	12/31/2017	11,648
RFP 1037	Norfolk	10	12/31/2017	7,504
RFP 1037	Norwood	10	10/31/2018	4,628
RFP 1037	Oswego Falls	10	10/31/2018	2,957
RFP 1037	Raymondville	10	10/31/2018	3,620
RFP 1037	Altona	10	1/31/2019	188,282
RFP 1037	Chateaugay Wind Farm	10	1/31/2019	215,058
RFP 1037/1168	Cohocton	10	1/31/2019	89,072
RFP 1037/1168	Dutch Hill	10	1/31/2019	36,713
RFP 1168	Effley	10	12/31/2018	1,399
RFP 1168	High Falls	10	7/31/2019	26,410
RFP 1168	Piercefield	10	12/31/2018	385
RFP 1168	Sherman Island	10	4/30/2019	19,292
RFP 1168	Wethersfield	10	1/31/2019	314,572
RFP 1681	Hardscrabble	10	2/28/2021	121,508
RFP 1681	School Street	10	12/31/2020	21,885
RFP 1681	Stewarts Bridge Hydro (Upgrade)	10	12/31/2020	11,609
RFP 1851	Albany 1	10	12/31/2020	6,790
RFP 1851	Hardscrabble Wind Energy Project	10	2/28/2021	74,141
RFP 1851	Mechanicville	10	5/31/2021	19,000
RFP 1851	Taylorville Hydro	10	12/31/2020	684
RFP 1851	Wappingers Falls	10	6/30/2021	474
RFP 2226	Black Brook	10	5/31/2021	1,900
RFP 2226	Chautauqua LFGE	10	6/30/2021	11,209
RFP 2226	DANC	10	6/30/2021	24,882
RFP 2226	Hyland LFGE	10	6/30/2021	15,396
RFP 2226	Ontario	10	6/30/2021	17,232
RFP 2226	Seneca	10	6/30/2021	46,664
RFP 1851	High Sheldon	10	2/28/2022	228,200
RFP 1851	Steel Winds II	10	1/31/2022	37,430
RFP 2226	Albany 2	10	6/30/2022	22,340
RFP 2226	Howard	10	12/31/2021	115,184
RFP 2226	Marble River	10	11/30/2022	581,510
RFP 2389	Clinton Co.	10	4/30/2022	7,934
RFP 1851	Stuyvesant Falls	10	12/31/2022	11,677
RFP 2226	Stewarts Bridge	10	6/30/2023	10,491
RFP 2389	Black River	10	5/31/2023	324,045
RFP 2389	Howard (Expansion)	10	12/31/2022	9,849
RFP 2554	Howard*	10	8/31/2023	6,359
RFP 2554	Zotos International	10	10/31/2023	3,847
RFP 2226	Orangeville	10	3/31/2024	279,103
RFP 2554	Marsh Hill	10	11/30/2024	52,526
RFP 2554	Rio	10	12/31/2023	4,199
RFP 3257	Burt Dam Incremental Hydro	19	9/30/2035	324
				3,546,971

Notes:

1 Staff makes no representation regarding the eligibility of the generation from existing renewable generating facilities in any programs operating in states other than New York.

2 The expected Generation figures are the annual generation levels under contract. Actual annual performance will vary.

3 This data excludes the percentage of generation not under contract and imports since the request is for NY generation procured through the MT.

2. **The total MWhs, and percentage of the CES 50x30 goal, and percentage of current electricity demand represented by prior Main Tier projects currently exporting RECs and no longer contributing to the CES 50x30 goal**

In response to this request, Staff assumed that the Clean Energy Advocates are interested in the percentage of current electric "load" and not "capacity". According to the New York State Generation Attribute Tracking System (NYGATS), 323,677 MWh of RECS from 2017 generation from former RPS Main Tier contracted facilities have been exported out of New York, as of December 15, 2017. According to the August 1, 2016 CES Framework Order, the forecasted 2030 load, net of energy efficiency was 140,992,000 MWh, of which 50%, or 70,496,000 MWh, were to be from renewable resources.

The 2017 REC exports from former RPS Main Tier facilities represents approximately 0.5% of the 2030 goal and 0.2% of current electric load. These percentages were calculated as follows:

2030 Forecasted load (MWh)	140,992,000
50% renewable goal (MWh)	70,496,000
2017 REC exports from former RPS facilities	323,677
Percentage of 2030 Goal	0.459%
2016 Electric load	157,048,579
2017 REC exports from former RPS facilities	323,677
Percentage of 2030 Goal	0.206%

3. **The total MWh of electricity generation from CES eligible renewable generation technologies that are currently exporting energy and/or RECs to other states but that came online prior to 2003.**

According to NYGATS, 191,626 RECs from 2017 generation from pre-2003 renewable generating facilities were exported from New York as of December 15, 2017. The information requested, and the responses provided above, does not capture incremental renewable generation that has been delivered into New York from outside the state. This generation will also be considered when calculating the State's achievement toward the CES goals.