

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

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

ORDER APPROVING CONTRACTS FOR THE PURCHASE OF TIER 4
RENEWABLE ENERGY CERTIFICATES

Issued and Effective: April 14, 2022

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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on April 14, 2022

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
Diane X. Burman, dissenting
James S. Alesi
Tracey A. Edwards
John B. Howard, dissenting
David J. Valesky
John B. Maggiore

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(Issued and Effective April 14, 2022)

BY THE COMMISSION:

INTRODUCTION

On October 15, 2020, the New York State Public Service Commission (Commission) issued in this proceeding an Order Adopting Modifications to the Clean Energy Standard (CES Modification Order).¹ The CES Modification Order creates a glidepath toward meeting the provision of the Climate Leadership and Community Protection Act (CLCPA) requiring that, by the year 2030, a minimum of 70 percent of the statewide electricity production must be by renewable energy systems (70 by 30

¹ Case 15-E-0302, Order Adopting Modifications to the Clean Energy Standard (issued October 15, 2020).

target).² The CES Modification Order, among other things, also added a new Tier 4 program to the Clean Energy Standard (CES) with the objective of siting renewable generation within or delivering renewable energy directly to New York City.

As relevant here, the CES Modification Order directed the New York State Energy Research and Development Authority (NYSERDA) to conduct a Tier 4 solicitation and NYSEDA and Department of Public Service Staff (Staff) to file a petition for Commission approval of any agreement(s) for the procurement of Tier 4 renewable energy certificates (RECs) associated with projects preliminarily selected through the NYSEDA solicitation process. The Commission ruled that its evaluation of such agreements would be based on whether the projects and associated agreements advance the public interest and the Tier 4 REC prices in the agreements are reasonable in relation to the value of the environmental attributes and other benefits, including system and public health benefits, attributable to the projects.

NYSERDA issued a solicitation for Tier 4 RECs and received 33 bids from seven proposers. After review of the bids, NYSEDA preliminarily selected two projects for consideration: (1) the Clean Path New York LLC (CPNY) proposed by the New York Power Authority (NYPA) and Forward Power (a joint venture between Invenergy and energyRe), which would deliver solar and wind energy sited in upstate New York to New York City through a new 1,300 megawatt (MW) high voltage direct current (HVDC) transmission line; and (2) a project proposed by H.Q. Energy Services (U.S.) Inc. (HQUS) to deliver hydropower from facilities owned by HQUS' parent company Hydro-Québec sited in Québec, Canada, to New York City through a new 1,250 MW HVDC

² See Chapter 106 of the Laws of 2019 (codified, in part, in Public Service Law (PSL) §66-p). The CLCPA became effective on January 1, 2020.

transmission line - the U.S. portion of which is known as Champlain Hudson Power Express (CHPE) and is to be built by HQUS' partner Transmission Developers Inc. (TDI). NYSERDA thereafter negotiated contracts for both projects. On November 30, 2021, in accordance with the CES Modification Order, Staff and NYSERDA filed a petition seeking approval of the contracts for each of the projects (Tier 4 Petition or Petition).

On the same date, the City of New York (NYC or City) filed a "Notice of the City Of New York Regarding Renewable Resource Procurements" (Notice), stating its intent to enter into a 25-year agreement with NYSERDA to procure Tier 4 RECs.³ NYC and NYSERDA have since finalized a contract (NYC Contract), which NYSERDA filed with the Commission on March 4, 2022. The Notice specifies that "the City expects to purchase approximately 20 percent of the combined Tier 4 RECs produced by the [HQUS and CPNY projects]," which when "combined with its load share-based allocation of offshore wind RECs, will be equivalent to its load."⁴ The Notice suggests that, presuming the Commission approves the CPNY and HQUS contracts, the voluntary load share commitment to purchase Tier 4 RECs made by NYPA - NYC's load serving entity (LSE) - should be reduced by an amount corresponding to NYC's load. For this and other reasons, the Notice also suggests that the Commission reallocate the load share obligations and commitments of each LSE under the other CES Tiers accordingly.

In this Order, the Commission grants the Tier 4 Petition, finding that NYSERDA's contracts with both CPNY and HQUS meet the requirements established in the CES Modification

³ Case 15-E-0203, Notice of the City Of New York Regarding Renewable Resource Procurements (filed November 30, 2021).

⁴ Id., pp. 3-4.

Order related to Tier 4, and otherwise are in the public interest. For these reasons, the Commission approves the proposed contracts for the purchase of Tier 4 RECs. Through this Order, the Commission also adopts the approach suggested in both the Notice and the Tier 4 Petition to reallocate each of the LSE's CES obligations in an equitable manner based on the significant ratepayer savings anticipated from the NYC Contract.

BACKGROUND

On June 18, 2020, Staff and NYSERDA filed the White Paper on Clean Energy Standard Procurements to Implement New York's Climate Leadership and Community Protection Act (White Paper).⁵ The White Paper proposed, among other things, to create a new Tier 4 of the CES that would provide support for renewable energy projects that deliver energy into New York Independent System Operator, Inc. (NYISO) Zone J, which encompasses New York City. The White Paper explained that reducing New York City's reliance on fossil-fuel fired generation would be essential to achieving the 70 by 30 target.⁶

A. The CES Modification Order

The CES Modification Order added Tier 4 to the CES and directed NYSERDA to conduct a competitive solicitation for the procurement of Tier 4 RECs. The CES Modification Order imposed a non-binding limit of 1,500 MW on the first Tier 4 REC solicitation, with an upper limit of 3,000 MW established. Specifically, the CES Modification Order stated that NYSERDA could exceed the non-binding 1,500 MW limit "upon receipt of

⁵ Case 15-E-0302, White Paper on Clean Energy Standard Procurements to Implement New York's Climate Leadership and Community Protection Act (filed June 18, 2020).

⁶ See Chapter 106 of the Laws of 2019 (codified, in part, PSL §66-p). The CLCPA became effective on January 1, 2020.

proposals that are sufficiently compelling to warrant such a major commitment from the State.”⁷

The CES Modification Order provides that any resource that qualifies as a “renewable energy system” under the CLCPA – except for offshore wind and distributed generation – is deemed eligible to participate under Tier 4, subject to three general conditions. First, regarding non-hydropower resources, such resources must have a commercial operation date (COD) on or after October 15, 2020. Second, regarding hydropower resources, energy is ineligible to participate if generated from new impoundments not already under construction as of June 18, 2020. Third, the Commission subjected hydropower resources to two additional requirements: a Supplier Energy Baseline; and a Supplier Greenhouse Gas (GHG) Baseline.

Under the Supplier Energy Baseline, a renewable energy supplier can be compensated for Tier 4 RECs only to the extent the generation delivered to the New York Control Area (NYCA) by the supplier and its affiliates exceeds the historical baseline of renewable energy that the supplier and its affiliates have delivered to the NYCA. The Commission intended this baseline to ensure that Tier 4 deliveries are not met through re-directing the use of existing resources in a way that provides no net benefit to the State.

Under the Supplier GHG Baseline, the renewable energy resource can be compensated only for Tier 4 RECs associated with energy that represents a net increase in the supplier’s total renewable energy generation as compared to a historic baseline. The Commission intended the Supplier GHG Baseline to ensure that the energy associated with the Tier 4 RECs is not backfilled by

⁷ CES Modification Order, p. 95.

fossil fuel-fired resources supplied to the historic recipient of the renewable energy.

The CES Modification Order also afforded some flexibility to NYSERDA in the application of the two baselines. For example, the Commission directed NYSERDA to solicit Tier 4 bids both with and without the Supplier Energy Baseline and to evaluate them based on their overall value to the State. For bids that included a Supplier Energy Baseline, the Commission authorized NYSERDA to negotiate terms that result in a Supplier Energy Baseline tailored to the unique circumstances of the supplier. With respect to the Supplier GHG Baseline, the Commission afforded NYSERDA the "flexibility to develop rules for suppliers to satisfy the Supplier GHG Baseline through annual averaging and to implement contract provisions that excuse the supplier from compliance with the Supplier GHG Baseline only in temporary, force majeure-type circumstances that fall entirely out of the supplier's control."⁸ The Commission also afforded NYSERDA the flexibility to negotiate with proposers on price and other material terms, so long as it provided an equal opportunity to all proposers.⁹

The Commission directed NYSERDA to apply the same evaluation and weighting criteria used in Tier 1 solicitations for the purposes of rank-ordering Tier 4 bids: 70% price; 20% project viability, operational flexibility, and peak coincidence; and 10% economic benefits. Of note, the CES Modification Order directed NYSERDA to develop new Portfolio Risk Factors for Tier 1 solicitations designed to take account of the interactive effects caused by the increasing penetration of renewable energy resources on the grid. NYSERDA decided to

⁸ CES Modification Order, p. 90.

⁹ Id., p. 97.

also include similar factors in the context of its Tier 4 solicitation, although it referred to these factors as "Program Policy Factors" in that context.

The Program Policy Factors included in the Tier 4 solicitation include:

- the extent to which the project would promote efficient utilization of key transmission points of interconnection and the cost-efficient integration of renewable generation into New York City;
- the extent to which the project would provide reliability and geographic benefits in the NYCA, including the reduction of execution risk through diversity;
- the project's projected public health benefits in terms of reducing local air contaminants by displacing thermal generation in New York City and, in particular, in disadvantaged communities;
- the extent to which the project would contribute to grid reliability and enable reduced reliance on thermal generation in Zone J through its dispatchability and level of firm supply;
- the extent to which the project would allow the State to accelerate the reduction of GHG emissions in furtherance of the CLCPA objectives;
- the extent to which a project's deliveries would not be met through the re-directing of existing resources in a way that would provide no net benefit to the State;
- the extent to which the project would promote delivery of renewable energy from upstate regions of the State into Zone J, ease the curtailment of upstate renewable resources, and optimize the deliverability of renewable resources throughout the entirety of the State; and
- the degree to which two or more smaller projects would provide more competitive benefits and potentially more timely achievement of commercial operation, versus the potential scale economy anticipated with a single large project.

Because broad competition was not assured in this first of its kind Tier 4 solicitation, the Commission directed further analysis by NYSERDA and Staff after evaluation of the

bids and ranking the projects. For the highest ranked bid or bids, the Commission directed NYSERDA and Staff to evaluate whether each agreement would advance "the public interest" of the State.¹⁰ To conduct this "public interest" evaluation, the Commission provided a non-exhaustive list of criteria to be applied by NYSERDA and Staff:

- (1) whether the agreement is a cost-effective means of progressing toward the CLCPA's 2030 and 2040 Targets in light of the unique challenges of reducing fossil fuel use in Zone J;
- (2) the extent to which the selected project or projects will enable reduced reliance on fossil-fuel fired generation located in Zone J;
- (3) the degree to which the selected project or projects complement the foreseeable deployment of offshore wind within Zone J;
- (4) impacts to disadvantaged communities;
- (5) project viability; and
- (6) economic benefits to the State.¹¹

The Commission directed NYSERDA and Staff, as part of any filing for Commission approval of any agreement, to include the anticipated bill impacts that would result from the proposed agreement and to "incorporate principles articulated in the Commission's BCA [i.e., Benefit Cost Assessment] Framework Order" as part of the public interest evaluation.¹²

Regarding the cost allocation for the Tier 4 program, the Commission directed that each LSE would be obligated to purchase qualifying Tier 4 RECs in proportion to its overall share of statewide load. Each LSE's Tier 4 purchase obligation is to be calculated as the total Tier 4 RECs purchased by NYSERDA, minus any Tier 4 RECs sold to voluntary purchasers, and then multiplied by the LSE's overall share of statewide load.

¹⁰ Id.

¹¹ Id., pp. 97-98.

¹² Id., p. 82 (referencing Case 14-M-0101, Reforming the Energy Vision, Order Establishing the Benefit Cost Analysis Framework (issued January 21, 2016), Appendix C (BCA Framework Order)).

In determining to allocate Tier 4 costs on a statewide load-share basis, the Commission reasoned that Tier 4 is intended to facilitate statewide compliance with the CLCPA - not to confer a special benefit on a particular area of the State - and, like other CES tiers, Tier 4 provides benefits to the State as a whole, not just to a specific region of the State.¹³

B. NYSERDA's Selection Process

On January 13, 2021, following issuance of the CES Modification Order, NYSERDA released Request for Proposals (RFP) No. T4RFP21-1 for the purchase of Tier 4 Eligible RECs. NYSERDA structured the solicitation similarly to its procurements in other CES tiers, utilizing a two-step process. Step One included an Eligibility Application that sought general information about the proposer, the proposed project, the generation resources that comprise the project, any new transmission facilities that would be developed to deliver the energy to NYCA Zone J, and, for projects that included hydropower resources, historical hydropower data. NYSERDA required proposers of projects that included hydropower resources to submit a Step One Eligibility Application, while it strongly encouraged (but did not require) those that did not include hydropower resources to also submit a Step One Eligibility Application.

As explained in the Tier 4 Petition, NYSERDA received 18 Step One Eligibility Applications from 14 proposers by the February 16, 2021 deadline established for such applications. NYSERDA updated the RFP on March 29, 2021, and again on April 20, 2021, to provide further clarifications to proposers.

Step Two of NYSERDA's solicitation process required proposers to submit a binding proposal by May 12, 2021. As

¹³ Id., p. 103.

explained in the Tier 4 Petition, NYSERDA received 33 proposals from 7 proposers, most of whom submitted multiple bids consisting of different varying bid prices associated with alternate project attributes and/or contractual terms. All of the proposals received by NYSERDA were based on delivery of generation located outside Zone J through new transmission (i.e., none proposed siting renewables in New York City).

The specifics regarding the evaluation process applied by NYSERDA to the proposals are set forth in the Tier 4 Petition and briefly summarized here. All proposals were evaluated by a Scoring Committee that first looked to proposal completeness, eligibility, and viability, which resulted in NYSERDA issuing deficiency notices and written questions to proposers. Subsequently, evaluators identified additional written clarifying questions aimed at increasing their understanding of the information presented in each proposal. The Scoring Committee then awarded scores for the non-price scoring criteria established in the RFP. Separately, NYSERDA conducted price scoring based on a pre-established model. Using the weighting structure mentioned above, NYSERDA combined the resulting non-price and price scores to determine the Initial Preliminary Ranking. NYSERDA then provided an opportunity to all proposers with eligible and viable bids to provide improved offers by July 14, 2021. Based on the improved offers, NYSERDA developed a Revised Preliminary Ranking of all the proposed projects, which it then confirmed as the Final Ranking. The Commission understands that, in establishing a Final Ranking, NYSERDA did not apply the Program Policy Factors presented in the Tier 4 RFP. This issue is addressed in the discussion below.

After establishing the Final Ranking, NYSERDA applied the criteria specified above to evaluate whether the top-ranking projects would advance the "public interest." NYSERDA also

applied the BCA Framework established by the Commission in the Reforming the Energy Vision proceeding to determine if a proposal should be considered for an award. At the conclusion of the solicitation process, NYSERDA negotiated and entered into contracts with CPNY and HQUS as the first and second ranked projects in the Final Ranking, respectively. On November 30, 2021, Staff and NYSERDA filed the Tier 4 Petition seeking approval of the CPNY and HQUS contracts. On that same day, NYC filed the Notice stating its intent to purchase Tier 4 RECs from NYSERDA in an amount that, when combined with its load-based allocation of offshore wind RECs, would be equivalent to NYC's load. On March 4, 2022, NYSERDA filed the NYC Contract, including the formal terms agreed upon between NYSERDA and NYC related to the purchase of Tier 4 RECs.

C. Tier 4 Petition and Associated Contracts

The Tier 4 Petition reiterates that the Tier 4 program is needed to reduce NYC's reliance on fossil fuel-fired generation and ultimately achieve the State's ambitious renewable energy goals. The Tier 4 Petition then describes each of the projects, and their proposed RECs prices, societal benefits, program costs and key contract provisions.

1. CPNY Project

The Tier 4 Petition describes the CPNY project as consisting of a combination of a new 174-mile, 1,300 MW HVDC transmission line that would deliver energy from a number of renewable energy resources located in upstate New York. The HVDC transmission line would span from a withdrawal point located near the Frasier Substation in Delaware County to an injection point located at the Rainey Substation in Queens. Energy delivered over the transmission line would be supplied by a portfolio consisting of 23 generation resources, including 1,932 MW of wind capacity and 1,430 MW of solar capacity. The

Tier 4 Petition explains that 14 projects within the CPNY portfolio, representing a total of 1,613 MW of capacity, have existing Tier 1 REC contracts with NYSERDA. The CPNY portfolio also includes the 1,160 MW Blenheim-Gilboa storage facility, which would be used to provide firming services to maximize the availability and reliability of renewable power delivered via the transmission line. CPNY also plans to add a further 514 MW of generation resources. The CPNY project's bid quantity of 7,870,865 MW-hour (MWh)/year represents a 69% capacity factor with respect to the transmission line. The CPNY project's expected commercial operation date is June 30, 2027.

The Tier 4 Petition asserts that the CPNY project is sufficiently viable and would both afford operational flexibility and provide energy to New York City during hours of high net load. The Petition determined that the CPNY project would provide additional economic benefits to the State in the form of a combined upfront private sector investment of \$2.1 billion in the upstate and downstate regions of the State over the first three years of the contract delivery term. The Petition specifies that the CPNY project is expected to invest an additional \$2.5 billion over the remainder of the 25-year term of the contract, including significant investment in disadvantaged communities, for a total of over \$4.7 billion invested over the contract term. The Petition estimates that the CPNY project would support nearly 8,300 short- and long-term jobs in project development, construction, and operation over the 25-year contract delivery term, with the project committing to \$270 million of investments in activities that provide opportunities for the workforce and communities in the State.

2. HQUS Project

The Tier 4 Petition describes the HQUS project as consisting of a new 375-mile (36 miles in Québec and 339 miles

in New York), 1,250 MW HVDC transmission line from a withdrawal point at the Hertel Substation in La Prairie, Québec to an injection point at the Astoria Annex Substation in Queens, which would deliver energy from hydropower resources located in Québec. According to the Petition, the HQUS project is sufficiently viable and would both afford operational flexibility and provide energy to New York City during hours with high net load. The HQUS project's bid quantity of 10,402,500 MWh/year represents a 95% capacity factor with respect to the transmission line. The HQUS project's expected commercial operation date is December 15, 2025.

The HQUS project, the Tier 4 Petition continues, would provide additional economic benefits to the State in the form of a combined upfront private sector investment of \$1.3 billion in the upstate and downstate regions of the State over the first three years of the 25-year contract delivery term. The Petition states the HQUS project is expected to invest an additional \$2.1 billion over the remainder of the contract delivery term, including significant investment in disadvantaged communities, for a total of over \$3.4 billion. The Petition calculates that the HQUS project would support over 1,400 jobs in project development, construction, and operation over the 25-year contract delivery term.

3. REC Prices and Other Contract Terms

According to the Tier 4 Petition, both projects were proposed under the Index REC pricing option. Thus, the bid prices were submitted as Year 1 Strike Prices that represent each project's targeted total amount of revenue per MWh from commodity revenues (energy and capacity) and Tier 4 REC compensation. The bid price for the HQUS project included an annual escalation rate to be applied to the Strike Price, while the bid price for the CPNY project was submitted without an

escalator. Under the Index REC approach selected by both projects, net Tier 4 REC payments would be calculated by deducting monthly reference energy and capacity prices from the Strike Price. The Tier 4 Petition provides that the forecasted levelized net REC cost for each Tier 4 REC delivered into New York City is \$23.36/MWh for CPNY and \$32.01/MWh for the HQUS project. The Tier 4 Petition notes that the CPNY and HQUS contracts each includes a provision to address the potential for a federal transmission investment tax credit or similar federal support being enacted into law. Were this to occur, the price for each project would be reduced such that 75% of the benefit from the federal support would be translated into a price reduction with equivalent reduction in the cost to ratepayers.

Both the CPNY and HQUS contracts include standard terms found in NYSERDA's other CES-related contracts, including terms related to the REC price, the contract term, deadlines for commercial operation, and compliance with New York State prevailing wage laws. In addition to standard terms, the contracts contain several other key provisions, including those related to the following:

- the extension of commercial operation dates or terminations of the contract(s) in the event that the Commission does not approve the contract(s) within 195 days after contract signing; termination or modification of the contract(s) in the event that Commission approval of the contract(s) imposes conditions that would materially adversely affect the project's pricing, revenues, or obligations;
- NYSERDA's right to terminate the contract(s) if the associated transmission line has not achieved commercial operation by the prescribed commercial operation deadline;
- a Tier 4 REC Delivery Verification Plan, establishing the methodology to match energy delivered through the transmission line with energy generated by the project;

- the establishment of minimum Tier 4 REC delivery requirements, which would be measured over a period of three preceding six-month seasonal capability periods, commencing with the third seasonal capability period after the commencement of the delivery term;
- the inclusion of Tier 4 RECs corresponding to energy that was not delivered into Zone J because of a dispatch decision made by the NYISO for purposes of calculating compliance with the minimum REC delivery requirements; and
- the impacts of the COVID-19 pandemic.¹⁴

Each contract includes project-specific provisions.

The CPNY contract includes specific provisions that address:

- uncertainties related to the current absence of NYISO market rules governing internally controlled transmission lines (§§4.03(c) and 4.05);
- the intent to cause the associated new transmission line to be admitted to the first NYISO Interconnection Class Year Process for which it is eligible after the effective date of the CPNY Contract (§2.08(c));
- the deadline to file an application under PSL Article VII, which was set for June 30, 2023 (§13.01(h));
- the deadline to issue a notice to proceed under the construction contract for the new transmission facility, which was set for June 30, 2025 (§13.01(h));
- evaluation of potential curtailment of local generation facilities resulting from CPNY resources (§2.07(f) and (g));
- the potential termination of the CPNY Contract if the Canisteo project is ultimately not included in the CPNY resource portfolio (§2.07(h));
- the treatment of additional RECs beyond the contracted bid quantity (§4.12);
- requirements to execute Project Labor Agreements for both the transmission line and the generation resources (§18.11);

¹⁴ See HQUS Contract §§2.06, 13.01(g), 3.01, 4.08, and 16.03; CPNY Contract §§14.01(g), 13.01(g), 3.01, 4.10(c), and 16.3.

- any change in the siting of the project's New York City converter station from the planned location in Astoria, Queens requiring NYSERDA's consent (Exhibit E); and
- treatment of relief that is provided to Tier 1 contract awardees in the event of a change in law, establishing that such relief will also be offered to CPNY (§4.09(c)).

As for the HQUS contract, additional provisions were added as follows:

- an obligation on behalf of HQUS to cause the U.S. transmission provider to issue a notice to proceed under the construction contract for the associated transmission line on or before the nine-month anniversary of the date of Commission approval of the contract (§15.01(b));
- a termination right in the event that a timely notice to proceed is not issued by the U.S. transmission provider (§14.01(h));
- the addition of 4.0 terawatt hours (TWh) of qualified renewable energy annually (§2.07);
- reduction of minimum delivery requirements to the extent the transmission line is unavailable (§4.08);
- requirements to execute Project Labor Agreements for the U.S. portion of the transmission line (§18.11);
- mitigation of environmental impacts on the Hudson River (Exhibit J); and
- commitments regarding Indigenous nations (Exhibit I-2).

The HQUS Contract also addresses issues related to the Supplier Energy Baseline and the Supplier GHG Baseline. The Tier 4 Petition explains that the selected HQUS bid does not contain a Supplier Energy Baseline, reflecting the optionality that the CES Modification Order permitted in this respect. By contrast the HQUS contract does include the Supplier GHG Baseline, as required for hydropower resources under the CES Modification Order. Of note, Exhibit H to the HQUS Contract represents a negotiated modification to the Supplier GHG Baseline, which the Tier 4 Petition describes as being intended to address the inherent challenges posed by the variability of

water flows from hydropower resources. Exhibit H of the HQUS contract employs a system of "banking" and "borrowing" that has the effect of averaging the HQUS project's production over the contract delivery term, subject to certain limitations. Under Exhibit H, to the extent that HQUS's hydropower resources generate energy that exceeds the Supplier GHG Baseline and the amount delivered to Zone J under Tier 4, HQUS would be permitted to "bank" the surplus energy, effectively creating a "credit" in the amount of the surplus, and conversely "borrow" at times when generation is below such amount, allowing it to still sell Tier 4 RECs for energy it provides to Zone J in years in which lower water flows from its hydropower resources would prevent attainment of the Supplier GHG Baseline.

As explained in the Tier 4 Petition, any banking or borrowing of credits authorized under the HQUS contract would be accounted for as a net positive or negative balance, under the condition that HQUS would not be allowed to accumulate surplus or deficit balances at any time in excess of 80 TWh. The Tier 4 Petition emphasizes that this proposed approach does not excuse HQUS from compliance with the Supplier GHG Baseline and in the event HQUS has a residual "borrowing" balance at the end of the contract delivery term, it would be obligated to reimburse NYSERDA, with interest, for the entire accumulated deficit of Tier 4 RECs for which NYSERDA has already paid but that would, in that eventuality, not have met the additionality requirement of the Supplier GHG Baseline.

Additionally, Exhibit H of the HQUS contract imposes a limit on HQUS's ability to accumulate levels of deficit that could create an unreasonable risk to NYSERDA, which would be relying on HQUS reimbursement at the end of the contract delivery term. Exhibit H of the contract establishes that HQUS would be permitted to mitigate the risk of accumulated deficits

by including in the calculation of its annual production: (1) Tier 1 RECs produced during the contract delivery term that are transferred to NYSERDA at no cost; and (2) the benefits of new demand side management and other programs intended to reduce electricity and energy consumption in Québec.

The Tier 4 Petition asserts that this approach to the Supplier GHG Baseline complies with the CES Modification Order because it grants NYSERDA flexibility to negotiate an approach to annual averaging as part of the Supplier GHG Baseline. In the alternative, the Tier 4 Petition requests that, to the extent the Commission concludes that any aspects of the contracted Supplier GHG Baseline approach extend beyond the specifics envisioned by the CES Modification Order, the Commission authorize the contracted Supplier GHG Baseline approach as being consistent with the CES Modification Order.

4. Tier 4 Program Costs and Impacts

The Tier 4 Petition analyzed the program costs arising from net Tier 4 REC payments under the recommended Tier 4 awards, as well as resulting impacts on electricity bills. It also conducted a societal BCA. The details of these analyses are provided in Appendix C to the Tier 4 Petition, and NYSERDA and Staff provided additional quantification during the comment process following filing of the petition. As discussed more broadly in Part A of the discussion below, NYSERDA and Staff estimate that the combination of the CPNY and HQUS projects would provide a societal benefit of between \$2.3 and \$5.8 billion, using a net present value based on 2021 dollars.

The Tier 4 Petition estimates that, based on several cost-related parameters, the proposed Tier 4 awards would lead to a statewide levelized impact on electricity bills of between 2.4%-4.7%, or \$2.36-\$4.64 per month for the typical residential customer, without accounting for deductions from voluntary

purchases of Tier 4 RECs or federal tax credits.¹⁵ The Petition states that this range of impacts reflects uncertainties related to future commodity prices and the NYISO market rules applicable to internal controllable lines. In the near term, the Petition projects the first-year statewide bill impacts in 2028 (as being the first year when both projects would be expected to be fully operational) to be between 3.0%-5.7%, or \$3.16-\$5.95 per month for the typical residential customer.

According to the Tier 4 Petition, when accounting for potential energy price effects, these near-term first year statewide bill impacts are projected to be between 1.8%-4.5%, or \$1.80-\$4.58 per month for the typical residential customer. The Petition explains that price effects can occur as the result of reduced transmission congestion costs where the added renewable generation, due to its low operating cost, results in the least efficient fossil fueled plants being pushed off the margin, thereby lowering prices. The Petition acknowledges that the magnitude, location, and duration of such price effects is difficult to predict and that such price effects are more likely to occur in the near term.

The Petition notes that Tier 4 program costs can be reduced through voluntary purchases of Tier 4 RECs. As discussed in the Notice summarized below, one such avenue for voluntary purchases of Tier 4 RECs is through the NYC Contract whereby the City would purchase Tier 4 RECs directly from NYSERDA. As noted in the Tier 4 Petition, the commitments made under the NYC Contract, when added to NYC's existing commitment

¹⁵ Statewide levelized bill impact indicators provide an average indication of costs both across the State and the Tier 4 program period, by dividing the net present value of projected Tier 4 program costs over the program period by the net present value of projected statewide energy expenditures over the same period.

(through NYPA) to pay its proportional share of offshore wind RECs (ORECs), would result in NYC purchasing environmental attributes associated with its entire electric load for the 25-year duration of the NYC Contract. According to the Tier 4 Petition, the number of Tier 4 RECs subject to the NYC Contract would far exceed NYC's load-based share of all Tier 4 RECs, resulting in a significant reduction in both overall ratepayer costs and associated bill impacts related to the Tier 4 program. Specifically, the Petition includes an estimated reduction of Tier 4 program costs resulting from the NYC Contract of at least 12%, reducing the statewide levelized bill impact estimate of 2.4%-4.7% to 2.1%-4.1%.

Furthermore, the Tier 4 Petition notes that additional voluntary purchases of Tier 4 RECs may likely occur as a result of New York City Local Law 97, which provides, as a compliance mechanism available to building owners subject to the law, the purchase of RECs associated with a "renewable energy source . . . considered by the New York independent system operator to be a capacity resource located in or directly deliverable into zone J load zone for the reporting calendar year."¹⁶ The Tier 4 Petition notes the potential for further significant program cost savings associated with this compliance mechanism. The Petition also notes that additional program cost reductions could materialize if federal transmission tax credits are enacted, triggering a provision in the Tier 4 agreements that would reduce the price of each project.

As part of the public interest review, NYSERDA and Staff applied a BCA to the Tier 4 projects. The agencies found that across a wide range of scenarios, the CPNY and HQUS projects, both individually and combined, present net societal

¹⁶ See N.Y.C. Admin. Code §28-320.6.1 (added by Local Laws of the City of New York for the Year 2019, No. 97. 2019).

benefits, supporting a high level of confidence in the overall conclusion that the societal benefits from the recommended projects exceed their costs and thus pass the BCA test. This analysis was updated in reply comments filed by NYSERDA and Staff to reflect each of the projects expected COD, rather than the assumed common 2025 COD used in the Tier 4 Petition.¹⁷

The updated analysis presented in the Agencies' Reply Comments similarly found that the HQUS and CPNY projects, both individually and combined, present significant net societal benefits. The Petition stresses that the societal benefits are more than just inputs into a model and include significant public health benefits from improved air quality and avoided greenhouse gas emissions. A further key input considered as a societal benefit is the extent to which the Tier 4 projects avoid investments in the electricity system that would otherwise have been required, such as the cost of other sources of generation displaced by the Tier 4 generation and the value of relieving anticipated grid congestion. The Petition notes that, in most scenarios, the benefits of these resource cost savings alone almost equal the cost of the Tier 4 projects.

In sum, the Tier 4 Petition asserts that both the CPNY and HQUS contracts comply with the requirements established in

¹⁷ See NYSERDA and Staff Reply Comments on Tier 4 Petition (Agencies' Reply Comments) (filed March 4, 2022). The Petition presented the BCA results assuming that both projects had a COD of 2025. Certain commenters noted that CHPE's expected COD is the end of 2025, while CPNY's is mid-2027. The updated figures referenced here reflect these expected CODs. The effect was to reduce the total net benefits for CPNY and CHPE combined from a range of \$2.9-\$7.4 billion to one of \$2.3-\$5.8 billion, with a relative increase in the net benefits of the HQUS project on a project-individual basis reflecting HQUS's earlier COD and the value of HQUS's benefits starting more than a year earlier than CPNY's.

the CES Modification Order, advance the public interest, and should be approved by the Commission.

5. NYC's Notice

NYC filed the Notice to advise the Commission of its intent to enter into a 25-year contract with NYSERDA to purchase Tier 4 RECs in a quantity consistent with its entire load less the load-based share of ORECs purchased on its behalf by NYPA. On March 4, 2022, NYSERDA filed a final signed version of the NYC Contract. The Notice estimates that, under the NYC Contract, the City would purchase approximately 20% of the combined Tier 4 RECs produced by the HQUS and CPNY projects.¹⁸ The Notice anticipates that the price of Tier 4 RECs would reflect the combined cost of new generation and extended HVDC transmission lines and thus would greatly exceed the prices for RECs associated with the other CES Tiers. It explains that, "[b]y purchasing significantly more than its proportional allocation of Tier 4 RECs, the City will [thus] be spending significantly more to secure carbon-free power than if it, through NYPA, simply complied with the base levels of compliance with the CES established by the Commission."¹⁹

The Notice also addresses what the City characterizes as NYPA's voluntary commitment under the CES. It states, for example, that "[t]he City is aware of NYPA's commitment to supporting achievement of the CES and CLCPA goals and is not seeking to reduce or otherwise interfere with that commitment."²⁰ The Notice references the aspect of the CES Modification Order in which the Commission noted the importance of NYPA and the Long Island Power Authority (LIPA) to provide "notice indicating

¹⁸ Notice, p. 6.

¹⁹ Id.

²⁰ Id., p. 4.

the extent to which they intend to participate in NYSERDA's annual CES procurement and/or fund their pro rata share of attributes procured by NYSERDA in the coming year."²¹ Pointing to the voluntary nature of NYPA's commitment, the Notice suggests that the Commission should "recalculate the LSE commitments related to CES Tiers 1, 2, 4 and ZECs [i.e., zero emission credits] once Tier 4 RECs become available to account for any reduction in the allocations of the related CES costs to NYPA occasioned by the City's plan."²²

NYC states that such a reallocation is reasonable because the quantity of Tier 4 RECs it would purchase under the NYC Contract would far exceed the proportion of Tier 4 RECs otherwise attributable to NYC's load to the benefit of the State's ratepayers. The Notice estimates that reallocating CES obligations and commitments as proposed would amount to between \$2.1 and \$4.3 billion in ratepayer savings over the 25-year duration of the NYC Contract.²³ According to the Notice, no other customer in New York would be financially harmed by the NYC Contract. Nevertheless, to ensure New Yorkers do not incur any potential risk resulting from this arrangement, the NYC Contract includes a provision that would allow NYSERDA to terminate the agreement within 30 days of the Commission making a determination that the arrangement is no longer in the best interest of New York electricity ratepayers.²⁴ Although not mentioned in the Notice, the NYC Contract (Section 5.5) also states that each party's obligations are subject to the Commission approving both the CPNY and HQUS contracts.

²¹ Id., pp. 4-5 (quoting CES Modification Order, p. 108).

²² Id., p. 5.

²³ Id.

²⁴ Id., p. 4.

NYC emphasizes that its interest in entering into the contract with NYSERDA is based on the "significant obstacles to the City's and the State's ability to achieve their policy goals."²⁵ The Notice acknowledges the significant siting challenges and high construction costs that have made it difficult to develop large-scale renewables in the City, as well as the significant discrepancy between the level of carbon-free resources that comprise the resource mixes upstate versus downstate. The Notice concludes that "Tier 4 presents a promising opportunity to improve local air quality and materially lessen reliance on the in-City fossil fleet."²⁶

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), Notices of Proposed Rulemakings regarding the Tier 4 Petition were published in the State Register on December 8, 2021 [SAPA Nos. 15-E-0302SP50 and 15-E-0302SP51] (SAPA Notices). The time for submission of comments pursuant to the SAPA Notices expired on February 7, 2022. Additionally, on December 2, 2021, the Secretary issued a Notice Soliciting Comments (Secretary's Notice) establishing two deadlines for the submission of comments on the Tier 4 Petition: February 7, 2022, for initial comments; and February 21, 2022, for reply comments. On February 22, 2022, the Secretary granted a request to extend the reply comment deadline to March 7, 2022. A full summary of the comments received in response to the Tier 4 Petition is included as Appendix A.

Additionally, pursuant to SAPA §202(1), a Notice of Proposed Rulemaking regarding the NYC Notice was published in

²⁵ Id., p. 8 (citations omitted).

²⁶ Id.

the State Register on December 15, 2021 [SAPA No. 15-E-0302SP52] (NYC Purchase SAPA Notice). The time for submission of comments pursuant to the NYC Purchase SAPA Notice expired on February 14, 2022. Many stakeholders who provided comments on the NYC Notice did so as part of their comments on the Tier 4 Petition. Comments on the NYC Notice are addressed below, with a full comment summary included in Appendix A.

LEGAL AUTHORITY

The Commission's authority derives from the PSL, through which numerous legislative powers are delegated to the Commission. Pursuant to PSL §5(1), the "jurisdiction, supervision, powers and duties" of the Commission extend to the "manufacture, conveying, transportation, sale or distribution of . . . electricity." PSL §5(2) requires the Commission to "encourage all persons and corporations subject to its jurisdiction to formulate and carryout long-range programs, individually or cooperatively, for the performance of their public service responsibilities with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources." PSL §66(2) provides that the Commission shall "examine or investigate the methods employed by [] persons, corporations and municipalities in manufacturing, distributing and supplying . . . electricity . . . and have power to order such reasonable improvements as well as promote the public interest, preserve the public health and protect those using such gas or electricity. . ."

PSL §4(1) also expressly provides the Commission with "all powers necessary or proper to enable [the Commission] to carry out the purposes of [the PSL]" including, without limitation, a guarantee to the public of safe and adequate

service at just and reasonable rates,²⁷ environmental stewardship, and the conservation of resources.²⁸ Further, PSL §65 provides the Commission with authority to ensure that "every electric corporation and every municipality shall furnish and provide such service, instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable." The Commission also has authority to prescribe the "safe, efficient and adequate property, equipment and appliances thereafter to be used, maintained and operated for the security and accommodation of the public" whenever the Commission determines that the utility's existing equipment is "unsafe, inefficient or inadequate."²⁹

The CLCPA amended the PSL by adding PSL §66-p(2), which directs the Commission to "establish a program to require that: (a) a minimum of seventy percent of the state wide electric generation secured by jurisdictional load serving entities to meet the electrical energy requirements of all end-use customers in New York state in two thousand thirty shall be generated by renewable energy systems; and (b) that by the year two thousand forty (collectively, the 'targets') the statewide electrical demand system will be zero emissions." In establishing such program, PSL §66-p(2) requires the Commission to "consider and where applicable formulate the program to address impacts of the program on safe and adequate electric

²⁷ See International R. Co. v Public Service Com., 264 A.D. 506, 510 (1942).

²⁸ PSL §5(2); see also Consolidated Edison Co. v. PSC, 47 N.Y.2d 94 (1979) (overturned on other grounds) (describing the broad delegation of authority to the Commission and the Legislature's unqualified recognition of the importance of environmental stewardship and resource conservation in amending the PSL to include §5).

²⁹ PSL §66(5).

service in the state under reasonably foreseeable conditions. The commission may, in designing the program, modify the obligations of jurisdictional load serving entities and/or the targets upon consideration of the factors described in this subdivision." In addition to the PSL, the New York State Energy Law §6-104(5)(b) requires that "[a]ny energy-related action or decision of a state agency, board, commission or authority shall be reasonably consistent with the forecasts and the policies and long-range energy planning objectives and strategies contained in the plan, including its most recent update."

DISCUSSION

Tier 4 represents a significant policy initiative adopted by the Commission in pursuit of decarbonizing the energy system in conformance with the goals of the CLCPA. The breadth and depth of stakeholder comments received in response to the Tier 4 award group proposed by Staff and NYSERDA reflect the complexity of the issues related to Tier 4, including the potential ratepayer impacts. Before addressing the numerous issues raised, the Commission notes widespread support from commenters for the recommended projects but also recognizes a significant body of concerns and questions raised.

In Part A below, the Commission applies the "public interest" review, including the six criteria identified in the CES Modification Order, the BCA test, and other considerations regarding the CPNY and HQUS projects. Part B addresses relevant Tier 4 contract terms and design features that apply to both the CPNY and HQUS projects, while Part C addresses issues unique to each of the individual projects. In Part D, the Commission reviews comments on NYSERDA's solicitation and evaluation processes. Part E reviews NYC's Notice regarding its contract with NYSERDA to purchase Tier 4 RECs. In Part F, the Commission

reviews the potential ratepayer impacts associated with the CPNY and HQUS projects to determine whether such impacts are just and reasonable. Finally, the Commission examines compliance with the State Environmental Quality Review Act (SEQRA).³⁰

A. Public Interest Review

As discussed above, the Commission stipulated in the CES Modification Order that its approval of a proposed award group would be subject to the award group advancing the public interest and indicated a number of criteria to be applied to its review. The Commission also directed NYSERDA to impose a non-binding limit of 1,500 MW on its first Tier 4 solicitation, while authorizing it to exceed that limit upon receipt of proposals that are "sufficiently compelling to warrant such a major commitment from the State."³¹ The Commission indicated that 3,000 MW is a reasonable maximum procurement quantity because it is appropriately scaled to the task of reducing New York City's reliance on fossil generation.³² The Tier 4 Petition puts forward an award group comprising the CPNY and HQUS projects, which total 2,550 MW of capacity.

The Tier 4 Petition asserts that across a wide range of scenarios, the CPNY and HQUS projects, both individually and combined, present net societal benefits, supporting a high level of confidence in the overall conclusion that the societal benefits from the recommended projects exceed costs and the projects thus pass the BCA test. NYSERDA and Staff quantified the benefits as the value of avoided electricity system investment costs, the value of carbon emission reductions, and the public health benefits from improvements in air quality

³⁰ Environmental Conservation Law (ECL) Article 8.

³¹ CES Modification Order, p. 95.

³² Id., pp. 94-95.

resulting from fewer pollutant emissions from fossil-fuel power plants. As noted, the agencies projected that the net benefits for the two projects combined range between \$2.3 billion and \$5.8 billion, in 2021 dollars.

The range of net benefits is derived from an estimated total investment cost of \$22.1 billion across both projects,³³ and total benefits ranging from \$24.4 billion to \$27.9 billion across a range of scenarios. As explained in the Petition, the high-end benefits quantification assumes that CPNY's capacity value is based on the full Zone J capacity prices as forecast, carbon value is quantified in line with the Department of Environmental Conservation's recommended valuation of the Societal Cost of Carbon at a 2% discount rate, and the air quality value uses a "high" value assumption consistent with the approach adopted for the Climate Action Council's Scoping Plan. Further scenarios in the BCA explore lower-value assumptions for each of these parameters, as shown in the following table that was presented in the Agencies' Reply Comments to represent the overall range of benefits calculated under the BCA.³⁴

Table 3 (updated): Benefit Cost Analysis Results (Actual COD) – CPNY and CHPE Combined

<i>Real 2021 \$B NPV</i>	Resource Investment	System Resource Value	Carbon Value	Air Quality Value	Net Benefit
High Capacity Value Scenario	\$22.1	\$18.9	\$6.2	\$2.8	\$5.8
Low Capacity Value Scenario	\$22.1	\$18.6	\$6.2	\$2.8	\$5.4
Low Carbon Value Scenario	\$22.1	\$18.9	\$2.8	\$2.8	\$2.3
Low Air Quality Value Scenario	\$22.1	\$18.9	\$6.2	\$1.2	\$4.2

³³ Investment costs across both projects consist of \$9.3 billion for the CPNY project and \$12.8 billion for the HQUS project.

³⁴ Agency Reply Comments, p. 2.

The Tier 4 Petition also provides a comprehensive application of the six-factor public interest test to the CPNY and HQUS projects. With respect to the first factor - whether the contracts constitute a cost-effective means of progressing toward CLCPA mandates - the BCA, as referenced above, examines this factor by means of a comparison between cases that tested how, in particular, the CLCPA's zero-emission grid target could be met by 2040 with and without the Tier 4 award group to determine whether the proposed award group offers a more cost-effective path of meeting the target than the alternative without. The BCA concludes that this is the case based on the resulting net benefit quantification of \$2.3-\$5.8 billion.

With respect to the second factor, the Tier 4 Petition estimates that the projects would collectively result in a significant displacement of fossil-fuel fired generation in New York City. Specifically, the Petition estimates an incremental reduction in electricity generated by the remaining in-City fossil fuel plants in 2030 of 51%, as a result of the two Tier 4 projects compared to the reference case without Tier 4.³⁵

As for the third factor - the degree to which the Tier 4 projects complement deployment of offshore wind - the Tier 4 Petition notes that the resources of both proposed Tier 4 projects have different and complementary profiles to offshore wind. Specifically, the Petition points to the diverse resource mix associated with the two projects - wind and solar, with pumped storage in the case of CPNY, and hydropower in the case of HQUS. The quantitative analysis supports this assessment with findings that project no incremental curtailment of current offshore wind procurements as a result of the Tier 4 generation and that, by 2040, the scenario with the Tier 4 projects results

³⁵ Tier 4 Petition, p. 32.

in 16% less offshore wind curtailment compared to the reference case.

For the final three criteria - project viability, economic benefits to the State, and impacts to disadvantaged communities - the Tier 4 Petition references the assessment of the proposals as part of the Scoring Committee's review.³⁶

The Tier 4 Petition summarizes the Scoring Committee's project viability assessment of both the CPNY and HQUS projects, noting the strengths of the two projects in this area that contributed to their overall top-two scores of all projects bid in the RFP. With respect to the CPNY project, the Petition notes the significant development and financing experience of the project team. The Petition also highlights NYPA's large storage facility (Blenheim-Gilboa) that is already operating and would provide significant dispatchability and operational flexibility, and the fact that it allows the overall project to have a 69% capacity factor. The Petition notes the sufficient time in the project schedule to complete permitting, and that the HVDC transmission line associated with the project would be situated to avoid the most environmentally sensitive areas, make extensive use of existing rights-of-way, and be buried entirely underground to minimize environmental impacts. Finally, the Petition notes CPNY's commitment to have construction managers and prime contractors negotiate Project Labor Agreements for work directly enabled under the CPNY contract.

As for the HQUS project, the Tier 4 Petition highlights the fact that the hydropower resources included in the project are already operating, the developers have already contracted to supply the physical cable infrastructure of the transmission line, and the CHPE transmission line is at a mature

³⁶ Id., pp. 20, 24.

development stage, with the New York segment close to being fully permitted and confidence in permitting of the transmission line on the Québec side of the project. Given the mature nature of the project, the Petition notes the earlier expected COD than all other Tier 4 proposals. The Petition also specifies that the project would be fully dispatchable, provide operational flexibility, and have a 95% capacity factor. Like the CPNY contract, the HQUS contract commits the developers to negotiate Project Labor Agreements for construction of the New York segment of the transmission line.

The Scoring Committee's evaluation also included a quantification of economic benefits, which more specifically considered economic benefits to disadvantaged communities. According to the Tier 4 Petition, the two projects would deliver economic benefits to New York totaling \$8.2 billion of investments in labor, materials, and development, including more than \$460 million of investments in community benefits funds and the creation of approximately 10,000 jobs.³⁷

The Tier 4 Petition highlights that a significant portion of the \$8.2 billion in economic benefits from the two projects would accrue to disadvantaged communities. This includes CPNY's \$270 million Disadvantaged Communities Investment Fund that would invest in activities that provide opportunities for the workforce and communities in the State, as well as HQUS's commitment to pay \$189 million in community benefit funds for Hudson River and Lake Champlain restoration, support for disadvantaged communities, workforce development and job retraining for fossil industry workers, and capital improvements in host communities. Disadvantaged communities have also incurred substantial public health impacts associated

³⁷ Tier 4 Petition, p. 17.

with air pollution in New York City. In this regard, the Petition notes that a significant portion of the public health benefits from air quality improvements, quantified as \$2.8 billion across both projects, would accrue to disadvantaged communities in New York City that have been impacted disproportionately by emissions from combustion of fossil fuels.

The Petition also highlights further benefits of the two projects, including:

- the diverse mix of resource types (hydroelectric, solar, and wind) associated with the projects;
- the alignment between the total capacity of 2,550 MW associated with the projects and the magnitude of the expected transmission needs through 2040;
- the mitigation of execution risk due to the more mature development status of the HQUS project; and
- the contribution to the accelerated achievement of New York's goal of 70% renewable generation by 2030.³⁸

The Tier 4 Petition states that based on these benefits, NYSERDA and Staff determined that the recommended awards constitute a sufficiently compelling proposition to warrant a level of commitment beyond the non-binding 1,500 MW limit specified in the CES Modification Order.

Public Comments

The vast majority of comments filed by organizations and elected officials - 98 out of 128 commenters - either explicitly support or do not object to the recommendation made in the Tier 4 Petition to select two projects and approve the contracts for both CPNY and HQUS. A partial list of organizational commenters supporting both projects includes the New York State Economic Development Council, the Center for Economic Growth, the Building & Construction Trades Council of Greater New York, the New York Energy Consumers Council, the

³⁸ Id., pp. 16-17.

Business Council of New York State, Empire State Development (ESD), the New York League of Conservation Voters, Urban Green Council, Climate Concerned Citizens and Joint Frontline Intervenors, Nature Conservancy NY, Columbia University, the Partnership for New York City, the Real Estate Board of New York, Consolidated Edison, LIPA, EDF Renewables (EDFR), and multiple municipalities.

For example, the comments submitted jointly by the New York League of Conservation Voters and the Citizens Campaign for the Environment state that “[b]oth the CHPE and CPNY projects are critical to offset the need for fossil-fuel peaker plants and would bring renewable energy to millions of New York homes.” They further note that “[t]here is an urgent need for [the HQUS project] as a reliable energy source to replace fossil fuels generation in the most densely populated city in our nation,” and that the HQUS project “will bring critically needed clean, renewable hydropower to downstate New York’s energy mix which will allow us to reach our ambitious renewable energy mandates in the [CLCPA].”³⁹ These commenters state that, together, the projects “create a huge inflow of clean energy for NYS and are a massive step toward achieving a just transition to renewable energy.”⁴⁰ The Nature Conservancy NY supports both projects based on what it views as the long lasting economic, environmental, and public health benefits associated with the projects. It states that approving both the CPNY and HQUS contracts would help the State achieve its clean energy goals, deliver renewable energy to New York City, reduce GHG emissions and air pollution, and further the transition to a clean energy

³⁹ New York League of Conservation Voters and Citizens Campaign for the Environment Reply Comments, dated March 7, 2022, p. 1.

⁴⁰ Id., p. 2.

economy by creating thousands of good paying jobs and investing in disadvantaged communities.

Climate Concerned Citizens and Joint Frontline Intervenors comment that the combined projects “provide a net and absolute benefit to the State” and are in the public interest for not just New York residents but the global community.⁴¹ These commenters also point specifically to the HQUS project providing reliable, dispatchable baseload power to the City, which they assert is key to displacing existing fossil generation, as a complement to the intermittency of the renewable resources for the CPNY project.

Through its comments, Urban Green Council references the substantial economic, environmental, and public health benefits of the two projects, noting that the CLCPA mandates cannot be reached, particularly in conjunction with legislation like New York City’s Local Law 97 of 2019 and Local Law 154 of 2021 that push buildings towards efficient electrification, without a major influx of new renewable energy into New York City’s electric grid. Urban Green Council emphasizes that the projects together would deliver more than one-third of New York City’s current annual electricity demand and that “[a]pproval of two projects will also significantly decrease the risk of delays in the timeline for [renewable] power delivery” and “help keep the State on track to timely deploy new renewable power and transmission into New York City.”⁴²

The Natural Resources Defense Council (NRDC) and Regional Plan Association (RPA) filed joint comments to express strong support “for the goal of incentivizing more renewable

⁴¹ Reply Comments of Climate Concerned Citizens and Joint Frontline Intervenors, dated March 7, 2022, p. 1.

⁴² Urban Green Council Reply Comments, dated February 18, 2022, p. 2.

energy that is deliverable into the New York City area through the Tier 4 program.”⁴³ Citing the fact that “New York City hosts many of the State’s oldest and most highly polluting fossil power ‘peaker’ plants,” these parties also state their support for the goal of ensuring “that New York City residents are finally able to more fully access the climate and local health benefits of renewable energy under the clean energy standard.”⁴⁴

The Partnership for New York City similarly states that it strongly encourages the Commission to approve both contracts on the grounds that they are critical to the energy future of New York City and needed for the seamless transition from fossil fuel to renewables, which it asserts is consistent with the corporate sustainability goals and local law compliance strategies of many large City-based companies.

Through their comments, community organizations such as Urban Upbound and Variety Boys and Girls Club of Queens support both projects based on the expected reductions in both carbon emissions and reliance on fossil fuels. These commenters also stress the associated health benefits in environmental justice communities in New York City that have been adversely impacted by air pollution.

The New York State Economic Development Council supports both projects on the grounds that they “will re-energize New York’s economy, invest in our local communities, create thousands of construction jobs, and help support the creation of jobs across New York.”⁴⁵ The Business Council of Westchester comments that, following the closure of Indian Point, its region of the State “is now almost entirely dependent

⁴³ Reply Comments of NRDC and RPA, dated March 2, 2022, p. 1.

⁴⁴ Id., p. 2.

⁴⁵ Comment Letter from New York State Economic Development Council, dated January 18, 2022, p. 1.

on natural gas for power generation," confronting Westchester businesses with "the untenable situation of prohibitions because it has become nearly impossible to get energy infrastructure built."⁴⁶ Specifically, it sees the transmission lines associated with the two projects as resolving the energy bottlenecks into the region that create a less reliable power grid. In their comments, Capital Region Chamber of Commerce and the Center for Economic Growth each reference the "Tale of Two Grids" and the need to approve new clean energy infrastructure to both meet the future needs of the grid and resolve transmission bottlenecks that prevent clean energy resources from reaching the downstate region.⁴⁷ These commenters also view the two projects as helping to reduce carbon emissions and providing economic opportunity for the entire State.

ESD states in its comments that, although there would be ratepayer cost impacts - particularly to upstate businesses - should the Commission approve the CPNY and HQUS contracts, it nevertheless supports both projects based on their anticipated contribution to advancing the CLCPA's clean energy and emission reduction goals and maintaining an adequate, reliable power supply, while advancing the shutdown of dirty and inefficient fossil fuel generation. The Business Council of New York State supports both projects on the grounds that they are anticipated

⁴⁶ Comment Letter from Business Council of Westchester, dated December 9, 2021, p. 1.

⁴⁷ Comment Letter from Capital Region Chamber, dated December 21, 2021, p. 1 and Comment Letter from Center for Economic Growth, dated January 24, 2022, p. 1. As noted in the CES Modification Order (at pp. 77-78), the Tale of Two Grids is an analysis undertaken in 2019 by the NYISO, showing that the upstate region (Zones A-E) is supplied by 88% zero-emission resources, while the downstate region (Zones F-K) is supplied by 69% fossil fuel-fired generation. Downstate New York has become even more reliant on fossil generation since the retirement of Indian Point Nuclear Power Plant.

to create jobs, provide significant economic benefits to New York businesses, support local communities, and help New York State and New York City achieve their climate change goals. The Long Island Association states in its comments that it supports both projects based on their expected business and economic development benefits in conjunction with their decarbonization and clean energy attributes. In its comments, the Orange County Partnership urges the Commission to move forward with both projects to give New York State a fighting chance to meet its emissions requirements in a responsible and reliable way.

In its comments, the Real Estate Board of New York (REBNY) states that approval of both contracts is necessary to achieve the mandates set by CLCPA, particularly in New York City, where it notes that it is very difficult to site large scale renewable energy resources. For its part, the New York Energy Consumers Council supports the Commission's approval of both projects on the grounds that they would make enough Tier 4 RECs available for purchase by building owners in New York City to comply with Local Law 97.

EDFR states that it supports the Tier 4 program because it would allow the State to pursue rapid decarbonization, while preserving significant opportunities for Tier 1 and offshore wind resources. EDFR also notes that it supports both projects based on their potential for creating jobs and benefits that are essential to the economy, especially now when so many individuals and businesses are struggling due to the COVID-19 pandemic. HQUS and its partner TDI jointly filed comments, stating that the two projects would significantly advance the CLCPA mandates while improving air quality in New York City and the lives of people living in disadvantaged communities and advancing the public interest.

Consolidated Edison and Orange and Rockland agree that the projects are in the public interest and urge the Commission to approve both projects, stating that they "are a critical initial step to provide equitable access to renewable energy throughout the State."⁴⁸ In reply to comments that suggest restarting the procurement process, Consolidated Edison and Orange and Rockland state that this would "slow progress toward reducing the use of fossil fuels for electric generation and hinder timely achievement of the CLCPA's goals."⁴⁹ For similar reasons, LIPA noted its support for the procurement of both projects.

NYC filed comments supporting the selection of both projects and urging the Commission to find them to be in the public interest on the grounds that they would improve air quality for millions of New Yorkers, accelerate the decarbonization of the City's electric grid, make the electric system serving the City more resilient, and support thousands of new clean energy jobs. NYC notes that, through the agreement with NYSERDA to procure Tier 4 RECs, the projects would allow the City to lead by example and procure all of the electricity it uses for municipal purposes from renewable resources. For these and other reasons, NYC urges the Commission to find both projects to be in the public interest.

The Queens Borough President cites the benefits of both projects in safeguarding and supporting the well-being of his Queens constituents by reducing the State's reliance on fossil fuels and fostering massive growth in the clean economy. The Queens Chamber of Commerce states that the HQUS and CHPE

⁴⁸ Comment Letter from Consolidated Edison and Orange and Rockland, dated February 7, 2022, p. 6.

⁴⁹ Consolidated Edison and Orange and Rockland Reply Comments, dated March 7, 2022, p. 2.

projects are in the public interest and notes that the near-term in-service date and low execution risk of the HQUS project can't be replicated by any alternative. The Towns of Haverstraw and Stony Point and the Villages of Haverstraw and West Haverstraw each commented that they support both projects and want to see them go forward, with a particular focus on the HQUS project because it is fully permitted and can begin construction this year, thus providing substantial community benefits including increased tax revenue and jobs that are needed now.

Boralex supports both projects as being in the public interest on the grounds that they would help stabilize energy costs for New York consumers and meaningfully reduce reliance on the fossil fuel fleet located in New York City. Boralex also notes that selecting both projects "will meaningfully increase the chance that at least one project will succeed."⁵⁰ Boralex argues that the Petition understates the societal benefits these projects will provide in four ways. First, Boralex asserts that the Tier 4 projects should have been treated as necessary to achieving the State's 70 by 30 target, rather than being only incremental to that goal. Boralex argues that had the projects been treated in this fashion, the modelling would produce higher marginal benefits. Second, Boralex disagrees with NYSERDA's "discounting" of the air and carbon benefits of the Tier 4 projects between 2030 and 2040. Third, Boralex alleges that generator "margins" are included on the cost side but not on the benefit side of the BCA (i.e., in the costs of avoided system investments). Fourth, Boralex believes the benefits in the BCA are understated because no benefits are calculated for the period after the 25-year contracts end.

⁵⁰ Boralex Reply Comments, posted March 8, 2022, p. 2.

CPNY and HQUS/TDI also agree that the BCA should have examined the project benefits beyond the 25-year term of the contracts because the transmission lines associated with the projects would provide benefits beyond that period. For its part, HQUS argues that the Tier 4 Petition's BCA is overly conservative in how it quantifies air quality benefits because it focuses exclusively on the reduction of fine particulate matter (PM_{2.5}). HQUS and TDI assert that, even though quantifying the benefits of reducing ozone formation or other toxic air pollutants is more difficult, these benefits should also be acknowledged as benefits of the projects.

A number of commenters highlighted particular strengths of one project or the other. In their support of the CPNY project, several commenters, including Alliance for Clean Energy New York (ACENY), NY Renews, Rise Light & Power (RLP), Sierra Club, and the New Bronx Chamber of Commerce, point to what they view as the project's numerous benefits. Listed among these are the anticipated \$11 billion infrastructure investment and \$4.7 billion in total economic benefits (including a \$270 million community benefits fund and over 8,300 engineering, construction, operation, and maintenance jobs), as well as CPNY's environmental justice commitments, use of existing rights-of-way, high deliverability to New York City, significant operational flexibility due to inclusion of the Blenheim-Gilboa pumped storage facility, and a portfolio of in-State resources.

CPNY echoes the benefits characterized by its supporters and adds that its project would lead to a 20% reduction of particulate emissions - a disproportionate share of which affect disadvantaged communities - and cause net ratepayer savings due to reduced system costs and lower energy prices. It also notes that the HVDC line associated with the project would relieve congestion that inhibits renewable upstate power from

reaching downstate loads and would not be vulnerable to extreme weather events because it would be underground. CPNY also notes that its contract assumes that the NYISO would control the dispatch of the line, minimizing costs for ratepayers.

Other commenters emphasize similar features of the HQUS project. For example, a number of municipalities and counties, Industrial Development Agencies, Chambers of Commerce, elected officials, labor unions, other non-governmental entities and HQUS itself point to the important contribution of the HQUS project towards advancing the CLCPA mandates, while improving air quality in New York City and the lives of people living in disadvantaged communities. These commenters particularly stress the unique attributes of the project being fully permitted and expected to be operational in 2025. They also list the same benefits as those identified in the Petition.

Around 5,200 private individuals, with or without affiliation to an organization, submitted comments. Around 550 individuals affiliated with labor unions filed comments, with 120 comments in support of both projects, 130 in support of the CPNY project, and 300 in support of the HQUS project. Each of these comments emphasize the job-related and other economic benefits associated with the projects. Around 1,800 commenters oppose the HQUS project, primarily citing concerns regarding environmental impacts. Of these, around 100 indicate their support of the CPNY project. By contrast, around 2,700 other commenters assert that New York will realize its climate goals only if the Commission approves both projects and highlight the HQUS project as being shovel-ready and providing a dependable supply of clean energy to New Yorkers, including during extreme weather events because most of the HVDC transmission line would be buried. An additional 100 commenters support the HQUS project for similar reasons without referencing CPNY.

As relevant to the public interest review of the award portfolio as a whole, some commenters argue that neither of the projects is in the public interest because of the projected high level of program costs. Some commenters assert that the case for a second project has not been made because the BCA does not show incremental societal benefits for the portfolio of two projects compared to one project. Others, while not objecting to the need to select two projects as such, question the case and/or urgency for selecting two projects now, rather than one project now followed by another Tier 4 procurement as needed at a later stage, and some commenters argued that a second in-state project should be selected instead of CHPE.

The N.Y. Municipal Power Agency (NYMPA) states that the Tier 4 Petition “fails to establish that the selected projects are in the public interest, because that will result in unacceptably high bill impacts to all upstate LSEs and NYMPA members in particular,” estimating that NYMPA members would see double-digit bill impacts caused by the Tier 4 projects.⁵¹ NYMPA also notes that its members obtain emissions-free hydropower from NYPA. Nucor Steel Auburn (Nucor) comments that the Tier 4 projects are not in the public interest, in part because the “Tier 4 REC costs are excessive at roughly double the cost of comparable indexed Tier 1 RECs.”⁵² Nucor states that the cost analysis in the Petition should have examined more closely the exceptional premium associated with the Tier 4 prices.

IPPNY, RLP, and the New York City Environmental Justice Alliance (NYC-EJA) argue that the BCA included in the Tier 4 Petition indicates that the net societal benefits for both projects do not exceed those of one project, and therefore

⁵¹ Comment Letter from NYMPA, dated February 7, 2022, p. 9.

⁵² Comment Letter from Nucor, dated February 7, 2022, p. 10.

selection of both projects is not justified. IPPNY and RLP argue that the BCA demonstrates that total net societal benefits drop when CHPE is added to CPNY as a second Tier 4 project and that the HQUS project is therefore not in the public interest. Thus, IPPNY concludes that "if the Commission approves NYSERDA's proposed contract with CPNY, which is the lower cost of the two projects, it should reject NYSERDA's proposed contract with HQUS [i.e., CHPE] because it reduces net societal benefits and is not in the best interests of ratepayers."⁵³ Similarly, RLP states that the record of this case does "not meet any objective standard justifying the selection of two Tier 4 projects" and thus only the CPNY project is approvable at this time.⁵⁴ RLP, ACENY, and other renewables developers recommend that a second Tier 4 project be selected through a separate solicitation for a New York-only project in place of the HQUS project.

Nuclear New York states that NYSERDA should have calculated the carbon benefit in the BCA using the same 3.68% discount rate used in the program cost evaluation, rather than the 2% discount rate used in the base scenario and the 3% discount rate used in the low carbon value scenario. Nuclear New York characterizes that the 3% discount rate "is still a high carbon value scenario in the context of this analysis."⁵⁵

Commission Determination

Taking into account both the assessment in the Tier 4 Petition and commenters' views, the Commission finds that the CPNY and HQUS projects pass the BCA analysis and, specifically, meet the six "public interest" criteria established in the CES Modification Order. The Commission also finds that NYSERDA and

⁵³ IPPNY Comments, dated February 7, 2022, p. 2.

⁵⁴ RLP Comments, pp. 6-7.

⁵⁵ Nuclear New York Comments, p. 3.

Staff, through the Tier 4 Petition, have made a compelling case for exceeding the 1,500 MW capacity threshold for Tier 4 identified in that order.

The Commission is satisfied that the analysis in the Tier 4 Petition demonstrates substantial expected reductions in thermal-fired electricity generation in New York City. We find particularly compelling that the two projects combined would result in a 51% reduction of electricity generated from in-City fossil-fuel fired plants in 2030. The BCA calculates that the public health benefits from the resulting improvements in air quality alone amount to \$2.8 billion. The Commission agrees with those commenters that emphasize the imperative need to accelerate the displacement of fossil generation in New York City without delay. The primary purpose of Tier 4 is to ensure the delivery of clean dispatchable energy into New York City as part of a strategy to displace fossil generation. The Commission made clear that 3,000 MW is a "reasonable upper limit . . . because it is appropriately scaled to the task of reducing New York City's reliance on fossil generation."⁵⁶ The Commission based this limit on several interrelated points made in the White Paper:

[N]early all of the roughly 22,500 GWh [i.e., gigawatt hours] of electricity generated within New York City [in 2019] was from fossil fuel-fired generation. Without displacing a substantial portion of the fossil fuel fired generation currently operating within Zone J, the statewide 70 by 30 Target will be difficult to achieve. The location of fossil-fueled generation of this magnitude in the most densely populated area of the State only accentuates the need for change.⁵⁷

The selection of projects exceeding the non-binding limit of 1,500 MW aligns with the conclusions of the

⁵⁶ CES Modification Order, p. 94 (emphasis added).

⁵⁷ White Paper, p. 45.

comprehensive analysis undertaken in the Power Grid Study,⁵⁸ which was prepared on behalf of Staff to comply with the Accelerated Renewable Energy Growth and Community Benefit Act (Accelerated Renewables Act).⁵⁹ We point in particular to Figure 17 of the Power Grid Study (reproduced on next page), which shows that, to meet the CLCPA's zero emissions grid standard, statewide electric generation would need to increase from about 150 TWh in 2019 to 208 TWh in 2040 - to accommodate the projected electrification of the transportation and building sectors.⁶⁰ However, absent technological breakthroughs, 17 GW of gas-powered generation capacity would still be needed in 2040 to maintain reliability, with a significant portion of that capacity located in New York City.⁶¹ While this analysis presumed "a new 1,250 MW HVDC transmission asset delivering dispatchable renewable energy into New York City,"⁶² the implication is that additional NYC-based, gas-powered capacity could be retired if a second HVDC line carrying renewable energy is interconnected into Zone J. To buttress this point, the Power Grid Study found that additional bulk transmission upgrades beyond a single (1,250 MW scale) Tier 4 project would be needed by 2040 to resolve congestion and curtailments.⁶³

⁵⁸ Case 20-E-0197, Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Initial NY Power Grid Study Report (January 19, 2021) (Power Grid Study).

⁵⁹ See L. 2020, Ch. 58, Part JJJ, §7(2) (April 3, 2020).

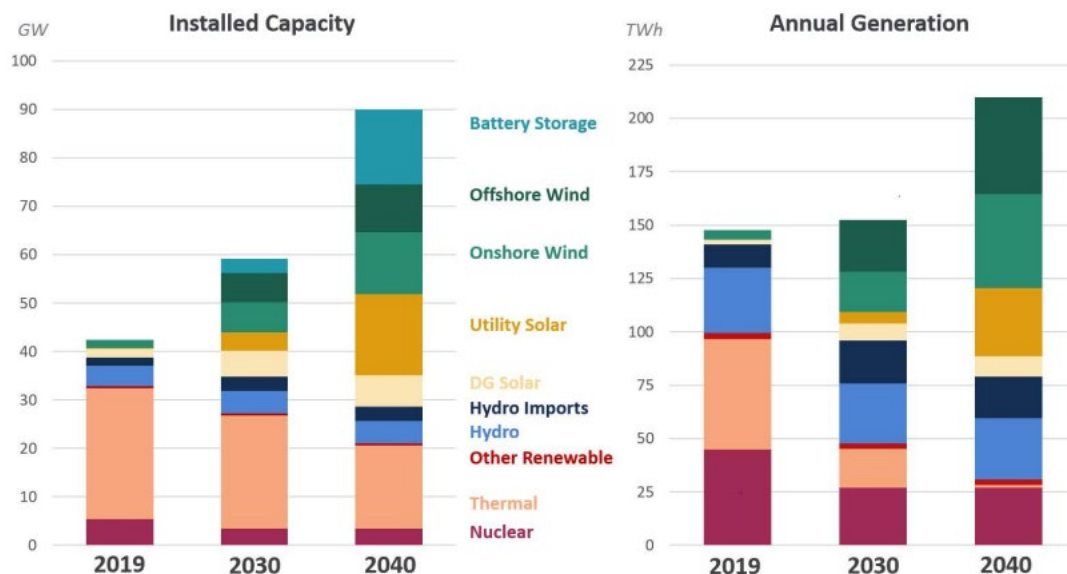
⁶⁰ Power Grid Study, p. 80, Table 17.

⁶¹ Id., pp. 79-80, Table 17 and Appendix E, Table A4.

⁶² Id., p. 79, n. 76.

⁶³ Power Grid Study, Appendix E, Section 6.5.

FIGURE 17. INITIAL SCENARIO: CAPACITY AND GENERATION BY TECHNOLOGY IN 2030 AND 2040



Sources: 2030 and 2040 values: Zero Emissions Study, Section 4.1.2, Table 4-1 and Section 4.2.1, Table 4-3; 2019 values are from the 2020 NYISO Gold Book.

Notes: *"Thermal" burns regular natural gas in 2030 and renewable natural gas in 2040. Legacy hydro imports are included in chart and assumed to have an effective capacity of 1,690 MW.

The most recent available analysis amplifies these findings. On December 30, 2021, the Climate Action Council released the Draft Scoping Plan, which projects a much greater increase in statewide electric load to between 236 and 251 TWh by 2040 across the three presented scenarios that meet the CLCPA targets.⁶⁴ The load forecast in the Draft Scoping Plan for Zone J (New York City) ranges from 78-81 TWh, compared to 64 TWh in the Tier 4 analysis. In other words, compared to the load projections from the Power Grid Study that underpinned the determination of an expected need of 3,000 MW of Tier 4 capacity in the CES Modification Order, the latest Scoping Plan analysis suggests a further additional need of 14-17 TWh of clean

⁶⁴ Draft Scoping Plan, <https://climate.ny.gov/Our-Climate-Act/Draft-Scoping-Plan>, Appendix G, Annex 2, tab Elec Load and Peak by Scenario. Load figures quoted here are at generation before transmission and distribution losses, excluding electrolysis.

generation in New York City by 2040, itself an amount almost equal to the generation from the two proposed Tier 4 projects.

The Power Grid Study and the Draft Scoping Plan each presume that combustion-based power generation would be fueled by renewable natural gas (RNG) and/or hydrogen in Zone J. This presumption is warranted to maintain dispatchable capacity in order to meet reliability standards- but it is only a presumption. As the Draft Scoping Plan notes, RNG and hydrogen generation are emerging technologies. The State is pursuing several efforts to develop these technologies, including through a recently updated Potential Study of Renewable Natural Gas in New York State,⁶⁵ collaborations to explore the role of green hydrogen as part of a comprehensive decarbonization strategy,⁶⁶ and a commitment to position New York as a clean hydrogen hub.⁶⁷ It must be understood, however, that innovative technologies are subject to resource availability and other risks. Thus, neither RNG nor hydrogen may be in a position to fully replace natural gas as fuel for power plants by 2040. Moreover, it remains uncertain whether either fuel type would be deemed eligible to count towards the CLCPA's zero-emission grid target.

These findings underscore the impending need to maximize the deployment of clean dispatchable renewable capacity that is located in, or is directly deliverable to, New York City. As explained above, a defining feature of the CPNY and

⁶⁵ <https://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-Prices/Energy-Statistics/RNGPotentialStudyforCAC10421.ashx>.

⁶⁶ <https://www.nyserda.ny.gov/About/Newsroom/2021-Announcements/2021-07-08-Governor-Cuomo-Announces-New-York-Will-Explore-Potential-Role-of-Green-Hydrogen>.

⁶⁷ <https://www.governor.ny.gov/sites/default/files/2022-01/2022StateoftheStateBook.pdf>, p. 147, and <https://www.nyserda.ny.gov/About/Newsroom/2022-Announcements/2022-03-24-Governor-Hochul-Announces-Multi-State-Agreement-on-Hydrogen>.

HQUS projects is that, unlike most renewable resources, they are both dispatchable. In the case of the CPNY project, it is by means of pumped storage from the Blenheim-Gilboa facility that is included in the portfolio of resources. In the case of the HQUS project, it is through access to 37 GW of dispatchable hydropower generation. These hydropower resources offer both high-capacity factors and dispatchability characteristics that offshore wind lacks. Indeed, the analysis in the Petition highlights the complementary nature of these projects with offshore wind, noting that the combination of the Tier 4 projects with offshore wind is expected to reduce offshore wind curtailment by 2040.

The proposed portfolio also offers a compelling case, as related to project viability, in ways that go beyond the assessment of that factor through the RFP scoring criteria. While it may be tempting to conclude that a delay is affordable, given that much of the ultimate need for Tier 4 is framed in the context of the 2040 CLCPA target, the Commission chose to proceed with the Tier 4 program now rather than later for a reason, recognizing that execution of projects of this size and complexity is by its nature risky. Any delay associated with selection of alternative Tier 4 projects should not only be assessed in terms of delay in the procurement process and construction timeline but also in terms of the risk of a selected project ultimately being successfully realized at all. The Tier 4 Petition refers to this consideration as "execution risk."⁶⁸ It is clear that in terms of viability and a view to minimizing execution risk, including two projects in the award portfolio offers an important level of reassurance.

⁶⁸ Tier 4 Petition, p. 16.

Execution risk is not merely a matter of selecting two Tier 4 projects in order to have a better chance of at least one ultimately achieving completion. At this stage in New York's efforts to decarbonize the State's energy system, with procurements well underway for at least half a decade, turning procured projects into deployed projects remains a seminal challenge to achieving the CLCPA targets in the electricity sector. The Commission and other State agencies are acutely conscious of this challenge - which extends beyond Tier 4 to all renewable procurement efforts - and have been pursuing multiple avenues to reduce this risk, including through (i) continued procurement efforts under Tier 1 and the Offshore Wind Standard, (ii) proactive efforts to facilitate onshore wind and solar siting and permitting efforts including through the newly-created Office of Renewable Energy Siting, (iii) the proposed expansion of the distributed solar target to 10 gigawatts (GW), that is subject to Commission review,⁶⁹ and (iv) establishment of NYSERDA's "build-ready" program pursuant to which NYSERDA acquires and advances the development of sites for purposes of development by private renewable energy developers.⁷⁰

With this context in mind, the Commission finds that the proposed Tier 4 award portfolio and, in particular, the inclusion of the HQUS project in the portfolio offers a unique combination of projects that cannot be replicated either by rejecting the HQUS project in favor of a different second

⁶⁹ See Case 21-E-0629, et al., Advancement of Distributed Solar, NYSERDA and Staff, New York's 10 GW Distributed Solar Roadmap: Policy Options for Continued Growth in Distributed Solar (issued December 17, 2021).

⁷⁰ See Case 15-E-0302, Order Approving Build-Ready Program (issued October 15, 2020) (approving NYSERDA's plan to implement statutory provisions included as part of Accelerated Renewables Act).

project with new renewable generation sourced from within New York or postponing selection of a second project, as some commenters have suggested. Through its delivery of 1,250 MW of renewable generation into Zone J, the HQUS project is unique in that it provides access to 37 GW of already-deployed renewable capacity, paired with an HVDC transmission line equating to 7% of New York's electric load for which no major permitting, siting, land use, or interconnection barriers need to be overcome in New York, and that can be in operation as early as December 2025. Either a delay in Tier 4 procurement efforts, or a desire to specifically avoid selection of the HQUS project as some commenters have suggested, would risk trivializing the challenges associated with achievement of the CLCPA targets.

While the consideration of execution risk illustrates the importance of avoiding delays with a view towards meeting CLCPA mandates, timing considerations also apply in the near term. The benefits of shifting to a clean energy system should be pursued not only from the perspective of the ultimate CLCPA target dates. The Petition points out that the combined two projects would provide an accelerated glidepath toward meeting the 70 by 30 target under the CLCPA. Every year of carbon emission reductions contributes to climate change mitigation; every year of air quality improvements contributes to public health benefits.

The Commission is particularly conscious of the concerns raised by those representing disadvantaged communities in New York City who have long been subject to health impacts from air pollution. This precise concern was raised by the New Bronx Chamber of Commerce, Bronx Community Board #1, the Bronx Council for Environmental Equality (BCEQ), South Bronx Unite, the Greater Hunts Point Economic Development Corporation & Greater Hunts Point Chamber of Commerce, the Queens Borough

President, the Old Astoria Neighborhood Association, the Queens Chamber of Commerce, Urban Upbound, and the Variety Boys & Girls Club of Queens. While it is not the role of Tier 4 to offer specific commitments on individual fossil power plant closures, it is undeniable that the overriding factor that would contribute most toward reducing the localized harmful fossil generation emissions is the supply of more clean energy as early as possible to New York City. The inclusion of the HQUS project in the award group allows reductions in such emissions to commence in less than four years. Any other award group, particularly if pursued through another RFP, would postpone this timeline significantly, both as a result of the time required to carry out an additional RFP, and the likely less mature development stage of alternative projects compared to the current award portfolio including HQUS.

A further recent development that highlights the importance of early action comes in the form of the latest outlook on capacity margins in New York City from the NYISO. On December 2, 2021, the NYISO released its Comprehensive Reliability Plan for 2021-2030 (CRP), stressing that "the margin to maintain reliability over the next ten years will narrow or could be eliminated based upon changes in forecasted system conditions" and "[r]isk factors such as delayed implementation of projects in this plan, additional generator deactivations, unplanned outages, and extreme weather [that] could potentially lead to deficiencies in reliable electric service in the coming years."⁷¹ The CRP projected tight transmission security margins under its base load assumptions with limited forced generation

⁷¹ See CRP available at: <https://www.nyiso.com/documents/20142/2248481/2021-2030-Comprehensive-Reliability-Plan.pdf/99a4a589-7a80-13f6-1864-d5a4b698b916>, p. 5.

outages in New York City from 2025.⁷² In scenarios assuming a heat wave and additional forced outages, these margins are even projected as negative from 2025. These projections did not include any Tier 4 projects.⁷³ Thus, the NYISO's findings further stress the importance of moving swiftly on Tier 4. This is particularly true with respect to the HQUS project because of its planned completion date of 2025, meaning the project would contribute to alleviating the identified near-term capacity constraints in a way that alternative earlier-stage Tier 4 projects could not.

The Commission disagrees with the argument made by some commenters that one or both of the contracts in the proposed award group should not be approved because of the high costs of the associated projects. While program costs are obviously an important consideration, per the CES Modification Order, the public interest determination is to be based on a variety of factors, including the societal benefits associated with the proposed projects. As is well documented by NYSERDA and Staff, the benefits calculated in the BCA applied to the two projects are expected to significantly exceed the costs; it is the resulting net benefits that justify the Commission's conclusion here.

Some commenters assert that only one project should be selected because the BCA undertaken by NYSERDA and Staff indicates that a second project would reduce, or at least not deliver, incremental net societal benefits compared to selection of one project. That assertion misinterprets the objective and scope of the BCA and applies too limited a perspective to the cost-effectiveness criterion. While the BCA results do not show

⁷² Id., p. 7.

⁷³ Id., p. 58.

higher net societal benefits for the combined case than for either project on its own, the increased societal benefits are significant and relatively equivalent to the increased cost. The BCA is presented to test whether any project or combination of projects considered for award selection would, as required under the CES Modification Order, be a cost-effective means of progressing toward the CLCPA's 2030 and 2040 Targets (i.e., deliver net societal benefits.⁷⁴ The BCA was not intended to rank one award group option (e.g., two projects) against another (e.g., one project). For the purposes of the cost-effectiveness criterion within the public interest review, the key observation is that both projects individually, as well as the award group of both projects, are expected to deliver significant net societal benefits and thus advance the public interest.

The Tier 4 Petition demonstrates that the costs of the CPNY and HQUS projects are exceeded significantly by the monetary estimates of societal benefits they provide. As shown in the Agencies' Reply Comments updating the BCA, CPNY produces significant benefits of up to \$15.3 billion relative to its costs of \$9.3 billion. That is also correct if one looks at the HQUS project in isolation, with benefits of up to \$19.3 billion exceeding the costs of \$12.8 billion. In either case, adding the second project increases the combined costs and benefits by a similar amount. Adding the HQUS project to the CPNY project increases the cost by \$12.8 billion and benefits by up to \$12.6 billion, while adding the CPNY project to the HQUS project increases the cost by \$9.3 billion and benefits by up to \$8.6

⁷⁴ CES Modification Order, p. 82.

billion.⁷⁵ As a result, the maximum net benefits for the two projects combined at \$5.8 billion are close to the maximum net benefits of either project by itself - \$6.1 billion for CPNY and \$6.5 billion for HQUS.⁷⁶ Most importantly, the combined benefits of the projects are significant and constitute real additional societal benefits in the form of more public health benefits from air quality improvements and more carbon savings.

Some commenters also rightly point out that the BCA does not attempt to quantify and thus include other real benefits from the two projects. As Boralex notes, the BCA analysis does not include any benefits beyond the 25-year term of the CPNY and HQUS contracts. Yet the HVDC lines associated with the projects would continue to provide clean energy benefits to New York long after expiration of the two contracts. Additionally, as other commenters noted, the BCA did not quantify avoided transmission upgrades and considered only the air quality benefits associated with reduced PM_{2.5}. For example, it did not include benefits from reductions in ozone formation or reductions in emissions of toxic air pollutants, which are directly tied to exacerbation of asthma and other cardiovascular and pulmonary illnesses.⁷⁷ Therefore, the BCA results are conservative, and the Commission takes these further qualitative benefits into account.

The BCA does not provide an exhaustive quantification of all factors relevant to the Commission's decision. As noted throughout this section, the Commission takes into account

⁷⁵ These figures are calculated as the difference between those presented for the two projects combined and those for the first project (either CPNY or HQUS) only. See Agencies' Reply Comments, p. 2.

⁷⁶ Agencies' Reply Comments, p. 2.

⁷⁷ Tier 4 Petition, Appendix C, p. 9.

critical further considerations around (i) the unique ability of dispatchable, high-capacity factor HVDC lines into New York City that carry renewable energy, to displace generation and capacity provided by existing in-City fossil-fueled power plants, (ii) the risks and uncertainties surrounding alternative innovative technologies such as low carbon fuels that would need to otherwise fulfill this role, and (iii) the unique contributions in particular of the HQUS project in terms of managing execution risk around reaching our CLCPA targets, unlocking health and other benefits from the Tier 4 projects for disadvantaged communities as soon as possible and helping to relieve tight capacity margins in New York City from the middle of this decade. While these benefits are difficult to quantify at this time, they are still very real.

On the other hand, the Commission disagrees with other aspects of the claims made by Boralex, CPNY, HQUS, and NYC that the BCA understates the projects' benefits. The Commission does not see any merit to assuming under the BCA that Tier 4 contributes to the 70 by 30 target because this would show higher societal benefits. NYSERDA's modeling approach of assuming that Tier 4 will be incremental to the 70 by 30 target correctly reflects the Commission's direction in the CES Modification Order.⁷⁸ The Tier 4 Petition's analysis also correctly reflected the fact that, with or without the two proposed projects, the State would achieve the 2040 goal of a zero-carbon grid, and the elimination of other co-pollutants as well. Thus, the Commission considers as reasonable NYSERDA's modeling approach to reduce the incremental emissions quantification to zero over the period to 2040. The Commission addressed Nuclear New York's argument related to the discount

⁷⁸ CES Modification Order, pp. 22, 26-27.

rate to be used for the valuation of carbon reduction in its BCA Framework Order, which states that the "SCC is distinguishable from other measures because it operates over a very long time frame, justifying the use of a low discount rate specific to its long term effects."⁷⁹ The range of discount rates used in the NYSERDA analysis of 2%-3% is consistent with this guidance.

The Commission does not find persuasive the arguments put forward by some commenters in favor of delaying selection of a second project based on an expectation of future cost reductions. While the cost of wind and solar resources may well continue to decline, these cost savings would be captured as part of NYSERDA's ongoing Tier 1 generation procurements. New York-based projects would ultimately draw from the same wind and solar resource potential, whether in the form of Tier 1 or Tier 4. The prospect of future wind and solar cost declines has not stopped and should not stop New York from procuring now, given the urgency and challenging nature of achieving CLCPA targets, which depends on NYSERDA sustaining an ambitious procurement program over a number of years. In any case, a predominant portion of the Tier 4 costs is associated with the HVDC transmission lines tied to each project, rather than from the generating assets, and there is no reason to expect that those costs would reduce significantly in the foreseeable future. The highly competitive nature of the Tier 4 solicitation provides ratepayers with the greatest assurance that the outcome of the RFP has yielded the most cost-effective projects.

The Commission also disagrees with those comments calling for rejection specifically of the HQUS project because it includes a project component outside of the State, in favor of a second State-only project. The Tier 4 RFP evaluation and

⁷⁹ BCA Framework Order, p. 27.

weighting criteria reflected the approach established by the Commission, under which only the economic benefits that accrue from New York-based deployment are valued as part of the scoring criteria, which is an appropriate way of giving additional credit in the scoring in cases where a New York-based project typically offers higher economic benefits than a project wholly or partially outside New York. With these differences appropriately reflected in the scoring, the Commission sees no reason to override the outcome of the RFP. In-State resources have benefitted from the Tier 1 program through NYSERDA's procurement to date of 10,317 MW of large-scale renewables capacity - all to be sited in New York. The Commission needs to avail itself of all resources and mechanisms, whether in-state or out-of-state, to tackle global climate change.

In sum, the Commission finds that the CPNY and HQUS projects examined together advance the public interest and the case made in the Petition supporting this award group is sufficiently compelling to approve the contracts associated with both projects.

B. Tier 4 Contract Terms - Both Projects

This section discusses noteworthy Tier 4 contract terms and design features that apply to both projects; specifically, those related to the role of capacity and bid quantity in the contracts, and the mechanism by which to ensure the economic benefits agreed to in the contracts are delivered.

1. The Role of Capacity Within Tier 4

The CES Modification Order states that, to qualify under Tier 4, resources must only demonstrate the ability to supply energy into Zone J; the resource need not participate in the Zone J capacity market. The Tier 4 RFP clarified, in alignment with all other CES procurement efforts, that Tier 4 is for the procurement of RECs. The products purchased under the

Tier 4 contracts do not include either energy or capacity, which project developers are able to sell outside the Tier 4 contract.

As the Tier 4 Petition explains, under the Index REC approach, net REC payments are determined by deducting Reference Energy and Capacity Prices from the bid prices submitted as Strike Prices.⁸⁰ Bidders were required to submit values for Unforced Capacity Deliverability Rights (UDRs) as a component of bid pricing to establish the monthly Reference Capacity Prices deducted as part of this calculation. This approach is analogous to the submission of developer-chosen fixed production factors that are utilized in Tier 1 REC procurements, as further described in the Commission's Order Modifying Tier 1 Renewable Procurements (Index REC Order).⁸¹ As described in the Index REC Order, this approach allows developers to propose a capacity price hedge that will be assessed against other bids in a competitive environment.

Developers were also allowed to submit, for the same project, different levels of UDRs with different associated strike prices, to ensure that the variant most attractive to NYSERDA under NYSERDA's assumptions has a chance at being awarded. Indeed, Tier 4 proposals included bid variants with varying levels of UDRs. For instance, CPNY submitted bid variants with and without UDRs, and HQUS submitted bid variants with different levels of UDRs. The differing UDR levels corresponded with adjusted Strike Prices provided as part of bids submitted under the Index REC type of REC purchase mechanism. In accordance with a pre-established methodology, NYSERDA used the as-bid UDR factors along with the Strike Price and other bid price components to calculate the levelized net

⁸⁰ Tier 4 Petition, pp. 25-26.

⁸¹ Case 15-E-0302, Order Modifying Tier 1 Renewable Procurements (issued January 16, 2020).

REC cost of each of these variants and determine the 70%-weighted price component of bid evaluation.

Public Comments

Some comments objected to the HQUS project because the HQUS bid variant recommended for award does not include UDRs for the winter capability period. ACENY, Sierra Club, Rise Light and Power, IPPNY, and Riverkeeper all interpret the lack of winter capability period UDRs in the selected HQUS bid to mean that the HQUS project is uniquely not under any obligation to provide capacity in the winter, which those commenters object to in light of the expectation that winter is projected to become the time of peak electricity demand when space heating starts to switch from gas-fired boilers to heat pumps. Nuclear New York agrees with this perspective and concludes that HQUS would deliver electricity only during low or moderate demand periods, keeping power in Québec during severe winter weather. It states that, without winter capability period UDRs, New Yorkers would be paying HQUS via the unadjusted Strike Price for capacity that HQUS is not guaranteeing.

RLP asserts that under the HQUS contract, HQUS would incur no penalty or default for taking CHPE offline when an event strains the system in such manner that Hydro-Québec serves the reliability needs of Québec first, even if rolling New York City blackouts occur as a result. RLP states that if New York City cannot rely on CHPE's capacity then the HQUS project would not displace existing fossil-fuel fired generating resources. ACENY further hypothesizes that a winter guarantee of delivery was not included due to cost considerations. ACENY requests that the Commission examine this limitation of the project and consider if there might be alternatives, or if it is possible to share more information regarding this tradeoff with the public. IPPNY takes the position that any acceptance of the HQUS

contract should require that HQUS supplies capacity to Zone J during the winter capability period.

In reply comments, HQUS and TDI dispute the claims that the HQUS project lacks reliability and environmental benefits for New York City because its contract does not include winter capability period UDRs. The parties state that the HQUS contract provides a significant economic incentive to maximize capacity sales into New York City throughout the year, including in the winter. Their comments reference HQUS's submission of bid variants to NYSERDA that included UDRs during both winter and summer and interpret NYSERDA's selection of a summer-only UDRs-based bid to indicate that HQUS and NYSERDA do not have the same view on future capacity prices in New York City.

Nevertheless, HQUS and TDI emphasize that this does not change HQUS's intention to provide winter capacity. They further state that there is no credible basis for linking the provision of capacity services to the ability of the project to replace fossil fuel-fired generation in New York City, as environmental impacts from avoided emissions are produced from energy deliveries, not capacity, which is a reliability measure spanning only a small number of hours each year. HQUS and TDI state that they expect that energy from the project would be delivered at or near the maximum line capacity in nearly all hours throughout the year.

Commission Determination

While the general policy concern raised by the comments objecting to the HQUS contract's lack of winter UDRs is important, the comments on this issue misinterpret the role played by winter UDRs under the HQUS contract. Neither the HQUS contract, nor any of NYSERDA's procurement contracts under the CES program, including under Tier 1 and the Offshore Wind Standard, contain requirements to provide capacity. The reason

for this is obvious: NYSERDA's agreements are for the procurement of RECs only. Capacity is not procured by NYSERDA; it is procured in the State pursuant to market rules administered by the NYISO, as approved by the Federal Energy Regulatory Commission. Interestingly, the same commenters that raised this issue support the CPNY project but do not note in their comments that the contract for that project also lacks any requirement to provide capacity.

Rather than reflecting a level of capacity commitment, as these commenters suggest, the inclusion of a UDR factor in the Index REC formula allows proposers to choose whether they wish the "hedging" feature of the Index REC structure to extend to capacity (in which case they will include UDRs) or only energy (in which case they will not include UDRs). Whether or not UDRs are included in the Index REC settlement in a given month does not determine whether the project will offer capacity to the NYISO but rather whether the Index REC structure would provide a hedge against future capacity revenue fluctuation. In months where the UDR factor in the Index REC settlement formula is set to zero (as is the case in the winter capability period in the HQUS contract), the Strike Price is settled only against the reference energy price, with expected capacity revenue kept outside the Index REC calculation. Due to these dynamics, bids with lower levels of UDRs therefore also tend to have lower Strike Prices, reflecting the project's expected level of capacity revenue outside the Index REC structure.

While the Tier 4 REC contracts by their nature do not contain capacity commitments, indications on the likely level of delivery during the winter capability period can nevertheless be derived from the bid quantity commitments in the Tier 4 contract. In this respect, the HQUS proposal offers 10,402,500 MWh/year, representing a high transmission line utilization

factor of 95%. While the bid quantity (discussed in more detail in the following section) is also not a fully firm commitment, Tier 4 projects receive REC payments only for energy delivered, and the bid quantity in the HQUS contract indicates the objective to fill the CHPE line to maximum capacity for 95% of the year in order for the project to achieve its intended rate of return. In addition, the Tier 4 contracts for both HQUS and CPNY contain minimum delivery requirements in both the summer and winter capability periods.⁸²

Any project, regardless of the UDR value used in the contract, would have an equal commercial incentive to seek capacity revenue in Zone J, depending on how much capacity revenue the project can earn in Zone J compared with other available markets. In other words, the question of whether any project provides capacity to Zone J would be determined not by the Index REC pricing formula in its contract with NYSERDA but rather by NYISO rules and market dynamics that exist at the time when capacity is bid into the market.

Based upon our assessment of the process, it appears that NYSERDA did not select an HQUS bid with UDRs during the winter capability period because the bid variants that included such UDRs failed to out-compete other Tier 4 bids under the price and non-price evaluation criteria mandated by the CES Modification Order. The Commission does not view the HQUS contract's lack of winter UDRs as problematic and, moreover, agrees with NYSERDA and Staff that other aspects of the contract appropriately incentivize HQUS to maximize the provision of

⁸² These minimums require (subject to curtailment, force majeure, and other limited exceptions) delivery of 40% of the Bid Quantity (i.e., 80% of half the Bid Quantity) in each half-year capability period.

capacity services through the HVDC line associated with the project.

2. Bid Quantity

The Tier 4 RFP and form agreement described the bid quantity as the amount (in MWh) of Tier 4 RECs that a project expects to proffer as performance during each contract year during the contract delivery term. The annual Tier 4 REC cap is the amount of Tier 4 RECs equal to the product of 8,760 hours/year and the transfer capacity of the transmission line (i.e., a higher capacity line would have a higher annual Tier 4 REC cap). For the CPNY project, the bid quantity is 7,870,865 MWh/year, and the annual Tier 4 REC cap is 11,388,000 MWh based on the 1,300 MW transfer capacity of the associated HVDC line. For the HQUS project, the bid quantity is 10,402,500 MWh/year, and the annual Tier 4 REC cap is 10,950,000 MWh, based on the associated HVDC line's 1,250 MW transfer capacity.

Public Comments

In its comments, Nucor stated that the anticipated bill impacts described in the Tier 4 Petition are premised on the bid quantities in the contracts, whereas NYSERDA is obligated to purchase Tier 4 RECs up to the annual Tier 4 REC caps described above, which in the aggregate are substantially higher than the aggregate bid quantities of the two contracts. Nucor noted a concern that the cost analysis "materially understates the potential consumer bill impacts by failing to account for costs associated with as many as 100 million RECs over the 25-year contract terms."⁸³

Commission Determination

The Commission believes that calculating bill impacts using the bid quantities, as was done by NYSERDA and Staff in

⁸³ Nucor comments, p. 18.

the Tier 4 Petition, was appropriate. The bid quantities represent the reasonable expectation projects have of the amount of Tier 4 energy to be supplied annually during the contract terms. With respect to the risk of potential increased costs noted by Nucor, we first note that in the circumstance raised as a concern, New York City would be receiving more renewable energy from the projects. In other words, the higher payments would be associated with higher performance. Nonetheless, the CPNY contract expressly addressed this issue by including a provision limiting Tier 4 payments to the bid quantity, subject only to a benefit sharing of potential voluntary sales of Tier 4 RECs, as described in the Tier 4 Petition. The HQUS contract does not include a similar provision but, given the much higher bid quantity of the HQUS project relative to the capacity of the transmission line, the possibility of actual Tier 4 deliveries exceeding the bid quantity is much less likely and, in any case, this eventuality would be well within the range of the accepted approach to this issue throughout the CES programs (e.g., NYSERDA's Tier 1 REC and OREC contracts allow for annual sale and purchase of RECs 10-20% above the annual quantity contemplated in the project's bid). On this basis, the Commission is satisfied that the concern raised by Nucor is managed adequately in the Tier 4 contracts.

3. Economic Benefits

Following the same practice as in Tier 1 REC and OREC procurements, NYSERDA's Tier 4 contracts include provisions that hold developers accountable to cause the economic benefits commitments included in their bids, which were awarded credit in evaluation, to actually materialize. Specifically, the contracts require the developer to document and report on the dollar amount of actual financial expenditures benefitting the State that are verified to have accrued as a result of the

development, construction, modification, interconnection, and operation of the project through the end of the third year following commencement of REC deliveries. If this reported amount is less than 85% of the as-bid dollar amount of expected financial expenditures benefitting New York State expected to accrue through such period, the contracts require an alternative investment to be made or contract damages paid. The contracts also include specific commitments to provide benefits to Disadvantaged Communities. Recognizing that the definition of Disadvantaged Communities has not yet been finalized, the contracts further require that once the definition of Disadvantaged Communities has been finalized, the parties will review feedback from Disadvantaged Communities with respect to the appropriate scope and method of determining benefits to Disadvantaged Communities to be provided by each project, following which the parties will negotiate in good faith to establish the details and parameters of an appropriate framework for identifying, measuring, and tracking benefits to Disadvantaged Communities.

Public Comments

Nucor argues that the contractual enforcement mechanism with respect to economic benefits commitments is "quite weak" because at the time of enforcement, "with the facilities already built and in operation, the prime opportunity for the intended local economic support will have come and gone." Nucor further suggests that "[t]he Commission should require more definitive local spending commitments before project construction begins."⁸⁴ While numerous commenters touted the economic benefits to Disadvantaged Communities expected to accrue from the projects, only Bronx Community Board #1

⁸⁴ Nucor's comments, p. 20.

addressed the contractual provisions in this area, requesting that the contract include "provisions that would establish the details and framework for identifying, measuring and tracking benefits to this disadvantaged community as a formal stakeholder."⁸⁵

Commission Determination

The Tier 4 contracts contain firm contractual commitments from the projects with respect to realization of economic benefits, in line with both the RFP requirements and established practice across other CES programs. The Commission agrees with Nucor that it is far preferable for the projects to deliver on their economic benefits commitments than to seek payment of damages in case of nonperformance, but this is precisely what the contractual damage payment clause seeks to accomplish. The main objective of the damages provision is to deter the counterparty from not complying with its obligations; in this case, on the obligations to deliver economic benefits. The Commission declines to impose a new contractual approach to economic benefits here. NYSERDA's established approach sensibly allows for flexibility in project development by establishing only an aggregate dollar amount of economic benefits rather than dictating that project expenditures be made in a specific way. There is nothing about Tier 4 that suggests a different approach is needed compared to the one taken in all Tier 1 REC and OREC contracts to date. Regarding benefits to Disadvantaged Communities, the Commission finds that the approach taken in the Tier 4 contracts is reasonable and balances firm commitments from the projects with the need to establish an updated framework for identifying, measuring, and tracking benefits to Disadvantaged Communities once the definition of Disadvantaged

⁸⁵ Bronx Community Board #1 comments, p. 3.

Communities has been finalized. The Commission further finds that for these procedures to be meaningful and accountable, their results should be made public and filed with the Commission. Accordingly, the Commission directs NYSERDA to reach agreement with both CPNY and HQUS to include language in the final contract requiring that the details and parameters of the framework for identifying, measuring, and tracking benefits to Disadvantaged Communities, along with the resulting measured and tracked data, will be filed in this proceeding.

4. Interactive Effects with Offshore Wind

The Tier 4 Petition describes how the CPNY and HQUS projects are expected to complement the development of offshore wind.⁸⁶ It notes the complementary generation profiles of higher dispatch from CPNY's solar generation during the day and in the summer with higher dispatch from offshore wind at night and during winter. It also notes the benefits of the dispatchability both of HQUS's hydro resources and CPNY's Blenheim-Gilboa pumped storage facility to complement offshore wind generation. The Petition found that, because of these characteristics, no incremental curtailment of current or future offshore wind procurements is expected as a result of Tier 4 generation from the two projects. Presuming both the HQUS and CPNY projects are in service in 2040 and other CES targets are achieved, offshore wind curtailment is projected to be 16% lower compared to the Reference Case. Additionally, the integration of offshore wind is achieved with reduced storage requirements: total storage in Zones J and K is estimated to be reduced by 31% compared to the storage requirements in the Reference Case.

⁸⁶ Tier 4 Petition, p. 32

Public Comments

ACENY notes that the HQUS contract does not appear to contain provisions that would require it to deliver to Zone J "only at such times when offshore wind is not available or is already maximizing its delivery into Zone J."⁸⁷ ACENY requests, among things, clarification regarding whether this issue was explored in the context of examining the interaction between the HQUS project and offshore wind. ACENY further inquires whether by creating a firm baseload supply of energy into Northern Queens even when there is insufficient local load the HQUS project would exacerbate the identified offshore wind export generation pocket. While acknowledging NYSERDA's reported modeling analysis that projected no incremental curtailment of current or future offshore wind procurements as a result of Tier 4 generation, ACENY nevertheless wonders if this modeled benefit could be embodied in commitments or requirements in the HQUS contract for balancing with offshore wind.

In its comments, IPPNY states that the combination of offshore wind, the CPNY project, and transfers of renewable energy from upstate on the A/C transmission system might alone provide sufficient ability to deliver renewable energy to Zone J. IPPNY thus raises the possibility that the addition of the HQUS project could potentially result in backing down other renewable energy deliveries from upstate and even exporting power out of southeast New York into the rest of the State. IPPNY requests that the Commission evaluate how the Tier 4 projects would work in conjunction with offshore wind and other transmission infrastructure improvements that are underway.

Nuclear New York claims that the contracts authorize NYSERDA to pay nothing for RECs created during hours in which

⁸⁷ ACENY comments, p. 7.

the marginal price of electricity in NYC is zero or negative. Nuclear New York also points to a contract provision that it notes would expire after the first 200 hours in a year. Nuclear New York expresses concern that the expansion of offshore wind "will force NYC wholesale electricity prices into negative values, perhaps for thousands of hours every year," during which NYSERDA would be forced "to compensate [HQUS] and CPNY for these depressed prices, irrespective of whether NYC needs their output or not."⁸⁸

In its reply comments, HQUS states that once the HQUS project is built the infrastructure to balance intermittent power would be in place, thus positioning New York to take advantage of the operational flexibility of the Hydro-Québec system, including to balance offshore wind. HQUS states that the HQUS contract was developed through the Tier 4 RFP "with the specific objective of responding to the urgent need for baseload renewable power delivered into Zone J as the region transitions to much greater use of intermittent resources."⁸⁹

Commission Determination

The Commission recognizes two priorities in commenters' views that may at times contradict each other: Both the desire to ensure that deliveries to New York are maximized when needed to complement low offshore wind generation, and flexibility in the use of the transmission lines associated with the CPNY and HQUS projects in future situations where offshore wind may at times exceed local demand. The Commission believes that, in principle, market forces are the best driver to pursue such flexibility and ensure that the Tier 4 projects complement offshore wind. The Tier 4 Petition estimates that the two

⁸⁸ Nuclear New York comments, pp. 2-3.

⁸⁹ HQUS reply comments, p. 20.

projects would reduce potential curtailment of offshore wind by 16%. The Commission acknowledged in the CES Modification Order that it would nevertheless be desirable to include stipulations discouraging Tier 4 energy deliveries at times when this would contradict market signals. Accordingly, the CES Modification Order directed NYSERDA and Staff to consider terms that would limit the seller's risk of loss should the number of negative Locational Based Marginal Price (LBMP) hours exceed expectations.⁹⁰

Negative LBMPs reflect times when a generator must pay the NYISO to inject power into the grid. Negative LBMP periods can occur when load is relatively low, such as during overnight hours, and significant amounts of supply with low or zero short run running cost are available. A generator with no running cost, such as solar or wind, and which receives a REC payment for each MWh it injects, often is willing to pay the NYISO to inject power when the REC payment it receives per MWh is greater than the LBMP it must pay. As more intermittent resources with REC payments are added to the grid, it is likely that the number of negative LBMP hours will increase. Because of the significant amount of offshore wind generation that will be added to Zone J, care was taken to prevent the Tier 4 projects from adding to this concern. The RFP, and subsequently the Tier 4 contracts, addressed this concern by requiring that no Tier 4 REC payments are made for energy deliveries in the first 200 hours of each year in which the LBMP in Zone J is zero or negative. The Commission is satisfied that this contract provision, which established an objective safeguard that could be modeled and built into bids, represents a reasonable approach towards managing concerns in this respect.

⁹⁰ CES Modification Order, p. 99.

More broadly, the Commission is conscious that the determination of how market signals drive energy dispatch is primarily governed by NYISO market rules. Development of such market rules more specifically for the CPNY project is discussed further below. For the CHPE line as well, the NYISO would need to further develop its current market rules for external controllable lines such as the CHPE line to reflect the specific nature of the HQUS project as linking the CHPE line to a pool of generating resources.

C. Characteristics Specific to Each Project

The Commission next examines issues specific to the CPNY and HQUS projects that are material to its review. Specifically, as noted in the Tier 4 Petition, noteworthy issues include curtailment of Tier 1 resources, NYISO market rules, permitting requirements, deliverability of energy, hydropower baselines, project configuration, indigenous communities, and environmental impacts.

1. CPNY Project

As noted in the Tier 4 Petition, the CPNY contract has specific characteristics related to curtailment of Tier 1 resources, NYISO market rules, future permitting requirements, and deliverability of energy.

a. Curtailment of Tier 1 Resources

The Petition describes a provision in the CPNY contract related to curtailment of Tier 1 resources. Specifically, Section 2.07 of the CPNY contract establishes rules that govern the addition of certain generation resources to CPNY's portfolio at risk of causing incremental curtailment of other locally situated resources. Depending on the nature and size of the curtailment and whether the NYISO or the Commission designates a transmission project to eliminate the curtailment, CPNY committed through Section 2.07(d) to either

make transmission upgrades to eliminate such curtailment risk or adjust the bidding and scheduling of its curtailing projects to eliminate the curtailment. The CPNY contract includes a provision (Section 2.07(g)) requiring that a NYISO Requested Economic Planning Study (REPS) or comparable production cost modelling assessment should be undertaken to address the question of whether a particular generation resource causes incremental curtailment and includes further detail regarding the assumptions that should be included in any such study.

Section 2.07(d) provides that, if the assessment shows curtailment impacts of a significant enough magnitude, the resource causing the curtailment would not be permitted to be added to the portfolio unless and until the NYISO or the Commission designates a transmission project to eliminate the curtailment or CPNY commits to transmission upgrades or bidding and scheduling adjustments to eliminate such curtailment risk.⁹¹ The CPNY contract (Section 207(h)) also calls for a separate study to be conducted with respect to the Canisteo Wind generation resource in particular to determine whether certain terminal upgrades eliminate curtailments and, if not, to identify alternative mitigation to do so.⁹²

Public Comments

In its comments, ACENY supports the provisions of the CPNY contract that impose gating requirements on portfolio additions to avoid significant local curtailment of contracted or awarded renewable projects, viewing those provisions as

⁹¹ This provision is explained more specifically in the Tier 4 Petition, p. 38.

⁹² In the event that this process results in Canisteo Wind being excluded from CPNY's portfolio and the parties are unable to agree on adjustments to the contract to reflect its removal, Section 14.01(h) gives CPNY the right to terminate the contract.

critical for the effective achievement of CLCPA mandates. ACENY recommends that the studies mandated by Section 2.07 of the CPNY contract be publicly available to ensure the provisions are implemented in accordance with their terms. ACENY asserts that it will remain critical over time for energy deliverability requirements to be upheld, and it should be presumed that transmission upgrades would be completed to allow new resources to access the line, if necessary. ACENY supports making use of a REPS study but asserts that the study assumptions used for the REPS should be reviewed with market participants before the study is completed.

EDFR acknowledges and is encouraged by the CPNY contract provisions regarding curtailment mitigation, seeing it as a mechanism to protect resources with existing Tier 1 contracts from incremental curtailment. EDFR also states that transmission upgrades would eliminate curtailments only when they are placed in-service, and therefore the contract provision should be expanded to provide additional protections by addressing how impacted Tier 1 projects are to be protected if a lag exists between the timing of Tier 4 generation and the timing of new grid upgrades. EDFR questions why Section 2.07(e) of the CPNY contract sets a threshold to determine whether a Tier 1 project is affected by the addition of a Tier 4 project and states that any incremental curtailment should be considered as undue and trigger a Tier 1 generator to be considered to be affected. EDFR also states that the provisions should be further expanded to protect against potential impacts on the incremental energy price spread between local energy pricing at the node of projects with index REC arrangements and those projects' NYCA zone, given that the index REC formula is based on NYCA zonal pricing and therefore does not provide a hedge against this "basis risk." Finally, EDFR recommends that all

studies related to Section 2.07 of the CPNY contract be made public to ensure that they are implemented in accord with the intended coordination and implementation of all procurement programs across New York State.

Commission Determination

The Commission agrees with ACENY and EDFR that the provisions addressing the potential for incremental curtailment included in the CPNY contract are critical to ensuring that resources are not added to CPNY's portfolio until they have been shown to be expected to not cause significant curtailment of other local renewable projects. The Commission declines, however, to impose modifications to the CPNY contract proposed by EDFR that would prohibit additions of resources that are modeled to cause even insignificant levels of local curtailment or potentially add risk that the energy pricing between local projects' nodes may diverge from zonal energy pricing hedged against in the Index REC formula.

The contractual provisions strike a reasonable balance between the pressing need for new renewable energy projects to be developed and the legitimate interests of existing awarded or contracted projects. Imposing a requirement that, as proposed by EDFR, a proposed resource must be shown to cause zero curtailment would create an unnecessarily high bar for projects to clear before being added to CPNY's portfolio and would ignore that the State also has a role to play in considering relevant system upgrades needed to manage curtailment, as is currently underway through the Phase 1 and Phase 2 local transmission and distribution upgrades being undertaken pursuant to Commission

orders issued under the Accelerated Renewables Act.⁹³ Regarding EDFR's proposal to assess basis risk, the Commission views the review of curtailment in the existing contractual provisions as an adequate proxy for the overall potential harmful impacts that new resources would have on local projects.

The Commission also declines to impose changes to the CPNY contract proposed by EDFR and ACENY that would create new contractual consequences triggered by the actual levels of curtailment experienced by local projects in the future and/or the timing of approved transmission upgrades. The CPNY contract necessarily establishes a set of screening conditions as to whether a to-be-developed resource can or cannot be added to CPNY's portfolio. As long as the new resource is developed in a manner consistent with the assumptions that the evaluation of the screening conditions was based on, CPNY has fulfilled the obligations that it can reasonably be held accountable for in its role. CPNY cannot, however, fully predict or control the actual levels of curtailment that may result from a resource's addition, nor can CPNY control the timing of implementation of transmission upgrades approved by NYISO or the Commission. Any approach that would put the CPNY resource at risk of not receiving Tier 4 RECs in the future due to those factors beyond their control would undermine the ability of the portfolio resources to obtain financing and commit the investment needed to carry out construction.

As for the suggestions regarding the process through which NYSERDA should carry out and publicize the results of studies contemplated by these provisions of the CPNY Contract,

⁹³ See Case 20-E-0197, supra, Order on Phase 1 Local Transmission & Distribution Project Proposals (issued February 11, 2021); Order on Local Transmission & Distribution Planning Process & Phase 2 Project Proposals (issued September 9, 2021).

we believe that ACENY and EDFR have raised legitimate issues of public interest that should be considered. The decision as to whether and when studies of this nature are publicized should rest with NYSERDA, to be made on a case-by-case basis in consultation with Staff, balancing the need for public awareness and engagement with affected stakeholders with the sensitivity of information contained in such analyses.

Accordingly, the Commission rules that no changes to Section 2.07 of the CPNY contract are necessary, and NYSERDA shall consult with Staff and make a reasonable determination as to whether and when any analyses or studies undertaken pursuant to Section 2.07 of the CPNY contract are released publicly.

b. NYISO Market Rules

The Tier 4 Petition explains that, while the NYISO has energy and capacity market rules in place for controllable transmission lines from out of state (e.g., the CHPE line), the same cannot be said for internal controllable (HVDC) lines such as the line related to the CPNY project.⁹⁴ While this issue did not elicit comments from stakeholders, the Commission notes the assessment of this issue provided in the Tier 4 Petition, as well as our determination below.

Commission Determination

The Commission is conscious that the lack of market rules in this respect represents a challenge that CPNY faces when compared to the more mature HQUS project, and the Commission sees this within the broader context of the difference in development stage of the two projects. As noted above, the HQUS project has obtained virtually all of its

⁹⁴ As discussed above, the NYISO will need to further develop its current market rules for external controllable lines to reflect the specific nature of the HQUS project as linking the CHPE line to a pool of generating resources.

permits and is prepared to begin construction in the coming months. The CPNY project, by contrast, has not yet obtained several State and federal permits, including those required under PSL Article VII and Executive Law 94-c. This is not unusual in New York where most renewable projects do not significantly advance to the permitting processes until they obtain awards from NYSERDA, and likewise the Commission does not view the absence of fully established NYISO market rules as an impediment to awarding a NYSERDA contract.

In any event, the Commission is satisfied, based on its review of the Tier 4 Petition, that issues related to internal controllable line rules to be established by the NYISO and the pending nature of State and federal permitting issues have been comprehensively considered as part of the proposal evaluation. For example, uncertainty around NYISO market rules for internal controllable lines was included in the quantification of the range of expected program costs that NYSERDA provided in its ratepayer impact analysis, as discussed in more detail further below. In any event, the NYISO has already commenced a public process to develop market rules for internal controllable lines and on that basis the Commission sees no need for further consideration as part of this Order.⁹⁵

c. Environmental Impacts

As just noted, CPNY has not yet obtained applicable State or federal permits related to its project. The various generation and transmission-related facilities associated with the CPNY project obviously would not be allowed to begin

⁹⁵ See, e.g., NYISO Market Issues Working Group, "DC Line Scheduling Design" (Meeting of March 16, 2022), found at: https://www.nyiso.com/documents/20142/29177064/Internal%20Controllable%20Lines_031622%20MIWG_FINAL.pdf/85d7e68c-28e0-cd54-c2fc-6f7dfdde10eb.

construction or operation until all required permits are issued by the relevant governmental entities.

Public Comments

BCEQ and the Harlem River Working Group identified in their comments what they view as potential environmental impacts of the CPNY project that the Commission should review as part of this Order. For example, BCEQ alleges that “the completed environmental reviews, however extensive for upstate communities, and even NYC at large, have not reached the appropriate level identifying critical impacts on the Harlem River from the Hudson River to the East River,” and also specifically notes that “the impact of proposed transmission lines on the Harlem River and possible landfall in Harlem River Yards” have not been examined.⁹⁶ Both BCEQ and the Harlem River Working Group note that the cable burial depth requirements are different in the Harlem River than in the Hudson River and East River. BCEQ notes further that the Final Supplemental Generic Environmental Impact Statement (SGEIS) does not include documentation of the Bronx’s existing conditions and how they may be impacted by the proposed action. Additionally, several commenters request that NYPA make a clear commitment to decommission its four South Bronx-based generation peaking units as soon as there is a commensurate level of renewable energy introduced to Zone J.

Commission Determination

As explained below, the Commission prepared a Final SGEIS related to the changes to the CES and other programs adopted under the CES Modification Order. Thus, from a generic perspective, the potential environmental impacts associated with the various components of the CPNY project have been

⁹⁶ Comment Letter from Bronx Council for Environmental Quality, dated February 7, 2022, p. 1.

appropriately reviewed. Each developer of a project component is otherwise required to obtain all applicable State and federal permits and authorizations related to the CPNY project. The Commission's consideration of the CPNY contract is without prejudice to the permits that CPNY would need to obtain prior to commencing construction and ultimately operation. The Commission further declines to require the decommissioning of NYPA's peaking units, or any other particular fossil fuel plants, as a condition to our approval of either Tier 4 contract. The implementation of the CPNY and HQUS projects on as swift a timeline as practicable will reduce the need for "peaker" plants to generate, which will reduce emissions even before those plants are decommissioned. Additionally, DPS Staff, NYSERDA, and the Department of Environmental Conservation are already in the process of developing a blueprint to guide the retirement and redevelopment of New York's oldest and most-polluting fossil fuel facilities. The Commission may revisit the issue of "peaker" plant retirement as that blueprint is developed, but we find that it would be counterproductive, and beyond the jurisdiction of the Commission in this proceeding, to impose an obstacle to the Tier 4 projects on this basis.

d. Deliverability of Energy

The Tier 4 Petition notes that deliverability of energy from the Tier 4 generating resources to New York City constituted one of the evaluation criteria that the Scoring Committee applied to the Tier 4 proposals.⁹⁷ As noted above, the Petition concludes that the CPNY project offers a high level of deliverability to New York City.

⁹⁷ Tier 4 Petition, p. 11

Public Comments

Save Ontario Shores questions whether the resources included in the CPNY project would be able to generate energy that reaches New York City and states that wind and solar projects cannot provide the baseload and readily dispatchable energy that is needed to shutter poorly sited electric generating plants in New York City.

Commission Determination

The Commission is satisfied that NYSERDA's RFP evaluation process included an adequate level of analysis related to energy deliverability of the Tier 4 projects into New York City. While the CPNY project relies on a portfolio of intermittent generating resources, namely solar and wind resources, this does not prevent the project overall from offering a high level of deliverability by means of optimization of the composition of its wind and solar portfolio profile and, crucially, the combination of the renewable resources with the Blenheim-Gilboa pumped storage facility.

2. HQUS Project

As noted in the Tier 4 Petition, while the HQUS contract contains several unique provisions related to the Supplier GHG Baseline and Indigenous communities, it does not contain provisions related to the Supplier Energy Baseline, as permitted under the CES Modification Order. Those issues, as well as public comments related to the lack of a New York converter station and potential environmental impacts of the HQUS project are addressed next.

a. Supplier GHG Baseline

In accordance with the requirements of the CES Modification Order related to proposals that use hydropower as part of a resource portfolio, HQUS submitted all of its bids subject to the Supplier GHG Baseline. As noted in the

background of this Order, Exhibit H of the HQUS contract contains a negotiated modification to the Supplier GHG Baseline provisions originally set forth in the Tier 4 RFP.

As explained in the Tier 4 Petition, the Supplier GHG Baseline modification in the HQUS contract employs a system of "banking" and "borrowing" that has the effect of averaging the annual amount of the HQUS project's production (the "Supplier Production for GHG Baseline") over the contract delivery period, subject to certain limitations. To the extent that the HQUS resources annually generate energy in excess of the Supplier GHG Baseline plus the amount of Tier 4 energy delivered into Zone J, HQUS will be permitted to "bank" the surplus energy, effectively creating a credit in the amount of the surplus. The modification also allows HQUS to "borrow" by enabling HQUS to sell a full complement of Tier 4 RECs in years in which its production would not create a sufficient Supplier Production for GHG Baseline in excess of the Supplier GHG Baseline to permit HQUS to do so. Any banking and borrowing over time would be accounted as a net positive or negative balance.

This mechanism acknowledges that any accumulated deficit remaining at the end of the contract delivery period would represent Tier 4 RECs that were compensated for in years when the Supplier Production for GHG Baseline in excess of the Supplier GHG Baseline was insufficient to support such compensation. In this case, HQUS would be required to promptly reimburse NYSERDA after the end of the contract delivery period for any remaining accumulated deficit, plus interest. HQUS may compensate NYSERDA by (i) transferring Tier 1 RECs to NYSERDA at no cost to NYSERDA, (ii) by making renewable energy investments after the contract delivery period approved by NYSERDA, or (iii) if Tier 1 RECs are unavailable, and HQUS and NYSERDA cannot

agree on renewable energy investments, by a cash payment from HQUS to NYSERDA.

Under the banking and borrowing mechanism, HQUS cannot accumulate surplus or deficit balances at any time in excess of 80 TWh. Thus, there is a limit on the degree to which HQUS could carry over benefits from years of excess production. There is also a limit on the degree to which HQUS could build levels of deficit that create an unreasonable risk to NYSERDA in relying on HQUS reimbursement at the end of the contract delivery period. HQUS is also permitted to mitigate the risk of accumulated deficits by including in the calculation of its annual production (i) Tier 1 RECs produced during the contract delivery period that it transfers to NYSERDA at no cost, and (ii) the benefits of new demand side management and other programs and actions intended to reduce electricity and energy consumption in Québec that applicable regulators in Québec have authorized after the effective date of the HQUS contract. Only savings that have been filed or otherwise published in accordance with such regulatory authorization shall be included for this purpose.

As noted elsewhere in the Tier 4 Petition, HQUS is also required, on or before the deadline for the project to achieve commercial operation (without giving effect to any extensions), to either own or enter into long-term power purchase agreements with new projects intended to generate qualified renewable energy of at least 4.0 TWh annually.

Public Comments

Some commenters took issue with the provisions of the HQUS contract related to the Supplier GHG Baseline. For example, Sierra Club takes the position that the HQUS contract is not in the public interest on the grounds that it undermines the Supplier GHG Baseline by authorizing HQUS to both average

energy delivered to Zone J across the entire delivery term of the contract and run a shortfall of up to 80 TWh of energy during the contract term. Sierra Club states that contract language related to this issue is in contravention of the requirement to comply with the Supplier GHG Baseline through annual averaging, while separately excusing compliance in force majeure-type circumstances. IPPNY, ACENY, and Riverkeeper also characterize the banking and borrowing mechanism that excuse compliance in force majeure situations as being inconsistent with the Commission's directive regarding the Supplier GHG Baseline. IPPNY and Sierra Club also assert that the Supplier GHG Baseline provision in the HQUS contract would allow HQUS to satisfy the baseline by using Tier 1 RECs that are not deliverable to Zone J and/or are produced from generation operating prior to the date of the CES Modification Order and that HQUS does not own or have under contract.

IPPNY, Sierra Club, and Riverkeeper also raise concerns regarding contract provisions related to the Supplier GHG Baseline that allow HQUS to include in the calculation of Supplier GHG Baseline Compliance demand side management to reduce electricity and energy consumption in Québec, which in their view does not meet the CLCPA definition of "renewable energy systems" and provides no economic benefit to New York. IPPNY states that allowing the aggregate savings from demand side management and other programs to be counted as Tier 4 renewable energy to Zone J would allow Hydro-Québec to backfill with fossil-fuel fired energy to achieve load growth plus the claimed incremental demand side program savings. IPPNY requests that the Commission direct NYSERDA to adjust the Supplier GHG Baseline in the contract upward to capture any growth in Hydro-Québec's service territory load and only reduce it if there is a net reduction in service territory load.

ACENY separately notes that the rationale for the requirement in the contract that HQUS procure or own additional wind and solar energy resources that come online after the date of the CES Modification Order and total at least 4 TWh per year is not explained in the Tier 4 Petition, while speculating that "it may have been included to either diversify the resource mix sent to Zone J or to make up for the fact that the contract does not fully apply the additionality requirements specified in the CES Modification Order."⁹⁸ ACENY states that the contract requirement should be modified to require the additional resources to be in New York State.

In their joint reply comments, HQUS and TDI assert that the provisions of the contract related to the Supplier GHG Baseline are appropriately designed to the type of renewable energy at issue, namely hydropower. HQUS and TDI state that the banking and borrowing mechanisms in the contract were developed to account for the reality that hydropower resources are subject to annual fluctuations of precipitation and variability of water inflows. They point to historic data on yearly deviation from average energy inflows, showing multiple instances where significant positive or negative deviations occur over a number of consecutive years compared to the long-term average. HQUS and TDI assert that averaging over the contract term is more representative of the hydropower production used to establish the Supplier GHG Baseline and that using the full contract term "to smooth out low water periods . . . ensures that deliveries from HQUS are truly incremental."⁹⁹ They state that the contract provides several environmentally beneficial options to compensate New York and, as a last resort, if a negative balance

⁹⁸ ACENY comments, p. 7.

⁹⁹ Reply Comments from HQUS and TDI, p. 17.

remains at the end of the contract term, HQUS would be obligated to pay back to New York the value of any shortfall plus interest, resulting in no risk because the State would have received the renewable energy in New York City at no cost.

HQUS and TDI also dispute those comments claiming that the force majeure provision of the Tier 4 contract provides relief from complying with the Supplier GHG Baseline due to low water conditions. They note that the purpose of the force majeure language in Exhibit H of the contract is to temporarily adjust the Supplier GHG Baseline if a hydropower station is affected by a force majeure event that prevents it from producing any electricity. Moreover, HQUS states that it would agree to the clarification of language of Exhibit H to reflect that low water levels alone do not constitute a force majeure event. Boralex also takes the position that the Supplier GHG Baseline was rigorously applied and satisfies the requirements of the CES Modification Order.

Commission Determination

The question here is whether NYSERDA reasonably applied the flexibility provided pursuant to the CES Modification Order with respect to the way the Supplier GHG Baseline additionality requirement is to be implemented. The Commission finds for the reasons discussed below that NYSERDA reasonably applied this aspect of the Order, particularly given the complexity of the baseline and the need to craft requirements based on the unique characteristics of the HQUS project.

The Commission disagrees with commenters who view the flexibility provided through the banking and borrowing provisions of the HQUS contract as conflicting with the CES Modification Order, and instead views this as a form of "annual averaging" permitted by the CES Modification Order, which

expressly allows for averaging of a proposer's Supplier GHG Baseline over multiple years. This form of flexibility in complying with the Supplier GHG Baseline forms the counterpart of the approach to setting the baseline. The Commission directed NYSERDA in the CES Modification Order to set the Supplier GHG Baseline to account for the natural fluctuation of precipitation that occurs across multiple years and its inherent association with energy produced by hydropower facilities. It was for this reason that the Commission directed NYSERDA to:

require all Tier 4 applicants to provide the historic renewable energy delivered to the NYCA (not less than 20 years), historic generation baseline of average annual hydropower production (not less than 20 years) with the corresponding water flows as measured by the U.S. Geological Survey (USGS) gauges or best available data sources, capacity additions, and other pertinent information that NYSERDA may request.¹⁰⁰

Within the averaging approach taken in the HQUS contract applicable to the Supplier GHG Baseline, it is appropriate to set the "borrowing" limit such that it provides HQUS with a reasonable level of flexibility that reflects natural fluctuations in precipitation, while still limiting such flexibility such that any borrowing can reasonably be expected to balance out with banking over the contract term to avoid a "negative balance" at the end of the term. The Commission sees no reason to challenge NYSERDA's judgement in this respect. We note in particular that the maximum borrowing limit of 80 TWh represents less than a third of the total energy delivery quantity expected over the contract period. It is also lower than aggregate deviations from average energy inflows that have historically occurred over certain periods of consecutive

¹⁰⁰ CES Modification Order, p. 91 (authorizing NYSERDA "to address baseline issues prior to the submission of binding Tier 4 bids, as it may deem necessary").

years.¹⁰¹ In sum, the Commission finds that the “banking and borrowing” provision is within the level of flexibility afforded by the CES Modification Order.

The Commission agrees with HQUS that the force majeure provision of the Tier 4 contract should not provide relief from complying with the Supplier GHG Baseline during low water conditions. The concept of force majeure is defined in Section 16.01 of the HQUS Contract and does not appear to encompass inconsistent water flows. We otherwise do not see anything unusual about the definition of force majeure, which appears to be generally consistent with definitions of that term in other NYSERDA contracts. Flexibility in the contract regarding inconsistent water flows is thus limited to the banking and borrowing provisions in the contract. Based on HQUS’s reply comments, the Commission agrees that it would be helpful if the language of Exhibit H is clarified to reflect that low water levels alone would not constitute a force majeure event. The Commission therefore directs NYSERDA to reach agreement with HQUS on this issue and include the clarified language in Exhibit H of the final contract.

Arguments that the banking and borrowing provisions reduce the incentive for HQUS to develop new generation fail to consider that the Supplier GHG Baseline was not created to drive new generation but rather to enable bidders to offer available unused capacity from existing hydropower resources. Any incentive for a project to develop additional capacity ultimately depends on whether the project in question has available sufficient unused hydropower capacity. The banking and borrowing mechanics in the HQUS contract protect the project operator against weather-related fluctuations over a number of

¹⁰¹ HQUS reply comments, submitted on March 7, 2022, p. 16.

years but not against a structural deficit in available additional generation. It is this potential structural deficit that Section 2.07 of the HQUS contract addresses. In particular, that provision commits HQUS to procure 4.0 TWh, or around 40% of its bid quantity, of additional qualified renewable energy projects prior to the deadline for the HQUS project to enter commercial operation.

ACENY's suggestion that the Commission should require HQUS to meet its commitment to develop 4 TWh of new generation resources by means of resources developed in New York extends beyond the reach of either Tier 4 or the GHG Baseline more specifically. Both Tier 4 and other CES programs impose certain delivery requirements regarding the energy relating to the RECs purchased under the contract, but these do not extend to a requirement to develop resources in New York. To be clear, the provisions of the HQUS contract that commit HQUS to develop 4 TWh of new renewable resources does not require those resources to be included in HQUS' Tier 4 portfolio and does not incorporate them as Tier 4 delivery requirements. Rather, the purpose of this provision is to require the procurement of additional resources to count towards the Supplier GHG Baseline. Tier 4 certainly does not require that all of a project developer's general portfolio of renewable energy resources be committed to delivering Tier 4 energy to New York City. However, given the holistic nature of the Supplier GHG Baseline, Tier 4 does consider all of a developer's resources (subject to certain stipulations) within the context of that baseline, regardless of whether included as Tier 4 resources or not.

The Commission disagrees with comments that object to the use of Tier 1 RECs as an alternative Supplier GHG Baseline compliance mechanism. As noted above, under Exhibit H of the HQUS contract, Tier 1 RECs can be used during the contract term

to count towards Supplier GHG Baseline compliance, reflecting the fact that a Tier 1 REC, by its nature, certifies the underlying renewable energy as being additional. This framework allows for an alternative commercial method for procuring qualifying renewable energy only for purposes of baseline compliance and in no way alters the requirement that energy must be delivered to Zone J and meet vintage and any other Tier 4 requirements to be eligible to generate Tier 4 RECs.

Separately, Tier 1 RECs can be provided at the end of the term in lieu of cash to cure a shortfall in Supplier GHG Baseline compliance. Critically, and in contrast to the use of Tier 1 RECs for baseline compliance during the contract term, the cash value of the Tier 1 RECs provided must be equal to the amount of the Tier 4 payments that were made in respect of the shortfall. In other words, the use of Tier 1 RECs to pay for the shortfall must be economically equivalent to using cash to pay for the shortfall.

The Commission finds that the contract provisions related to demand side management are consistent with the purpose of the Supplier GHG Baseline. While the Supplier GHG Baseline requires any REC compensated under Tier 4 to represent "the environmental attributes associated with a net increase in the supplier's total generation of renewable energy," the Commission made clear that the purpose of the baseline is to ensure "that deliveries of hydropower under Tier 4 are not simply backfilled by fossil resources elsewhere on the grid."¹⁰² Counting demand side management towards Supplier GHG Baseline compliance meets that purpose by demonstrating that less energy is needed in the system served by HQUS and its affiliates and therefore, no "backfill" can occur to the extent of such

¹⁰² CES Modification Order, p. 89.

reduction in demand. The Commission notes that the details of how demand side management is to be implemented and measured may be complex and accordingly directs NYSERDA and Staff to, prior to commencement of delivery of Tier 4 RECs from the HQUS project, provide in this case the details of how demand side management would be addressed. The Commission further directs NYSERDA to reach agreement with HQUS on how demand side management is to be addressed and include language in the final contract requiring that the agreed approach to implementation and measurement will be filed in this case.

The Commission also declines to impose IPPNY's proposed amendment to the HQUS contract that would adjust the Supplier GHG Baseline over time if Hydro-Québec's service territory load changes. IPPNY's proposal raises two issues for consideration. First, whether the Supplier GHG Baseline is set at the level of supplier energy production or energy consumption; and second, if linked to energy consumption, whether the baseline should be altered from time to time to reflect changes in consumption (e.g., if Hydro-Québec increases the territory it serves, whether its baseline should also be reset to reflect the load of its expanded territory). The CES Modification Order determined that the purpose of the Supplier GHG Baseline is to ensure that the historical baseline of production remains met and that Tier 4 energy is additional to that historical baseline. Accordingly, the Commission required its application at the level of generation rather than energy consumption and did not require that the baseline change over time as energy consumption might change. However, and consistent with its application at the production rather than consumption level, the HQUS contract includes provisions ensuring that, where HQUS's generation portfolio changes from time to time (e.g., through acquisition of resources from third

parties or retirement of existing resources), the Supplier GHG Baseline is adjusted accordingly. This reflects the same rationale as that noted in IPPNY's comment; namely, the baseline would be adjusted to reflect a significant change in HQUS' portfolio, but appropriately applied to generation rather than load, reflecting a project developer's sphere of control.

In summary, the Commission finds that the Supplier GHG Baseline as embodied in the HQUS contract aligns with the Commission's objective for the baseline and does not exceed the level of flexibility afforded in the CES Modification Order.

b. Supplier Energy Baseline

In accordance with the CES Modification Order, NYSERDA solicited Tier 4 bids from proposers whose portfolio includes hydropower both with and without the Supplier Energy Baseline. This approach reflects Commission concern, as stated in the CES Modification Order, that rigid application of the Supplier Energy Baseline could result in the unintended consequence of both compromising the cost-effectiveness of the Tier 4 program and encouraging uneconomic dispatch of resources. As noted, the HQUS Proposal included bids with and without the Supplier Energy Baseline. Following assessment of the bids under the price and non-price evaluation criteria, NYSERDA awarded a HQUS bid variant that does not include the Supplier Energy Baseline.

Public Comments

Several commenters object to the fact that the HQUS bid recommended for award does not include the Supplier Energy Baseline. RLP states that without the Supplier Energy Baseline, there is no guarantee that renewable generation delivered to the NYCA would increase beyond the historical baseline and that the State has no way of ensuring that the energy delivered by CHPE is not backfilled by fossil fuel-fired resources supplied to the historic recipient of such energy. Riverkeeper cites a

Northbridge Energy Partners analysis for the proposition that, in the absence of the HQUS and New England Clean Energy Connect projects moving forward,¹⁰³ neither the construction of any additional facilities nor completion of Hydro-Québec's Romaine 4 dam would be necessary. From this, Riverkeeper draws the apparent conclusion that the bulk of the power surplus in Hydro Quebec's portfolio that HQUS proposes to supply to New York City through the HQUS project is actually already being sold on the spot market, primarily in upstate New York. Riverkeeper asserts that, for these reasons, the HQUS project would likely not reduce greenhouse gases.

Sierra Club states in its comments that, without the Energy Supplier Baseline, HQUS is free to count deliveries it would otherwise have made into the NYCA towards compliance with its contract obligations, to the economic disadvantage of New Yorkers. Sierra Club asserts that the Petition fails to demonstrate that elimination of the Supplier Energy Baseline for the HQUS project results in a net economic benefit. Sierra Club states that, absent the Supplier Energy Baseline being added to the HQUS contract, there is no principled basis for distinguishing existing Canadian hydropower from existing in-State hydropower or other existing renewables.

ACENY requests that the Commission examine and communicate the implications of the lack of application of the Supplier Energy Baseline to the HQUS baseline and how the contract otherwise would prevent HQUS from redirecting hydropower currently exported to New York to the CHPE transmission line. ACENY claims that the Tier 4 Petition fails to explain how the lack of inclusion of the Supplier Energy

¹⁰³ The New England Clean Energy Connect project would deliver 1,200 MW of hydropower to New England from facilities owned by Hydro-Québec.

Baseline creates a net economic benefit to New Yorkers. IPPNY similarly notes that the Petition does not provide any analysis supporting NYSERDA's decision to accept HQUS's bid without the Supplier Energy Baseline and that it is unknown whether the BCA made any assumptions regarding the extent to which HQUS may redirect to Zone J hydroelectric power historically delivered to the rest of the State. IPPNY asserts that, without this information, the Commission cannot determine whether the HQUS contract is in the public interest.

In its reply comments, HQUS and TDI assert that the lack of a Supplier Energy Baseline actually makes it more likely that Hydro-Québec's exports to New York will be complementary to the production of renewable energy upstate. HQUS and TDI state that under the HQUS contract, HQUS can and will continue to supply energy to upstate New York when there is sufficient market demand, without a contractual obligation to do so. HQUS and TDI further state that the lack of a Supplier Energy Baseline allows HQUS to distribute energy to New York City when it is most needed instead of fulfilling an annual volume that might not be reflective of upstate energy needs and may actually exacerbate congestion and curtailment issues.

Commission Determination

The Commission does not share the view expressed by some commenters that the lack of inclusion of the Supplier Energy Baseline would result in backfilling by fossil fuel generation and thus jeopardize the potential greenhouse gas reduction benefits of the project. Those concerns appear to misapprehend the nature of the Supplier Energy Baseline and Supplier GHG Baseline. Specifically, as discussed above, HQUS's Supplier GHG Baseline was determined to encompass all its historic generation, including historic renewable energy deliveries to upstate New York. Under the HQUS contract, energy

from HQUS would count as eligible under Tier 4 only if it exceeds that baseline including those historic deliveries to upstate New York. This means that if, as commenters are implying, HQUS would merely redirect its historic exports to upstate New York to Zone J without increasing its total generation, such energy would not count as additional under the Supplier GHG Baseline.

It is true that, without a Supplier Energy Baseline in the contract, there is nothing preventing HQUS from redirecting energy it historically delivered to upstate New York to other areas of demand. The Supplier GHG Baseline by itself only pursues additionality of the total amount of generation by HQUS but does not mandate where such energy would be consumed. This is already the case at present since these imports into upstate New York are not subject to long-term contracts. Since, as the CES Modification Order observes, it is far from certain whether and to what extent these imports would be needed in upstate New York, requiring a firm commitment in this respect (e.g., through the Supplier Energy Baseline) would only be justified if a bid variant with that commitment performed better under the Tier 4 RFP price and non-price criteria. HQUS's bid variants that included the Supplier Energy Baseline failed to out-compete other Tier 4 bid variants, and the Commission sees no reason to overrule the results of the RFP evaluation in this respect. Because the Supplier GHG Baseline in the HQUS contract adequately protects against the theoretical loss of energy from upstate New York being backfilled by fossil-fuel fired generation, we find that it was appropriate for NYSERDA to select a bid variant that excludes a Supplier Energy Baseline.

c. New York Converter Station

The Commission recognized the benefits of a New York-based converter station through its requirement in the CES

Modification Order that any proposer of a project that includes new HVDC-based transmission that is planned to traverse New York State outside of Zone J must include a bid that includes at least one New York-based converter station. The inclusion of a New York-based converter station holds potential value to the State in the form of increasing the resilience and reliability of retail electric service, adding potential diversity to the resources serving Zone J, and increasing the deliverability of offshore wind throughout the State during times of peak offshore wind generation. NYSERDA's RFP authorized any proposer subject to this requirement to submit bids with or without a New York-based converter station. The RFP also noted that NYSERDA would evaluate the bids with and without the converter station and might accept or reject either bid variant in accordance with the evaluation process.

Because the HQUS project's withdrawal point is outside New York, its proposal included bids with a New York converter station to be located in Zone F. However, the awarded HQUS bid variant does not include the New York-based converter station.

Public Comments

ACENY observed that the lack of a converter station in New York would prevent upstate renewable resources from connecting into the CHPE transmission line. ACENY requested that the Commission consider inclusion of the converter station (or some other option that provides the opportunity for in-state power generators to deliver to Zone J) in the BCA, with a comparison to the costs of alternative means for increasing transmission capacity from upstate to downstate. Sierra Club similarly notes that without a New York-based converter station, renewables in upstate and northern New York would not be able to connect into the line. In their comments, RLP, Liberty Renewables, Candela Renewables, Cypress Creek Renewables, and

Terra-Gen make the same point. RLP also infers from the highest-scoring HQUS option not including the converter station that including a converter station is cost prohibitive for HQUS.

Commission Determination

The Commission believes that NYSERDA's evaluation approach of considering both bid variants with and without a New York-based converter station on their merits under the price and non-price evaluation criteria is consistent with the requirements of the CES Modification Order. HQUS's bids with a New York Converter Station failed to out-compete other Tier 4 bids under these criteria and were thus not recommended for award. The Commission sees no reason to overrule the results of the RFP evaluation in this respect, noting that the CPNY project provides an alternate route for New York State renewable resources to connect into Zone J, significantly reducing the incremental benefit of a converter station on the CHPE line. Additionally, CES Tier 1 provides a robust option for the development of renewables in upstate New York.

d. Indigenous Communities

HQUS makes specific commitments with respect to Indigenous communities under Exhibit I-2 of the HQUS contract, including the following provisions:

- entry into a joint ownership arrangement with the Mohawk Council of Kahnawà:ke with respect to the Québec portion of the transmission line;
- purchasing wind energy from the Apuait projects co-owned by Québec Innu communities;
- maintaining efforts to prioritize actions, taking into account the rights, interests, and perspectives of Indigenous groups; and
- consulting and sharing impact assessments with Indigenous groups in connection with any new transmission lines for the new wind/solar to be developed in accordance with this contract and changes to maximum or minimum water

levels or material environmental impacts caused by plant refurbishments.¹⁰⁴

The Commission notes here its understanding that the impact of the HQUS project on indigenous nations remains of key interest to many commenters, including the City of New York, which was directly involved in negotiating these provisions in the HQUS contract. In addition, the NYC Contract includes identical requirements as a condition to the City's commitment to purchase Tier 4 RECs produced by the HQUS project.

Public Comments

In its comments, Riverkeeper cites opposition by the Pessamit Innu and Innu Nation of Canada to new transmission lines enabling exports of hydropower from generating stations that flooded their territorial lands. Riverkeeper characterizes the HQUS project as raising environmental justice concerns related to the First Nations of Canada, noting the Innu Nation of Canada has requested its sign-off be required prior to construction of new transmission interties that deliver hydroelectric power from the Hydro-Québec system to the U.S.

The Algonquin Anishinabeg Nation Tribal Council raises in its comments the issue of the anachronistic nature of Hydro-Québec's water management models with regard to climate change and notes a long-lasting violation of the tribe's rights resulting from the construction of power stations on its and other First Nations' traditional territory. The Algonquin Anishinabeg Nation Tribal Council cites a letter written on behalf of several Indigenous tribes in Québec, denouncing the detrimental effects of the HQUS project on their lives and traditional territories based on the expectation that the electricity supplied through the project would come from

¹⁰⁴ HQUS Contract, Exhibit I-2, §§12, 13, 14(a)-(d).

facilities located on their territories that were, according to the letter, sited without their consultation.

The Mohawk Council of Kahnawà:ke (MCK) submitted comments in support of the HQUS project. MCK notes that, pursuant to an agreement with Hydro-Québec, MCK would jointly own the Hertel Line, which is the portion of the transmission line located on the Québec side of the project. MCK asserts that it is the only established Indigenous community that would be directly impacted by the build-out of the Hertel Line in Canada. MCK states that the hydropower installations to which other Indigenous groups have objected on the basis that they were constructed on their traditional lands without consent are unrelated to the HQUS project, and that their claims thus should not be addressed with respect to any approvals related to the HQUS project. MCK states that over the past two decades, Hydro-Québec has made a concerted effort to negotiate fair and reasonable accommodation measures for the ongoing use of Kahnawà:ke lands and has demonstrated dedication to being a good corporate citizen. MCK notes that it supports clean energy projects and is delighted to contribute to New York's largest renewable energy transmission project in the last 50 years.

HQUS reiterates the comments submitted by MCK and also notes that the HQUS project would create new economic development opportunities through partnerships between Hydro-Québec and local Indigenous nations to develop the clean energy infrastructure components of the project. In addition to MCK's joint ownership of the Québec portion of the transmission line, this includes a 204 MW Apuiat onshore wind farm project that would be 50% owned by the Innu communities in Québec.

Commission Determination

The Commission takes seriously the concerns raised by commenters with respect to potential impacts on Indigenous

communities. As these concerns primarily relate to historic practices and impacts that have occurred in the past, we are encouraged by the additional commitments in this area that were included in the HQUS contract. As noted above, these commitments were discussed and established as a result of the joint discussions among HQUS, NYSERDA, and the City. The City's particular support and assistance on this issue were integral in strengthening the commitments made by HQUS. Given the process through which they were agreed upon, we are satisfied that the HQUS contract includes a robust set of commitments regarding potential impacts on Indigenous communities.

e. Environmental Impacts

As noted, the Commission prepared a Final SGEIS associated with changes to the CES and related programs specified in the CES Modification Order. However, unlike with respect to the CPNY project, the HQUS project has reached a mature permit status and all site-specific environmental impacts associated with the project have been reviewed. For example, on April 18, 2013, the Commission issued a Certificate of Environmental Compatibility and Public Need (CHPE Certificate) associated with CHPE - the United States-based component of the project.¹⁰⁵ Since that date, the Commission has granted six amendments to the CHPE Certificate related to certain conditions and route modifications. On October 6, 2014, CHPE obtained a Presidential Permit from the U.S. Department of Energy (DOE), granting authority for the HVDC transmission line associated with the CHPE project to cross the international boundary

¹⁰⁵ Case 10-T-0139, Application of Champlain Hudson Power Express, Order Granting Certificate (April 18, 2013).

between New York and Québec.¹⁰⁶ It appears that CHPE has obtained all required State and federal permits except for the Certificate of Public Convenience and Necessity required under PSL §68, which the Commission understands is pending review.¹⁰⁷

Public Comments

Despite the CHPE component of the HQUS project having obtained almost all required permits, a number of commenters submitted comments related to the project's environmental impacts. Riverkeeper states that there are a number of problems with the proposed approach to install the cable by jet plow and to rest the cable on bedrock, covered by concrete tiles, where there are insufficient sediments to bury it seven feet deep. Riverkeeper states that this approach may stir up contaminants and cause ecological harm and contaminate drinking water intakes used by seven communities along the Hudson. Riverkeeper also reports a marine industry concern that anchors deployed in an emergency could snag the cable, and a final concern that many species of fish can detect magnetic fields caused by buried cables and change their behavior. Other comments pertaining to this issue are summarized in Appendix A to this Order.

¹⁰⁶ U.S. Department of Energy, Presidential Permit - Champlain Hudson Power Express, Inc., Order No. PP-362 (issued October 6, 2014). On July 21, 2020, DOE issued Presidential Permit No. PP-481, transferring the permit for the facilities authorized in PP-362 from Champlain Hudson Power Express, Inc. to CHPE; see U.S. Department of Energy, Presidential Permit - CHPE, LLC, Order No. PP-481 (issued July 21, 2020).

¹⁰⁷ Other permits and approvals obtained by CHPE include a Federal Water Pollution Control Act Section 401 Water Quality Certificate and a siting permit from the Army Corps of Engineers pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. See links to regulatory approvals at: <https://chpexpress.com/overview-of-public-documents/regulatory-documents/>.

Commission Determination

The Commission notes that the potential environmental impacts identified in the comments were addressed in the Commission's Order granting the CHPE Certificate and amendments to the Certificate, and through permits issued by federal agencies. In fact, Riverkeeper remains a party to a Joint Proposal regarding the original certification of the CHPE project where similar issues it seeks to raise here were addressed. Based upon our review of the governmental approvals associated with the CHPE project, the Commission is satisfied that the environmental impacts associated with the project have been appropriately reviewed. In any event, this is not the proper proceeding for the Commission to revisit those reviews.

D. Procurement and Selection Process

NYSERDA's procurement and selection process is described in the Tier 4 Petition and summarized above. Some commenters raised issues regarding the overall structure of Tier 4, including use of the Index REC mechanism and eligibility criteria for Tier 4. These topics were raised and resolved previously in the CES Modification Order. Other comments questioned more specific aspects of how the Tier 4 proposal evaluation was conducted and are addressed below.

1. Program Policy Factors

In accordance with the Tier 4 RFP, NYSERDA considered the Revised Preliminary Ranking in the context of other factors that contribute to the achievement of the CES, the reduction of greenhouse gas emissions, and the objectives of the CES Modification Order. As stated in the Tier 4 Petition, following review of the Revised Preliminary Ranking results, NYSERDA determined to not apply Program Policy Factors and confirmed the Revised Preliminary Ranking as the Final Ranking.

Public Comments

Some commenters claimed that the Tier 4 Petition fails to adequately explain why Program Policy Factors were not applied to adjust the set of projects recommended for award. For example, ACENY expressed concern that the decision not to apply Program Policy Factors may have limited the maximization of benefits from the HQUS project. Riverkeeper expressed the view that CHPE would have scored lower than the preliminary ranking if Program Policy Factors had been applied. Sierra Club took the position that application of the Program Policy Factors could have influenced the relative ranking of the projects because they strongly favor selection of in-state projects.

Commission Determination

The Commission is unpersuaded by these comments. As noted above, NYSERDA determined on its own to include the Program Policy Factors as a consideration in the context of the Tier 4 RFP (i.e., it was not a requirement of the aspects of the CES Modification Order related to Tier 4). Additionally, the Program Policy Factors significantly overlap with the non-exhaustive list of "public interest" factors that the Commission required NYSERDA and Staff to apply to the bids.¹⁰⁸ For example, the Program Policy Factors related to promoting public health benefits and meeting CLCPA targets are included as factors to consider as part of the public interest test. Other cost-based Program Policy Factors (e.g., efficient utilization of the grid) are included as part of the BCA evaluation. In any event, the CES Modification Order prioritized NYSERDA's evaluation of price and non-price factors, including project viability and economic benefits. The Commission's review of the Tier 4 Petition shows that NYSERDA undertook a robust review of these factors. The

¹⁰⁸ See CES Modification Order, p. 82; Tier 4 Petition, pp. 13-14.

Commission is thus satisfied with the decision made by NYSERDA and Staff not to apply the Program Policy Factors to the bids.

2. Weighting of Scoring Criteria

The CES Modification Order directed NYSERDA to apply the same evaluation and weighting criteria used in Tier 1 solicitations for the purposes of ranking the Tier 4 bids: 70% price; 20% project viability, operational flexibility, and peak coincidence; and 10% economic benefits. The Tier 4 RFP further described the evaluation approach, including identification of the factors considered in the project viability, operational flexibility, and peak coincidence category.

Public Comments

RLP noted in its comments that the Tier 4 RFP did not include any indication to proposers of the relative weight of various considerations within the evaluation categories - in particular within the qualitatively evaluated categories of project viability and economic benefits.

Commission Determination

While NYSERDA described the criteria relevant to its assessment of the price and non-price scoring categories identified in the CES Modification Order in the Tier 4 RFP, it did not disclose the relative weighting given to such criteria. This follows a similar approach used by NYSERDA in other CES-related RFPs. As long as NYSERDA has conducted its evaluation in line with the provisions of the RFP - and no commenters have stated otherwise - it is within NYSERDA's discretion whether to provide such additional level of transparency.

3. Consultation

NYSERDA consulted with stakeholders on specific questions related to the design of the Tier 4 RFP in October

2020 ahead of issuance of the RFP in January 2021.¹⁰⁹ NYSERDA also participated in various stakeholder engagement events during the public comment process preceding this Order.

Public Comments

Bronx Community Board #1 states that it did not know about the Tier 4 initiative until after Governor Hochul's announcement of the project awards and expressed concern that it "did not receive any formal notification at any time during the process and therefore was not able to secure equitable benefits on behalf of the community" and that the absence of stakeholder outreach ahead of award announcement "result[ed] in the unfortunate disenfranchisement of the community to ensure that this decades burdened disadvantaged community benefit from the initiative as is codified in CLCPA."¹¹⁰

BCEQ asserts in its comments that the NYSERDA lacked "a transparent and public process for the people of the Bronx to participate until the contract approval stage," stating further that the Bronx and other parts of the Harlem River Watershed "have not reached comparable agreement as upstate impacted communities with your contractors for Tier 4."¹¹¹ Similarly, the President of the Astoria Tenant Organization states that she "would like to see more participation of these presentation[s] done in Astoria Houses."¹¹²

Commission Determination

The Commission acknowledges that the NYSERDA procurement process does not include community outreach.

¹⁰⁹ See NYSERDA, Tier 4 RFI 4598, found at: <https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000Q2OdvEAF>.

¹¹⁰ Bronx Community Board #1 comments, p. 2.

¹¹¹ Bronx Council for Environmental Quality comments, pp. 1-2.

¹¹² Astoria Tenant Organization Comments, posted February 8, 2022.

NYSERDA is limited by State Finance Law 139-j, 139-k regarding the types of communications it is allowed to have regarding open solicitations and has developed very specific guidelines regarding such communications. At the same time, the Commission is sympathetic regarding concerns of community members with the lack of transparency regarding the location of resources subject to NYSERDA's solicitation process. Thus, the Commission directs NYSERDA to review its guidelines for all CES Tiers and the Offshore Wind Standard in light of existing procurement requirements to see if there are any measures that may be taken by either itself and/or proposers to increase the transparency regarding the sites of projects bid through its RFPs.

Additionally, the Commission notes that CPNY will need to obtain a Certificate of Environmental Compatibility and Public Need under PSL Article VII prior to commencing construction and operation of the HVDC transmission line associated with the project. As part of its public interest review, the Commission will require CPNY to show that it has undertaken an appropriate public information program associated with the transmission facility that includes, at minimum, notification to local elected officials and at least one meeting for community members who may be impacted by the siting of the transmission facility for each community through which the facility would be routed, including a meeting with any applicable community board. CPNY should endeavor to provide those notifications and presentations at least 60-days prior to the filing of its Article VII application and include a description of the transmission facility, a preliminary summary of any potential environmental impacts, the anticipated application date, information regarding the ability of community members to participate as intervenors in the PSL Article VII

proceeding, and the future availability of intervenor funds associated with such participation.¹¹³

E. NYC Contract to Purchase Tier 4 RECs

The Commission next reviews the Notice regarding the NYC Contract pursuant to which the City has agreed to purchase Tier 4 RECs directly from NYSERDA. The Tier 4 Petition reviews the key terms of the NYC Contract, including:

- over the contract period, the City has committed to purchase a quantity of Tier 4 RECs equal to its yearly electric MWh load beyond its proportional share of OREC-supported offshore wind determined on a load share basis;
- the City is authorized to elect to purchase additional ORECs should not enough Tier 4 RECs be available to cover the entirety of its load;
- the purchase price per Tier 4 REC is to be established as the average net REC price per REC paid by NYSERDA to the Tier 4 projects, with a maximum of the price of the Tier 4 RECs of the HQUS project, in each case plus any Commission-approved administrative adder applicable to NYSERDA's resales of Tier 4 RECs;
- the purchase term covers a 25-year period starting from the earlier COD of the Tier 4 projects;
- the contract is conditional upon the Commission approving both of the recommended Tier 4 projects;
- the contract can be terminated early by NYSERDA if the Commission concludes that the City buying Tier 4 RECs instead of bearing its share of overall CES costs no longer leads to net ratepayer savings;
- the contract requires the City to include in its preliminary and executive budgets for each fiscal year the monetary obligations set forth in the agreement anticipated to become due in such fiscal year; and
- the contract specifies that if commitments made in the HQUS Contract regarding Indigenous communities in Québec are breached, the City has the right to cease purchasing

¹¹³ As already noted, CHPE has already obtained its State and federal permits and would already have undertaken these outreach efforts.

Tier 4 RECs generated by HQUS but would continue to purchase Tier 4 RECs generated by CPNY to the extent available.¹¹⁴

The Notice explains that when added to its load-based share of ORECs, the NYC Contract would result in the City purchasing environmental attributes equal to its entire load. The Notice estimates that the City's gross investment in Tier 4 RECs ranges from \$3.2 to \$6.2 billion.¹¹⁵ The Notice requests that because the Tier 4 REC price is expected to be greater than the price for RECs under other CES programs, the Commission should relieve NYPA of its commitment to purchase RECs on behalf of the City under the other CES tiers. The City estimates that, assuming the Commission reallocates RECs in this fashion, the net benefits to other customers are expected to be in the range of \$2.1 and \$4.3 billion.¹¹⁶

Public Comments

NYPA submitted comments in support of the approach to reallocating CES commitments. It states that "the efforts of the City to lead by example and serve the entire load associated with New York City's governmental operations with renewable Tier 4 and offshore wind electricity" is commendable, particularly because "[t]he City represents one of the State's largest individual customer loads and this procurement structure will help advance CLCPA goals while lowering costs to the State's other electric ratepayers."¹¹⁷ Based on the ratepayer savings associated with NYC's proposed approach, NYPA agrees that the "CES allocations voluntarily undertaken by NYPA . . . will need

¹¹⁴ NYC Contract, §§2.2, 2.3(b), 2.5(a)&(c), 2.6(b), 2.8-2.10, 5.4, 5.5, 5.8, Schedule 2.9.

¹¹⁵ Notice, p. 6.

¹¹⁶ Id. The City notes that the net present value of these benefits ranges from 0.8 to \$1.7 billion. Id., n. 6.

¹¹⁷ NYPA's Comment Letter, dated February 14, 2022, pp. 2-3.

to be recalculated based on the NYC CES Plan.”¹¹⁸ The New York Association of Public Power (NYAPP) also conditionally supports NYC’s offer to purchase more than its load ratio share of Tier 4 RECs, in return for a reduction in other Tier obligations, subject to additional and sufficient details being provided.

On the other hand, some commenters object to the proposal to have the Commission reallocate to other LSEs NYPA’s Tier 1 and Tier 3 (ZEC) commitments attributable to NYC’s load. For example, Nucor, NYMPA, and LIPA each argue that NYC’s voluntary purchase of Tier 4 RECs should not shift any portion of its costs of achieving its enhanced targets to the rest of the State. NYMPA argues that the Notice constitutes a collateral attack on the CES Modification Order whereby the Commission ruled in the context of a request by NYC that, “[w]hen Tier 4 RECs are re-sold, the reduction in Tier 4 RECs held by NYSERDA will reduce each LSE’s compliance obligation commensurately. But no other aspect of the LSE compliance obligation will change.”¹¹⁹ LIPA argues that “the City’s new plan to purchase Tier 4 RECs should not be an opportunity for the City to escape its fair share of the cost of supporting the continued operation of the state’s nuclear plants.”¹²⁰

Commission Determination

We start our analysis by observing that the Notice does not seek Commission approval of the NYC contract itself. While none of the public comments address this issue, the Commission believes it necessary to explore if there is anything about its prior rulings or the NYC Contract itself that requires our approval or otherwise implicates the Commission’s

¹¹⁸ Id., p. 2.

¹¹⁹ NYMPA’s Comment Letter, dated February 7, 2022, pp. 5-6 (quoting CES Modification Order, p. 101).

¹²⁰ Comment Letter from LIPA, dated February 7, 2022, p. 2.

jurisdiction. As a general matter, the Commission notes that only LSEs are obligated to purchase RECs, ZECs, and ORECs pursuant to the Commission's prior orders, and NYC is not an LSE. Nevertheless, some terms of the NYC Contract are conditioned upon future Commission action and so we review those terms to determine if they require Commission approval.

For example, the contract is conditioned upon the Commission approving both of the recommended Tier 4 projects.¹²¹ The Commission is not troubled by this provision because it is fairly common for counterparties to condition a contract on some future related action of a third party and there is nothing about it that makes the contract subject to Commission jurisdiction. Additionally, it is the Commission's understanding that this provision was added because of NYC's belief in the importance of the Tier 4 program and that its actions may incentivize other large electricity consumers in the City to enter into similar contracts.

The only other provision that references potential Commission action is the section of the NYC Contract that authorizes termination upon a finding of the Commission that the City's voluntary purchase of Tier 4 RECs is no longer leading to net ratepayer savings.¹²² While it is difficult to foresee a circumstance where this provision would be triggered, the Commission does not believe it provides the basis for requiring approval of the contract. Nevertheless, given that this provision considers potential future action by the Commission, we retain jurisdiction over the NYC Contract for the limited purpose of reviewing a petition filed by NYC or NYSEDA requesting contract termination based on a finding that the

¹²¹ NYC Contract, §5.5.

¹²² Id., §5.4.

contract no longer provides ratepayer benefits. The basis of authority in this respect would be the PSL provisions requiring the Commission to maintain "just and reasonable rates."¹²³

The Commission does not see any other statutory or policy basis for mandating approval of the NYC Contract or other voluntary agreements of this kind. To the contrary, the Commission believes that allowing the NYC Contract to be effectuated without our review may act to incent other large consumers of electric service to enter into similar contracts. Voluntary purchases of environmental attributes like Tier 4 RECs will continue to play a key role in meeting the State's renewables mandates. The Commission made this precise point in the CES Modification Order, stating:

[o]f course, the voluntary market remains one of the potential outlets for resources not contracted with NYSERDA. Voluntary purchases of new, New York-based renewable energy supply counts towards CES goals and can be driven by participants of community choice aggregation (CCA) projects or from purchases by customers of energy service companies (ESCOs) and utilities offering products backed by RECs from renewables whose energy is consumed within New York. Demand can also come from voluntary procurements by larger commercial, industrial, institutional, or government end-use customers.¹²⁴

Similarly, the Commission found in its seminal Order Adopting Clean Energy Standard, that "[t]he development of voluntary market activity . . . can potentially have a large effect on the overall bill impacts of the CES, as voluntary and market-driven actions increase the amount of renewable generation, reduce the total amount of jurisdictional load, and shift usage."¹²⁵

¹²³ See PSL §§65(1), 66(5), (14).

¹²⁴ CES Modification Order, pp. 4-5 (emphasis added).

¹²⁵ Case 15-E-0302, Order Adopting Clean Energy Standard (issued August 1, 2016) (CES Order), p. 109.

We note here that the CES Procurement Order directed NYSERDA to "offer any Tier 4 RECs it obtains for re-sale to the voluntary market" and further stated that "[s]uch re-sales should be subject to a price floor set at NYSERDA's procurement costs, including administrative costs."¹²⁶ Because the NYC Contract sets the maximum price to be paid by NYC for Tier 4 RECs at the price of Tier 4 RECs of the HQUS project, there are scenarios in which NYSERDA's procurement costs could at times exceed the price paid by NYC and the NYC Contract could therefore be viewed as not complying with this directive. The Commission does not view the pricing in the NYC Contract as problematic. As further discussed below, even taking into account the reallocation of CES obligations described in the Notice, the NYC Contract would result in significant savings to all other ratepayers. The value of a binding commitment to purchase Tier 4 RECs, made so far in advance of the commencement of project operations, far exceeds any potential concerns that this cap on pricing could lead to a less than full recovery of NYSERDA's procurement costs.

Based on the foregoing, the Commission finds that its approval of the NYC Contract is unnecessary because the contract does not by itself commit the Commission to any future action and is otherwise consistent with our policy to incentivize voluntary agreements of this type. In particular, we read the plain language of Local Law 97 as authorizing the purchase of Tier 4 RECs as a way to comply with the building emissions limits imposed under that law and agree that an approach that incentivizes such purchases is in the public interest. Nevertheless, the Commission retains jurisdiction over the NYC Contract for the limited purpose of reviewing it anew at some

¹²⁶ CES Modification Order, p. 100.

point in the future in case the ratepayer benefits anticipated in the Notice do not transpire.

The Commission next addresses the request made in both the Notice to reallocate obligations and commitments made under CES Tiers 1, 2, and 3 based on NYC's commitment to purchase a large quantity of higher-priced Tier 4 RECs.¹²⁷ The Commission starts this part of the analysis by pointing to our determination in the CES Modification Order relieving NYPA from any commitments to purchase RECs under the competitive Tier 2 program given its ownership of large baseline renewable resources in the State.¹²⁸ For this reason, we view the request made in the Notice for a reallocation of CES obligations and commitments to apply only to Tiers 1 and 3.

The Notice asserts that reallocation of NYPA's RECs obligations under other CES tiers is appropriate for three interrelated reasons: (1) the City's commitment to purchase Tier 4 RECs, when added to its obligation through NYPA to pay its load-based quantity of ORECs, would be associated with NYC's entire load; (2) the NYC Contract would obligate the City to purchase Tier 4 RECs associated with about 4 TWh of annual load, representing about 20% of the 18 TWh expected to be generated annually by CPNY and HQUS; and (3) the City's projected expenditures under the NYC Contract would far exceed what it otherwise would be required to pay under CES Tiers 1 and 3, and this cost differential would accrue to the benefit of the

¹²⁷ The Notice and Tier 4 Petition explain that NYC is not seeking to alter its commitment to pay for its load-based share of ORECs purchased on its behalf by NYPA.

¹²⁸ See CES Modification Order, p. 76 ("However, in recognition of its ownership of existing baseline renewable resources, the Commission does not believe NYPA should be obligated to support other existing baseline renewable resources under the Competitive Tier 2 program.").

State's other ratepayers. As noted, NYC estimates, presuming NYPA's allocation under Tiers 1 and 3 is reallocated to other LSEs, the total benefit to the State's other ratepayers would be between \$2.1 and \$4.3 billion (i.e., a 12% reduction of ratepayer costs under Tier 4).

As explained further in the next part of this Order, the Tier 4 Petition reaches a similar conclusion regarding the overall ratepayer savings estimated in the Notice and provides related information in terms of percentage impacts. For example, as noted, the Tier 4 Petition calculates these ratepayer benefits as equating to a reduction of the total Tier 4 program costs of at least 12%.¹²⁹ Additionally, NYC's estimated savings are conservative because they included the reallocation of competitive Tier 2 RECs from NYPA to other LSEs but, as already noted, NYPA is not subject to the competitive Tier 2 program, so there is nothing to reallocate under Tier 2.

The Commission disagrees with those comments that object to the reallocation of NYC's RECs under CES Tiers 1 and 3, particularly with respect to argument that the CES Modification Order precludes the reallocation of LSE compliance obligations. The Commission issued its ruling in this respect without an understanding of either the actual Tier 4 REC prices that would be included in the contracts with selected bidders or the potential third party commitments regarding the voluntary purchase of RECs from NYSERDA. That information obviously only became available through the contracts that NYSERDA and Staff filed with the Commission. The Notice, filed concurrently with the Petition, provides the Commission with evidence, confirmed by NYSERDA in the Petition, of the estimated range of ratepayer savings that would apply from such an approach.

¹²⁹ See also Tier 4 Petition, p. 30.

With this knowledge in hand, the Commission revisits the aspect of the CES Modification Order to which NYMPA quotes. The Commission rules that a reallocation of CES obligations associated with a third-party commitment to voluntarily purchasing RECs is appropriate upon a showing that the State's ratepayers would significantly benefit from such a reallocation. Applied here, the Commission finds that the \$2.1 to \$4.3 billion estimated range of benefits to ratepayers is significant. We also note that NYC's commitment to purchase an amount of Tier 4 RECs and ORECs associated with its entire load for the 25-year duration of the NYC Contract is unprecedented since no other voluntary purchase of RECs of this magnitude and duration has occurred up to now under the CES. Finally, the Commission finds it important that NYPA, which would have to administer this reallocation approach, supports NYC's requested reallocation.

In the end, it would not make logical or equitable sense, as some commenters assert, for NYC to remain obligated to contribute to the cost of RECs beyond those associated with its full load under the circumstances where the Tier 4 RECs that it has agreed to purchase are far more expensive than either the Tier 1 RECs and Tier 3 ZECs that would be subject to reallocation. To ensure this result, the NYC Contract includes a provision authorizing contract termination if ratepayers do not continue to benefit from such an approach. This ruling would apply to self-supply RECs or ZECs so long as the self-supplier can show significant overall ratepayer savings from the voluntary purchase and associated reallocation of commitments, and the underlying agreement is for a sufficiently long term, as it is here. The Commission leaves open whether other factors should be applied in the future, including the percent of load associated with the voluntary RECs purchase and the duration of the commitment. That issue does not need to be addressed here

because NYC has agreed to purchase Tier 4 RECs and ORECs equivalent to its entire load over a 25-year period. Accordingly, the Commission rules that once the NYC Contract is in effect and Tier 4 RECs are being purchased by NYC, NYSERDA shall deduct from NYPA's annual allocations the RECs under Tiers 1 and 4, and ZECs under Tier 3 that it otherwise has committed to purchase associated with NYC's load, until such time as the City ceases to purchase Tier 4 RECs. The Commission directs NYSERDA to reallocate NYC's load-based RECs under Tiers 1 and 3 to all of the State's LSEs, including NYPA, counting NYPA's load as excluding that of NYC for this purpose. To be clear, this ruling does not apply to NYPA's ORECs commitment, which remains unchanged. The Commission also rules that the exception from the price floor as set forth in the NYC Contract shall be permitted for the reasons noted above.

F. Ratepayer Impacts

1. Estimated Rate Increases Related to the Projects

As discussed in Section A above, the Tier 4 Petition estimates future Tier 4 REC costs under two alternative wholesale market price forecasts - a higher market price forecast that yields a lower REC cost forecast, and a lower market price forecast that yields a higher REC cost forecast - which resulted in a range of ratepayer impacts. Reflecting this range, the Tier 4 Petition states that the recovery of costs associated with the CPNY and HQUS projects would result in a statewide levelized rate increase (over the Tier 4 contract terms) of between 2.4% and 4.7% before any opportunities for cost mitigation are considered, including by means of voluntary purchase of Tier 4 RECs by interested buyers. As discussed in the preceding section, a voluntary purchase agreement with NYC is already in place, which is estimated to reduce this cost range to between 2.1% and 4.1%. The Tier 4 Petition presented

potential first-year bill impacts between 3.0% and 5.7%, reducing to between 1.8% and 4.5% when accounting for potential energy price effects, in each case before cost mitigation through voluntary purchase. After considering the cost-reducing impact of the NYC Tier 4 purchase contract, first-year bill impacts are estimated as 2.7% to 5.0% without energy price effects and 1.4% to 3.8% with energy price effects.¹³⁰

The Tier 4 Petition describes how these cost estimates were derived. As an initial matter, under the Index REC bid structure, the projects submitted their bid prices in the form of a "Strike Price", applicable to their annual "bid quantity" of expected Tier 4 energy deliveries. For the selected CPNY proposal, this was set at a fixed Strike Price of \$129.75 per MWh for the bid quantity of 7,870,865 MWhs per year, over the 25-year term of the contract. The strike price for the HQUS project is \$97.50 per MWh in year 1, escalated at 2.5% per year, for a bid quantity of 10,402,500 MWhs per year, over the same contract term. The Petition indicates that on a levelized basis (reflecting the average over the 25-year contract period) these strike prices equate to \$94.20 per MWh for CPNY and \$92.86 per MWh for HQUS (real 2021\$). These strike prices represent the total amount of revenue per MWh necessary to make the investment.

The Tier 4 REC costs under the contracts are determined by subtracting from the Strike Prices the wholesale market price indexes for energy and capacity, and then multiplying the result by the delivered MWhs.¹³¹ Thus, the

¹³⁰ Tier 4 Petition, Appendix C, pp. 21-22.

¹³¹ Because the contracts are for RECs only, the projects would obtain the commodity value from the wholesale market. Consumers would still need to purchase the commensurate number of MWhs of commodity from the wholesale market

actual Tier 4 REC costs under these contracts would depend on future wholesale market prices for energy and capacity. As noted, the Tier 4 Petition addresses this uncertainty by estimating future Tier 4 REC costs under two alternative wholesale market price forecasts. The higher market price forecast yields a lower REC cost forecast, while the lower market price forecast, in turn, yields a higher REC cost forecast. The Tier 4 Petition recommends that, accordingly, the projected high-end cost projection scenario should be viewed within the context of customers benefiting from lower commodity prices in this scenario, pointing out that the Index REC structure, as described, effectively responds to volatility in the energy market by ensuring that higher program costs only materialize when energy prices are low, and that program costs remain at the low end of the projected cost range when energy prices are high.¹³²

The Tier 4 Petition provides illustrations of the above cost ranges for typical residential customers. For a 600 kWh per month residential customer, the additional monthly cost under the low REC cost forecast is \$2.36 per month (or approximately \$0.0039 per kWh), while under the high REC cost estimate the additional cost is \$4.64 per month (or approximately \$0.0077 per kWh). On a 25-year levelized and statewide basis, these costs result in projected bill impacts of 2.4% and 4.7%, respectively.¹³³ After reflecting the City's offer to serve its load with a direct purchase of Tier 4 RECs and offshore wind ORECs, in exchange for a commensurate reduction under other CES Tiers, the additional monthly costs drop to \$2.08 per month or approximately \$0.0035 per kWh for the

¹³² Tier 4 Petition, p. 28.

¹³³ Id., p. 27.

low REC cost case, and \$4.08 per month or approximately \$0.0068 per kWh, in the high REC cost case.¹³⁴ On a 25-year levelized and statewide basis, these costs after reflecting the City's purchase result in projected bill impacts of 2.1% and 4.1%, respectively. Because clean energy costs like Tier 4 RECs are allocated and charged per kWh, the additional monthly cost is consistent across the state: a 600 kWh customer in Buffalo and a 600 kWh customer in Manhattan would see the same \$2 to \$4 per month increase to their bill. Customers using more kWhs per month would see a higher increase to their bills (but at the same \$/kWh Tier 4 REC cost), while those that use less than 600 kWhs would see a lower increase.

Because a 600 kWh per month customer in Manhattan already pays more for electricity than does a customer in Buffalo, this \$2 to \$4 adder will represent a smaller percent increase to the Manhattan bill. As explained in the Tier 4 Petition, the cost of electricity, in particular the cost of delivery, varies widely between utilities. Large, energy-intensive customers would pay the same \$/kWh Tier 4 REC cost as all customers. However, because energy consumption represents a larger portion of their bills and their costs per kWh tend to be much lower than those for the average ratepayer, the percent impact for large energy-intensive customers will be greater.

Table 13 in the Tier 4 Petition's Appendix C (shown below) illustrates for rate impacts in 2028 how this constant 4 mill to 8 mill per kWh adder would lead to different percent impacts depending on the relative size of the base bill.¹³⁵

¹³⁴ Id., p. 2. These reductions are net of the cost shift for Tier 1 RECs and Tier 3 ZECs.

¹³⁵ A "mill" is a unit of currency equal to one tenth of a cent.

Table 13: First-Year Ratepayer Impact by Utility (CPNY and CHPE)

	High Commodity Prices/ CPNY Zone J Capacity Revenue		Low Commodity Prices/ CPNY Upstate Capacity Revenue	
	No Price Effects	Energy Price Effects	No Price Effects	Energy Price Effects
Statewide	3.0%	1.8%	5.7%	4.5%
Jurisdictional Utilities	3.4%	1.9%	6.3%	5.0%
Con Ed	2.6%	1.2%	4.9%	3.5%
Central Hudson	3.5%	1.7%	6.5%	4.8%
National Grid	5.2%	3.7%	9.9%	8.4%
NYSEG	4.6%	3.2%	8.6%	7.3%
Orange & Rockland	3.1%	1.3%	5.9%	4.1%
RG&E	4.0%	3.0%	7.5%	6.5%

The Tier 4 Petition also notes that there would be variation among utility rate classes. Bill impacts on large commercial classes could be up to double the utility-wide average, on a percent basis.

The Tier 4 Petition provides that the levelized lifetime bill impacts to statewide ratepayers could be further reduced to 1.8% and 3.8%, respectively, if proposed Federal transmission tax credits are enacted.¹³⁶ Finally, these impacts could also be reduced if New York City large building owners take advantage of an option to voluntarily purchase Tier 4 RECs to meet NYC Local Law 97 requirements, or as a result of other voluntary purchases of Tier 4 RECs. In this regard, the Petition references a study prepared on behalf of REBNY by Level Agency for Infrastructure, which indicates that demand for RECs such as Tier 4 RECs could range from 5.1 TWh to 12.8 TWh per year by 2030.¹³⁷ The Petition estimates that such additional voluntary purchases, together with potential transmission tax credits, could reduce the ratepayer impact of residual Tier 4 costs further to 0.4%-3.2%.

¹³⁶ Tier 4 Petition, Appendix C, p. 23.

¹³⁷ REBNY Reply Comments, dated February 18, 2022 (attaching LEVEL Agency for Infrastructure, "LL97 Compliance REC Demand Study" (August 9, 2021)); Tier 4 Petition, p. 31.

Public Comments

Some commenters express significant concerns with regard to the level of expected program costs and ratepayer impacts. Multiple Intervenors (MI) takes the position that the proposed cost impacts stemming from the contracts are excessive and would harm customers statewide, and that the Commission must find ways to reduce these impacts by a significant amount. MI asserts that the fact that the CPNY and HQUS contracts could cause electricity bills to increase by what it asserts is, as much as 5.7% statewide should be a huge concern to the Commission. MI states further that the Commission needs to start evaluating proposals that require incremental customer funding in the aggregate, in conjunction with the many other programs and initiatives that customers are already being required to fund, so that the full impact of expenditures can be understood at the customer level.

Nucor states that that Tier 4 Index REC prices are excessive, noting that they appear to be roughly twice the Tier 1 Index REC prices in the last Tier 1 solicitation. Nucor asserts that the cost analysis in the Tier 4 Petition does not provide the Commission with sufficient basis for finding that the costs associated with the proposed contracts are justified or that the proposed strike prices are reasonable. Nucor also asserts that resources with Tier 1 contracts trading up to Tier 4 would not provide an incremental contribution toward the CLCPA's 70 by 30 target because they would provide the same energy and RECs as promised under Tier 1 and, in any event, such resources would only provide an incremental environmental benefit from potentially reduced in-City fossil-fired generation. NYMPA similarly states that the Petition fails to establish that the selected projects are in the public interest on the grounds they would result in unacceptably high bill

impacts to all upstate LSEs and NYMPA members in particular, who they estimate would see double-digit bill impacts caused by these projects alone.

Many commenters identify Tier 4 REC voluntary purchase opportunities, in particular through Local Law 97, as an important mechanism to reduce program costs that would need to be borne by Statewide ratepayers. For example, NYC states that Local Law 97 has created a demand for Tier 4 RECs, and New York City building owner REC purchases would reduce the potential costs that would be borne by the general body of ratepayers, in addition to the material reductions associated with the City government's purchase of Tier 4 RECs. REBNY notes that "by offering renewable attributes from the project for voluntary purchase, NYSERDA is enabling the many New York City organizations with interest in switching to clean energy, but who have been unable to do so on-site due to practical constraints, to move ahead with confidence."¹³⁸ REBNY also submitted a letter from 13 large property owners in NYC stating that they "are eager to explore participating in this voluntary market to determine how purchasing these RECs can enhance our corporate goals and local law compliance strategies."¹³⁹ Partnership for NYC, which represents more than 300 of the City's largest employers, property owners and industry leaders, also anticipates that many of its members "will be eager to purchase Tier 4 RECs to meet decarbonization and emissions goals."¹⁴⁰ Similarly, in its comments, Columbia University states that the Commission's "efforts to secure clean energy transmission into New York City are also necessary to support

¹³⁸ Comment Letter from REBNY, dated February 1, 2022, p. 1.

¹³⁹ Comment Letter from REBNY, dated March 3, 2022, p. 1.

¹⁴⁰ Reply Comments from Partnership for NYC, dated March 7, 2022, p. 1.

all of us who are committed to both achieving net zero through electrification and aligning with New York City's Local Law 97."¹⁴¹ Other commenters, including the Building Owners and Managers Association of Greater New York, the New York Energy Consumers Council and Urban Green Council agree that Tier 4 RECs will likely be in high demand through Local Law 97's alternative compliance mechanism.

CPNY and HQUS also emphasize the important role they see for voluntary purchases in their comments. HQUS notes that purchases by NYC and other voluntary customers would contribute to ratepayer impact reductions, perhaps by over 90%, in addition to potential federal tax incentives. CPNY references Local Law 97 REC sales as an opportunity to reduce ratepayer costs in combination with the government purchase reflected in NYC's Notice, by potentially 85%.

HQUS and CPNY also argue that they view the ratepayer impact analysis in the Petition as being overly conservative in a number of respects. HQUS states that its project would increase the supply of competitively priced energy and capacity available to New York, putting downward pressure on market prices and resulting in reduced bills for ratepayers. HQUS cites a study by PA Consulting for the proposition that its project will decrease costs for residential, commercial, and industrial customers in New York City and across the State by over \$17 billion over the first 25 years of operation. Based on this analysis, HQUS characterizes NYSERDA's ratepayer impact analysis as unduly conservative because it only reflects energy price effects in one year and does not include capacity price effects, and energy prices have increased since the completion of NYSERDA's analysis. HQUS also states that NYSERDA's analysis

¹⁴¹ Comment Letter from Columbia University, dated February 1, 2022, p. 1.

does not consider the cost of alternatives for delivering an equal amount of clean energy to New York City, and in doing so gives the false impression that inaction is an option.

Similarly, CPNY asserts in its comments that the Petition artificially limits the energy and capacity price effects to the near term, limiting what it views as more permanent energy and capacity cost reductions associated with its project. CPNY states that the analysis presented in the Petition does not consider ratepayer costs that would be avoided because of the CPNY project, including utility infrastructure investments, storage capacity investments, and renewable resource investments. CPNY notes that the BCA also does not account for the CPNY project lowering congestion on the transmission system and minimizing constraints that cause curtailments of Tier 1 resources, which it asserts would reduce the costs of procuring Tier 1 RECs. CPNY asserts that the value of these avoided system costs, estimated in the Petition to be \$9.9 billion, would offset nearly all of its project's resource investment costs if included in the ratepayer impact analysis. NYC made a similar point, stating that under its analysis, the addition of the Tier 4 projects would result in a 10% to 15% reduction in wholesale energy prices in New York City by 2030.

In its comments, Boralex similarly states that the ratepayer impacts in the Petition are overstated. Boralex asserts that, absent Tier 4, additional RECs would likely need to be procured and that, during times when resources with both Tier 1 and Tier 4 contracts are selling Tier 4 RECs, Tier 1 direct costs would be reduced. Boralex asserts that the ratepayer impact analysis should have included energy price effects over the full contract term, not just in the first-year values, and that NYSERDA should also have included capacity price effects. Boralex states that the levelized lifetime bill

impact with price effects may be a much more realistic scenario than without price effects, and that the price impact as the market adjusts to Tier 4 may not have a disproportionate effect on the bill impact analysis overall. Boralex also comments that the low commodity case results should be discounted because, although they reflect higher program costs, they do not consider the associated reduction in statewide energy spend and are therefore not consistent with the BCA framework principle.

ESD comments that while it supports the Tier 4 projects, it "is cognizant of the resulting cost impact on businesses, particularly on those energy-intensive commercial and industrial businesses located upstate, and recognizes the need to work with other State partners to address these and other cost increases on businesses."¹⁴² ESD states that it supports the mitigation strategies in the Climate Action Council's Draft Scoping Plan, supports "further future action to be taken by the state to mitigate any excessive cost increases on businesses as the state takes steps to meet its Climate Act goals - particularly on those companies most vulnerable to leakage, such as those in energy-intensive and trade-exposed industries," and "remains committed to providing economic incentives where appropriate to help secure economic activities that would otherwise not occur within the state."¹⁴³ ESD states that it will continue to work with other State entities, such as NYPA and NYSERDA, to build on existing programs and/or design other appropriate mechanisms to meet this need, both prior to and continuing after these costs are scheduled to go into effect in 2025.

¹⁴² Comment Letter from ESD, dated March 7, 2022, p. 1.

¹⁴³ Id., p. 2.

In its comments, NYPA states that it will continue to provide low-cost power programs statewide, including the provision of low-cost power to industrial and commercial customers that commit to operate facilities in the State long-term, make capital investments in their New York-based facilities, and create or retain jobs within the State. NYPA states that as the State pursues its clean energy goals, NYPA will “explore other opportunities to provide its customers with low energy costs and long-term predictability and stability.”¹⁴⁴

Commission Determination

There is no denying that the Tier 4 projects have relatively high strike prices of \$94.20 per MWh for CPNY, and \$92.86 per MWh (average over 25 years, real 2021\$) for HQUS. These strike prices are of the same order of magnitude as those for offshore wind, even after accounting for the much higher capacity factors associated with the CPNY and HQUS projects. However, this investment is necessary to comply with the CLCPA, decarbonize New York’s electric sector, and unlock the significant societal benefits discussed throughout this Order. While it is also true, as some commenters state, that these strike prices are double the Tier 1 REC strike prices, Tier 1 and Tier 4 serve different purposes, with the additional Tier 4 transmission cost occurring precisely because it is not feasible to develop Tier 1 projects at the Tier 1 price in Zone J itself. Further, the Tier 1 REC Strike Prices do not include the full costs of integrating those resources into the upstate grid. For example, many of the Tier 1 projects would benefit from Phase 1 and Phase 2 local transmission and distribution upgrades being undertaken and paid for by the utilities pursuant to Commission

¹⁴⁴ Reply Comments from NYPA, dated March 7, 2022, p. 3.

orders issued under the Accelerated Renewables Act.¹⁴⁵ The Tier 4 projects, by contrast, both include costs related to HVDC transmission lines that would bypass the A/C transmission system to deliver energy directly to New York City.

Many commenters noted that the costs of the two projects would result in different percent increases for different utilities and customers in different parts of the State. But to suggest that this implies an inequity in cost sharing is mistaken. Using an illustrative example, a 7 mill per kWh average rate increase would lead to a 4% bill increase to a customer paying an average rate of 20 cents per kWh, while that same 7 mill per kWh increase would lead to a 14% increase to a customer only paying an average rate of 5 cents per kWh. This is not to trivialize a 3.5 mill to 7 mill per kWh rate increase. The Commission and Staff work tirelessly to keep utility rate increases at the minimum to ensure safe, adequate, and environmentally clean service. This is to say that it is equitable to allocate these clean energy costs on a set per kWh basis since the damage being avoided is caused per kWh.

Nevertheless, as several commenters note, voluntary purchases of Tier 4 RECs would obviously ameliorate impacts to the State's ratepayers. In this respect, the Commission references the commitment made by NYC to purchase approximately 4 TWh per year of Tier 4 RECs that, when combined with its load-based obligations to purchase ORECs, equates to its entire load for the duration of the NYC Contract. As noted in the context of our review of the NYC Contract, this commitment and the associated reallocation of CES commitments required under this

¹⁴⁵ See Case 20-E-0197, supra, Order on Phase 1 Local Transmission & Distribution Project Proposals (issued February 11, 2021); Order on Local Transmission & Distribution Planning Process & Phase 2 Project Proposals (issued September 9, 2021).

Order reduce ratepayer impacts by several billion dollars. NYC estimates that its commitments reduce from 18 TWh to 14 TWh the associated number of Tier 4 RECs the State's LSEs are obligated to purchase annually.

The NYC Contract would result in NYC paying more per kWh for costs of the Tier 4 program than other ratepayers. The estimated \$2-\$4 per month increased cost for most ratepayers reflects the noted discount provided by the NYC Contract to directly purchase a number of Tier 4 and ORECs representative of NYC's entire load, in exchange for exemption from the other, lower-cost clean energy charges.¹⁴⁶ As discussed above, that discount arises from City's commitment to purchase more expensive Tier 4 RECs in a quantity that significantly exceeds what would otherwise be allocated to NYPA in relation to the City's load, thus reducing the cost of the Tier 4 program for all other ratepayers.

The City of New York is making significant financial commitment to Tier 4 and has provided a model for other branches of State and municipal governments to follow. In this respect, on April 8, 2022, the Office of General Services (OGS) filed a letter of intent in the docket stating that it would also be entering into a contract with NYSERDA for Tier 4 RECs associated with energy used by State agencies and departments located in the City on terms similar to those in the NYC Contract. The Commission sees this "all of government" approach as a significant development that will meaningfully reduce the

¹⁴⁶ The Tier 4 Petition notes (at p. 30) that "[t]he Notice from the City quantifies the benefit to ratepayers from its Tier 4 REC purchase as \$0.8 - \$1.7 billion (net present value), reflecting the net effect of its purchase payments minus the reduced CES participation described in the Notice. NYSERDA's analysis reaches a similar conclusion as that presented in the City Notice. This range equates to a reduction of the Tier 4 program cost of at least 12%..."

utility ratepayer impact of implementing the CLCPA, and strongly encourages other branches of government to make similar commitments under Tier 4 and other CLCPA initiatives, like those made by NYC and OGS.

Additionally, as noted in comments filed by several parties - particularly NYC and REBNY, Local Law 97 provides an alternative compliance mechanism that appears likely to result in NYC-based building owners purchasing a significant number Tier 4 RECs. Local Law 97 expressly provides that building owners may purchase RECs associated with a "renewable energy source . . . considered by the NYISO to be a capacity resource located in or directly deliverable into zone J load zone for the reporting calendar year."¹⁴⁷ Tier 4 RECs appear to meet this criterion because they are associated with capacity resources whose energy would be directly deliverable into Zone J. We find particularly noteworthy given its role in implementing Local Law 97 that NYC sees that statute as a pathway to significant Tier 4 REC purchases. For its part, REBNY notes that there is a need for Tier 4 RECs that could range from 5.1 TWh to 12.8 TWh per year by 2030. When taken together with the estimated NYC Tier 4 annual purchase quantity of approximately 4 TWh, the result is a potential total upper range approaching the total Tier 4 bid quantity of about 18 TWh.

The Commission also notes the existence of NYPA's existing low-cost energy supply programs, which remain available to businesses in upstate New York. As noted in its comments, NYPA will continue to provide low-cost power programs statewide, in accordance with its statutory mission. The business-related customers to whom NYPA provides low-cost power generally commit to operate facilities in the State pursuant to long-term

¹⁴⁷ N.Y.C. Admin. Code §28-320.6.1.

contracts requiring that they make capital investments in their New York-based facilities and create or retain jobs within the State. NYPA's programs provide other customer groups with low-cost renewable power to support the communities and businesses located near NYPA's large hydroelectric power generators in Western New York and the North Country, as well as to municipalities and other political subdivisions of the State authorized by law to engage in the distribution of power at rates as low as possible for the benefit of their customers.

The Commission also takes notice of ESD's comments in support of further future action to be taken by the State to mitigate any excessive cost increases on businesses as the State takes steps to meet its CLCPA goals - particularly on those companies most vulnerable to leakage, such as energy-intensive commercial and industrial businesses. In order to help attract and retain commercial and industrial activities in New York State, ESD provides a variety of economic incentives including loans, grants, and tax credits. ESD commits to working with NYSERDA and NYPA to build on existing programs and/or design other appropriate mechanisms to help mitigate any extensive cost increases on businesses, as well as to reduce the risk of economic and emissions leakage both prior to and continuing after the Tier 4 projects are scheduled to go into service.

In any event, the Commission takes seriously its statutory obligation to ensure that utility rates are "just and reasonable."¹⁴⁸ Unquestionably, the potential rate increases associated with the Tier 4 Program are significant. Nevertheless, the "just and reasonable" standard cannot be looked at in a vacuum; it must be examined in terms of the

¹⁴⁸ PSL §65(1).

benefits of the projects(s) in question.¹⁴⁹ As already noted, the Commission believes that the benefits associated with the CPNY and HQUS projects are vast, greatly outweigh their costs and address an impending need to reduce in-City fossil-fuel fired generation and associated pollution. Furthermore, the Commission views the commitment made by NYC, when added to the potential for substantial Tier 4 RECs purchases by NYC-based building owners, to be an important mechanism to mitigate the overall cost of Tier 4 to the State's other ratepayers. Finally, the State's low-cost power and economic development policies would also help to ensure energy-intensive businesses in New York continue to receive nationally competitive energy pricing. For these reasons, the Commission finds that the ratepayer impacts associated with the projects are just and reasonable.

The Commission does not agree with CPNY and HQUS that the wholesale market price suppression caused by these projects would be so large, and so permanent, that signing contracts with a strike price of up to around \$94 per MWh would actually save ratepayers money. The models used to assess societal resource costs and savings are not designed to project long term price formation or dynamics. The demand side is treated as fixed, with no price responsiveness at all and the supply-side price responsiveness is limited to short run dispatch and the entry and exit of resources. Demand side consumption will certainly respond to prices in the future. As noted in the BCA Framework Order, price suppression does not reflect a societal resource

¹⁴⁹ See CES Order, p. 70 ("Consideration of the Cost Study is driven by the dual statutory charges of providing for just and reasonable rates and achieving reasonable consistency with the State Energy Plan.").

cost savings and is likely to be ephemeral.¹⁵⁰ For bill impact estimates, the Commission suggested an adjustment period of one to three years. The Tier 4 Petition's use of modeled price impacts from these projects to reduce first year bill impact estimates is reasonable. This approach is also conservative and thus better serves the role of the Commission to ensure just and reasonable rates. Extending that expectation to 25 years would be inconsistent with that approach.

CPNY's argument that the bill impact analysis should include system cost increases that would otherwise be added to ratepayers' bills is misguided. When the Commission approves a rate increase in the context of a utility rate case, it does so with the knowledge that the failure to pay for needed capital projects could lead to unreliable service and increased future costs from customer outages. The Commission does not reflect in its orders approving rate increases that the capital projects would actually result in a rate "savings" because of the costs that could be incurred if the projects were not built. Instead, the rate increase is explicitly justified based on the need to maintain safe and adequate service. The Commission sees no reason to depart from this well-established precedent when separating quantification of the costs and bill impacts of the Tier 4 projects at issue here from the wider discussion of the benefits that justify incurring such costs, as discussed further above in the public interest review.

2. Cost Allocation

The CES Modification Order states that "each LSE will be obligated to purchase qualifying Tier 4 RECs (less any Tier 4 RECs re-sold in the voluntary market) in proportion to its

¹⁵⁰ BCA Framework Order, pp. 24-25.

overall share of statewide load.”¹⁵¹ The CES Modification Order explains this determination by stating:

[t]his approach appropriately allocates the cost of meeting the CLCPA’s 2030 and 2040 Targets statewide. The purpose of Tier 4 is not to confer a special benefit on a particular area of the State but to facilitate statewide compliance with the CLCPA. Thus, contrary to the suggestion of some commenters, there is no basis for allocating a disproportionate cost of Tier 4 to Zone J customers. Like every tier within the CES, each of which has its own geographic characteristics, the financial responsibility for Tier 4 is most fairly allocated on a statewide load-share basis.¹⁵²

In the Tier 4 Petition, NYSERDA notes that as a result of the cost allocation approach stipulated in the CES Modification Order, the cost will be the same for every customer statewide on a load share basis. However, the Petition also notes that, expressed on a percentage basis, the customer bill impact resulting from statewide allocation of Tier 4 program costs can nevertheless vary by utility and customer class, with percentage bill impacts across upstate utilities projected as higher than those in New York City. For example, National Grid ratepayers are projected to experience the highest near-term (2028) bill impacts of between 5.2-9.9% while Con Edison ratepayers are projected to experience a lower level of bill impacts between 2.6-4.9%. This difference between the two sample utilities is primarily because customers’ bills vary by utility. In upstate utilities, like National Grid, electric bills tend to be lower than those downstate in Con Edison, which results in higher percentage impacts. Also, because these costs are allocated across utilities and customers by kWh, the

¹⁵¹ CES Modification Order, p. 102.

¹⁵² Id., p. 103.

percentage bill impacts will be greater for those customers that have higher consumption load factors.¹⁵³

Public Comments

A number of commenters object to a statewide allocation based on load ratio share. Nucor references prior Commission orders that allocate costs for public policy transmission investments based on the "beneficiaries pay" principle, whereby 75% of costs are allocated to primary beneficiaries and 25% are allocated statewide. Nucor acknowledges that the Commission decided on a load ratio share allocation for Tier 4 in the CES Modification Order but takes the view that, with the cost-based information now available in the Tier 4 Petition, that allocation approach would produce inequitable outcomes that the Commission must remedy. Nucor argues that the expected bill impacts on energy intensive manufacturing upstate would be excessive. Nucor states further that using HVDC lines as the delivery vehicle for Tier 4 energy means that the projects would not provide any material electric system benefits to the rest of the State, and all of the local emission benefits are designed to apply to Zone J. Nucor also argues that employing a statewide cost recovery approach negates pricing incentives needed to develop acceptable local in-City resource alternatives.

NYAPP echoes Nucor's position that, because the benefits of the two Tier 4 projects are aimed at Zone J, it is equitable that the costs of the projects be allocated to the beneficiaries instead of by load share. NYAPP supports use of an approach in this case by which 75% would be allocated based on the beneficiaries pay principle and 25% would be based on load ratio share. MI takes the same position, stating that -

¹⁵³ Tier 4 Petition, p. 27.

inasmuch as the proposed transmission lines are in furtherance of a stated public policy goal of directing more renewable power downstate - the contract costs should be allocated consistent with the beneficiaries pay principles. MI also states that recovery of Tier 4 costs on an energy-usage basis would be inequitable and, given new information now available to the Commission, that approach should be modified. MI states that the Commission could not have anticipated that the proposed Tier 4 contracts would be exceedingly expensive. It asserts that there is no rational basis regarding why large non-residential customers should be exposed to three times the cost impacts of residential customers, and the cost impacts could potentially contribute to plant closures, job losses, and capital investments being directed elsewhere.

NYSEG and Rochester Gas and Electric comment that there are some possible unintended consequences related to the prior Commission guidance on Tier 4 cost allocation; specifically, that the percentage impact on utility bills for those customers not directly served by the two projects are materially larger than the percentage impact for those customers not served by the projects. For these reasons, the two utilities ask that the Commission consider revisiting the prior guidance related to cost allocation for Tier 4.

Save Ontario Shores objects to the funding arrangement wherein the projects would raise rates for people and industries in Western New York, which it asserts already bear the major burden regarding the siting in that region of large-scale renewable projects and a large portion of the extended transmission projects, to a greater extent than in other parts of the state. Monroe Community College (MCC) comments that the proposed cost structure would have a negative impact on its ability to holistically support students' educational and

training needs because of the financial consequences of increased energy bills. Rochester Institute of Technology (RIT) also expresses concern regarding what it perceives to be the inequality of cost distribution, noting that one of the attractions of upstate New York is low-cost electricity, especially for high-tech manufacturing, and that the region will become less competitive if utility bills increase. MCC, RIT, and the Greater Rochester Chamber of Commerce each request that the Commission alter the proposed plan to ensure the financial burden is appropriately shared with utility customers located in the New York City metropolitan area or that the State itself steps in to subsidize the cost.

Commission Determination

As some commenters note, the Commission already determined in the context of the CES Modification Order that the load ratio share cost recovery mechanism would apply to Tier 4 projects. No parties sought rehearing of this part of the order or challenged it in court.

Nevertheless, the Commission revisits its prior determination for the limited purpose of reexamining the policies underlying its prior ruling and related issues that have arisen since issuance of that ruling. To start with, the Commission has found the load ratio share applicable to all of the CES program tiers, as well as the Offshore Wind Standard. For example, the Commission found in applying the load ratio share in the context of the CES Tier 3 program that:

[a]pplying the obligation on a volumetric basis is rational and the most appropriate basis to broadly allocate the costs given the nature of carbon emissions that are a creature of the volume of electric generation and consumption. The Commission is instituting this program to prevent widespread damage from carbon emissions that affect everyone. It

is fair and appropriate for all consumers to participate.¹⁵⁴

The Commission adopted the load ratio share allocation knowing that the payments under Tier 3 would be made to the FitzPatrick, Nine Mile Point, and Ginna nuclear power plants, all located in northern New York adjacent to Lake Ontario.¹⁵⁵

The Commission based its determination to apply the load ratio share cost allocation methodology to Tier 3 resources prior to enactment of the CLCPA, and the CLCPA provided the primary basis for the Commission to create the Tier 4 program in the first place. This is noteworthy because the CLCPA itself cites repeatedly in the Legislature's "findings and declaration" to the statewide benefits that are to accrue from implementation of the clean energy and technology mandates specified under the statute.¹⁵⁶ From our reading of the statute, it seems clear that the Legislature recognized that the harm of climate change affects all residents of the State, and it intended the cost burdens of climate change to be distributed equally to all residents and businesses of the State without regard to the location of particular projects. Thus, the load ratio share methodology seems to fit the purpose of the CLCPA.

Simply stated, the load ratio share methodology is appropriate for large-scale clean energy projects because the

¹⁵⁴ CES Order, p. 149 (emphasis added).

¹⁵⁵ *Id.*, p. 146.

¹⁵⁶ See CLCPA §1(1) ("[c]limate change is adversely affecting economic well-being, public health, natural resources, and the environment of New York" through, *inter alia*, an increase in the "severity and frequency of extreme weather events," "a decline in freshwater and saltwater fish populations," "increased average temperatures, which increase the demand for air conditioning and refrigeration among residents and businesses," and "exacerbation of air pollution"); *id.* §3 (primary purpose of CLCPA is for "New York" to address these impacts by "reduc[ing] greenhouse emissions").

carbon emissions damage caused by combusting fossil fuels to produce energy impacts the entire State. The claim by both MI and Nucor that the economic benefits from the CPNY and HQUS projects would fall exclusively to Zone J is mistaken. Reducing CO₂ emissions and avoiding economic damages benefits all New Yorkers. New York City ratepayers have contributed significantly to all large-scale clean energy programs, including the ZEC program, even though most projects, to date, are located in upstate New York. Further, power injections into Zone J reduce generation needed from downstate and upstate resources. NYCA is an interconnected power grid, and the New York State economy is an open economy.

Parties that argue that the Tier 4 costs should be allocated by a formula designed for transmission projects intended to maintain reliability or increase deliverability miss this fundamental point. Reliability-based transmission and distribution project costs are allocated on a capacity-basis (i.e., in MW) because it is peak capacity use that causes the need for the transmission upgrades. Projects such as the Western New York or AC transmission projects were needed based on a combination of reliability and congestion relief and required a cost allocation formula reflecting those cost drivers. For large-scale clean energy programs, such as the CES Tiers 1-4 and Offshore Wind Standard, the cost causation is different. Consumption of energy generated by combusting fossil fuels causes climate change. Accordingly, the costs to eliminate those damages should be allocated in MWh. This is the economic basis upon which the Commission in the CES Modification Order determined to apply the load ratio share cost allocation methodology to Tier 4, and we see no reason to change that determination here.

Finally, it deserves mentioning again that NYC has entered into a pivotal commitment to purchase what it estimates are 4 TWh-worth of Tier 4 RECs, and Local Law 97 remains another pathway toward additional voluntary purchase of Tier 4 RECs. Thus, while the Commission believes firmly that it is appropriate to apply a load-based cost recovery mechanism to its CES programs, the overall cost of Tier 4 has been significantly mitigated by NYC's commitment and in all likelihood will be further mitigated by additional voluntary purchases.

STATE ENVIRONMENTAL QUALITY REVIEW ACT

On June 12, 2020, in accordance with SEQRA, the Commission accepted as complete a Draft SGEIS that explored the potential environmental impacts associated with the increase in renewable resources needed to achieve the mandates of the CLCPA. On September 17, 2020, after evaluation of the numerous comments received in response to the Draft SGEIS, the Commission finalized and published a Final SGEIS, which included an analysis of the proposal to procure renewable resources to deliver energy directly into New York City under a new Tier 4. The Final SGEIS did not review specific siting of generation or transmission but instead considered in general and conceptual terms the effects of renewable procurements associated with the CLCPA goals, including Tier 4.¹⁵⁷

On October 15, 2020, the Commission included as part of the CES Modification Order a SEQRA Findings Statement that considered the environmental impacts of the Tier 4 program. As described in the Findings Statement, the Final SGEIS builds upon and incorporates by reference relevant material from similar analyses conducted by the Commission in 2015, 2016, 2018, and

¹⁵⁷ See Final SGEIS (filed September 17, 2020), pp. 4-1, 5-1, 7-1, and 8-2.

2020.¹⁵⁸ Pursuant to SEQRA, "[w]hen a final generic EIS has been filed . . . [n]o further SEQR compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the generic EIS or its findings statement."¹⁵⁹

As relevant to the Tier 4 Petition, the Commission is acting only on the HQUS and CPNY contracts and is not addressing any issues related to the construction or operation of the transmission and generation resources contemplated in the contracts.¹⁶⁰ As noted in the Findings Statement, any site-specific environmental impacts associated with the construction and operation of those resources must be addressed through separate statutorily required processes (i.e., under PSL Article VII, PSL Article 10, and Executive Law 94-c, as applicable).¹⁶¹ Of important note, SEQRA specifically exempts "[a]ctions subject to the provisions requiring a certificate of environmental compatibility and public need in articles seven, ten and the former article eight of the public service law or requiring a siting permit under section ninety-four-c of the executive law."¹⁶²

Thus, the Commission concludes that no further review under SEQRA is necessary to approve the HQUS and CPNY contracts. The action contemplated here, the approval of contracts for the

¹⁵⁸ CES Modification Order, Appendix E, p. 4.

¹⁵⁹ 6 NYCRR 617.10(d)(1).

¹⁶⁰ Of note, there are only two transmission projects associated with Tier 4. The CHPE project has already been granted its PSL Article VII approvals, and the CPNY transmission line will be required to obtain all necessary approvals, including under PSL Article VII, prior to construction (see CPNY Contract §17.04).

¹⁶¹ CES Modification Order, Appendix E, p. 23.

¹⁶² ECL §8-0111(5)(b).

purchase and sale of Tier 4 RECs, was sufficiently reviewed as part of the Final SGEIS and Findings Statement. Any additional environmental reviews associated with the siting of any transmission or generation facilities under the Tier 4 program will be conducted pursuant to either PSL Article VII, PSL Article 10, or Executive Law 94-c and, as noted, SEQRA exempts projects subject to those statutes from additional review.

CONCLUSION

Based on the foregoing, the Commission hereby approves the Tier 4 Petition based on our findings both that the CPNY and HQUS projects advance the public interest, and the two projects are sufficiently compelling to exceed the 1,500 MW solicitation threshold established in the CES Modification Order. The Commission finds that the impending need to reduce emissions from power plants in New York City necessitates immediate action, while the CPNY and HQUS projects together present the most cost-effective solution to address that need. The Commission thus approves both the CPNY and HQUS contracts, subject to the changes to be made in the HQUS contract, as noted in the body of this Order. With respect to the Notice, the Commission rules that it need not approve the NYC Contract, although it maintains jurisdiction over the contract for the limited purposes explained in the body of this Order. The Commission otherwise grants the requests made in both the Notice and the Tier 4 Petition to equitably reallocate LSE obligations and commitments in recognition of the Tier 4 RECs that NYC has voluntarily agreed to purchase.

In the CES Modification Order, the Commission directed NYSERDA to file an implementation plan for stakeholder comment and Commission approval that includes a description of the Tier 4 compliance obligation calculations, process and structure. On

December 24, 2021, the Secretary of the Commission extended the deadline for filing the implementation plan, but a new deadline has not been set. Given the distinctive complexities involved with the resale of Tier 4 RECs described in this Order, the Commission concludes that a significant amount of time is warranted to develop the implementation plan and accordingly sets the deadline for filing of the implementation plan as 180 days following the effective date of this Order.

The Commission orders:

1. The contract entered into between the New York State Energy Research and Development Authority and Clean Path New York LLC is approved, subject to the counterparties adding a provision to the contract requiring Clean Path New York LLC to, prior to the start of construction of the associated new transmission facility, reach agreement with the New York State Energy Research and Development Authority on the Disadvantaged Community benefits framework described in Exhibit H-1 and to file such framework and resulting measured and tracked data in this proceeding, as discussed in the body of this Order. The counterparties to the contract shall file the required contract amendments within thirty days of the effective date of this Order.

2. The contract entered into between the New York State Energy Research and Development Authority and H.Q. Energy Services (U.S.) Inc. is approved, subject to the counterparties (a) modifying the terms of Exhibit H of the contract to reflect that low water levels associated with the hydropower resources subject to the contract cannot alone constitute a force majeure event, (b) adding a provision to the contract requiring H.Q. Energy Services (U.S.) Inc. to, prior to commencement of delivery of Tier 4 RECs, reach agreement with the New York State

Energy Research and Development Authority on the details of how demand side management would be accounted for and to file such details in this proceeding, as discussed in the body of this Order, and (c) adding a provision to the contract requiring H.Q. Energy Services (U.S.) Inc. to, prior to the start of construction of the associated new transmission facility, reach agreement with the New York State Energy Research and Development Authority on the Disadvantaged Community benefits framework described in Exhibit I-1 and to file such framework and resulting measured and tracked data in this proceeding, as discussed in the body of this Order. The counterparties to the contract shall file the required contract amendments within thirty days of the effective date of this Order.

3. The Commission retains jurisdiction over the contract entered into between the New York State Energy Research and Development Authority and New York City for the limited purpose specified in the body of this Order.

4. The New York State Energy Research and Development Authority shall consult with Staff of the Department of Public Service to determine whether and when any analyses or studies undertaken pursuant to Section 2.07 of the Clean Path New York contract are publicly released.

5. The New York State Energy Research and Development Authority shall review its guidelines related to solicitation of projects under the Clean Energy Standard and Offshore Wind Program to determine, in light of existing procurement requirements, whether any measures should be taken either itself and/or by proposers to increase the transparency regarding the location of projects bid through its solicitations, as discussed in the body of this Order.

6. The New York State Energy Research and Development Authority shall deduct, from the New York Power Authority's

annual allocation, the (1) renewable energy certificates (RECs) under Tiers 1 and 4, and (2) zero emission credits under Tier 3 that the New York Power Authority otherwise has committed to purchase associated with New York City's load once the New York City contract is in effect and Tier 4 RECs are being purchased by New York City, and until such time as New York City ceases to purchase Tier 4 RECs.

7. The New York State Energy Research and Development Authority shall reallocate New York City's load-based renewable energy certificates under Tiers 1 and 3 to all of the State's load serving entities, including the New York Power Authority, counting the New York Power Authority load as excluding that of New York City for this purpose, as discussed in the body of this Order.

8. The New York State Energy Research and Development Authority shall file, within 180 days of the effective date of this Order, an implementation plan, for stakeholder comment and Commission approval, that includes a description of the Tier 4 compliance obligation calculations, process and structure, and a Tier 4 standard purchase agreement, as discussed in the body of this Order and in the CES Modification Order that was issued in this proceeding on October 15, 2020.

9. 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 three days prior to the affected deadline.

10. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

APPENDIX A

Summary of Initial and Reply Comments on the Tier 4 Petition and
Notice from the City of New York

This summary of comments is compiled for the benefit of the reader and is not intended to be a comprehensive source of all comments submitted in this proceeding or to reflect any weight given particular comments by the Public Service Commission (Commission) or the Staff of the Department of Public Service (Staff). In addition to the comments summarized individually below, thousands more comments have been submitted and considered by Staff and the Commission.

Around 5,200 individuals submitted public comments electronically on the New York State Department of Public Service (DPS) Document and Matter Management System (DMM), and/or they were emailed to the DPS Secretary, under Case No. 15-E-0302, during the public comment period for the Tier 4 Petition.

A majority of the individual commenters, approximately 2,800 out of 5,200, support both the CPNY and HQUS projects. Approximately 200 additional commenters support the CPNY project. Approximately 400 additional commenters support the HQUS project. Approximately 1,800 of the 5,200 individual commenters expressed opposition to Commission acceptance of the HQUS Project for a variety of reasons including disruption to the Hudson River, impacts on Indigenous populations and Canadian hydropower not being emissions-free. In addition to the several thousand public comments submitted during the public comment period for the Tier 4 Petition, Millennial Strategies submitted for submission 420 public comments on behalf of Urban Upbound, expressing disappointment that the State passed up an opportunity to replace unit at the Ravenswood Generating Station known as "Big Allis."

Approximately 15 of the 5,200 individual commenters expressed concern regarding the statewide cost allocation for the Tier 4 Projects. No individuals commented on the NYC Notice

The full versions of all comments can be found at the Department of Public Service website under Case No. 15-E-0302. Staff and the Commission have considered the comments in their entirety.

Entities that Commented on the Tier 4 Petition or the Notice of
the City of New York

Adirondack Regional Chamber of Commerce
Advanced Energy Research and Technology Center at Stony Brook
University
Algonquin Anishinabe Nation Tribal Council
Alliance for Clean Energy New York
Assemblyman D. Billy Jones, 115th District
Assemblyman John T. McDonald III, 108th District
Assemblyman Matthew Simpson, 114th District
Assemblyman Christopher Tague, 102nd District
Assemblywoman Carrie Woerner, 113th District
Association for a Better New York, Inc.
Astoria Tenant Organization
Boralex
Borough of Queens
Bronx Community Board No. 1
Bronx Council for Environmental Quality
Building and Construction Trades Council of Greater New York
Building Owners and Managers Association of Greater New York
Business Council of Westchester
Canadian Electricity Association
Candela Renewables, LLC
Capital Region Chamber
Center for Climate and Energy Solutions
Center for Economic Growth
Citizens Campaign for the Environment
City of New York
Clean Path New York
Climate Concerned Citizens and Joint Frontline Intervenors
Clinton County Legislature
Columbia University in the City of New York
Concerned Climate Citizens
Consolidated Edison Company Of New York-Orange & Rockland
Consumer Energy Alliance
Counties of Warren and Washington Industrial Development Agency
County of Albany
Cypress Creek Renewables
Deignan Institute for Earth and Spirit & Thomas Berry Forum for
Ecological Dialogue at Iona College

Dutchess County Legislature
Eastern New York Laborers' District Council
EDF Renewables
Empire State Development
Engineers Labor-Employer Cooperative
Environmental Defense Fund
Essex County Industrial Development Agency
Grand Riverkeeper Labrador, Inc.
Greater Rochester Chamber of Commerce
Green Education and Legal Fund
Greene County Industrial Development Agency
Greene County Legislature
H.Q. Energy Services (U.S.) Inc. & Transmission Developers Inc.
Harlem River Working Group
HEC Montreal
International Brotherhood of Electrical Workers (IBEW)
IBEW Local Union No. 3
Independent Power Producers of New York (IPPNY)
League of Women Voters of the Mid-Hudson Region
Liberty Renewables Inc.
Long Island Association
Long Island Power Authority
Massachusetts Institute of Technology Center for Energy and
Environmental Policy Research
Mohawk Council of Kahnawà:ke
Monroe Community College
Multiple Intervenors
National Hydropower Association
Natural Resources Defense Council & Regional Plan Association
New York Association of Public Power
New York Building Congress
New York City Council Members James Gennaro (District 24), Julie
Menin (District 5), Francisco Moya (District 21), Jennifer
Gutiérrez (District 24), and Kamillah Hanks (District 49)
New York City Environmental Justice Alliance
New York Energy Consumers Council Inc,
New York League of Conservation Voters
New York Municipal Power Agency
New York Power Authority
New York State Conference of Operating Engineers
New York State Economic Development Council
New York State Electric and Gas Corporation & Rochester Gas and
Electric Corporation
New York State Energy Resource and Development Authority
North Country Chamber of Commerce
North Country Regional Economic Development Council
Northland Power U.S. Projects Inc.
Nuclear New York

Nucor Steel Auburn, Inc.
NY Renews
Old Astoria Neighborhood Association
Orange County Partnership
Partnership for New York City
President's Coop & Condo Council
Queens Chamber of Commerce
Queens Together
Randall's Island Park Alliance
Real Estate Board of New York
Rise Light & Power
Riverkeeper Inc.
Rochester Institute of Technology
Save Ontario Shores, Inc.
Schenectady County Legislature
Senator Neil D. Breslin, 44th District
Senator Todd Kaminsky, 9th District
Senator Anna Kaplan, 7th District
Senator Daniel Stec, 45th District
Sheet Metal Workers' International Association Metropolitan
Local Union No. 28
Sierra Club
Sisters of Charity of New York Office of Peace, Justice and
Integrity of Creation
Solidarity Committee of the Capital District
South Bronx Unite
Stony Point Action Committee for the Environment
Terra-Gen
The Business Council of New York State, Inc.
The Greater Hunts Point Economic Development Corporation &
Greater Hunts Point Chamber of Commerce
The Nature Conservancy NY
The New Bronx Chamber of Commerce Inc.
Town of Chesterfield
Town of Clarkstown
Town of Essex
Town of Glenville
Town of Haverstraw
Town of Milton
Town of Putnam
Town of Putnam
Town of Stony Point
Town of Westport
T'ruah, The Rabbinic Call for Human Rights
U.S. Representative Ritchie Torres, 15th District New York
Urban Green Council
Urban Upbound
Utility Intervention Unit

Utility Workers Union of America, Local 1-2
Variety Boys & Girls Club of Queens
Village of Haverstraw
Village of West Haverstraw

Adirondack Regional Chamber of Commerce

The Adirondack Regional Chamber of Commerce supports the HQUS project, referencing economic benefits, permitted status, readiness to begin construction in 2022, and expected operation by 2025. An agreement between the HQUS project and the Warren Washington County Industrial Development Agency "will deliver over \$270 million to Washington County over the next 30 years and statewide local governments are expected to receive approximately \$1.4 billion in new tax revenue from the project." This tax revenue will enable local towns and school districts to undertake capital projects, infrastructure projects and have a direct benefit to schools. Other economic benefits include more than 1,400 direct construction jobs and approximately 3,200 secondary jobs. The Adirondack Regional Chamber of Commerce characterizes the HQUS project as "an important piece of New York's energy infrastructure" and strongly encourages the Commission to approve the contract.

Advanced Energy Research and Technology Center at Stony Brook University

Advanced Energy Research and Technology Center at Stony Brook University supports the HQUS project, characterizing it as "an unprecedented opportunity for New York to take large steps forward in the state's efforts to transition to more renewable energy" and further referencing the project's economic benefits.

Algonquin Anishinabe Nation Tribal Council

The Algonquin Anishinabe Nation Tribal Council expresses concern regarding the HQUS project because of the damages done by Hydro-Québec on the Nation's unceded ancestral territory and ongoing climate change impacts. The Algonquin Anishinabe Nation Tribal Council also cites a letter sent to NYC former First Deputy Mayor Dean Fuleihan in May 2021 from several First Nations in which they condemn the detrimental effects of the transmission line because the hydropower resources powering the line "were set up without consultation and therefore in an unconstitutional manner" and reference Hydro-Québec's anachronistic water management models and impacts on aquatic wildlife. The Algonquin Anishinabe Nation Tribal Council states that the 33 power stations in the Algonquin Anishinabe Nation and Pessamit Innu Nation traditional territories represent 36% of Hydro-Québec's total installed power in Québec.

Alliance for Clean Energy New York (ACENY)

ACENY is fully supportive of New York's procurement of Tier 4 RECs through the CPNY Project and urges the Commission to approve its contract, referencing the project's diverse portfolio of in-State resources, economic benefits, congestion relief and utilization of the Blenheim-Gilboa facility. With respect to the CPNY contract, ACENY notes and is supportive of the provisions that require energy deliverability studies to be conducted to prevent curtailments of contracted or awarded renewable projects. ACENY recommends that studies in accord with these provisions be made publicly available.

ACENY is concerned that NYSERDA's decision not to apply program policy factors may have limited the maximization of benefits from the HQUS project. ACENY also raises questions regarding several HQUS project characteristics. First, ACENY

questions the lack of a converter station that would allow renewable generation from New York resources to access the transmission line. Second, ACENY states that the HQUS project does not guarantee delivery of Tier 4 RECS in the winter even though NYISO predicts that New York's peak electricity demand will shift to the winter. Third, ACENY suggests that the contract provision requiring HQUS to procure or build additional solar or wind energy resources should specify that the resources can or must be in New York. Fourth, ACENY inquires if the findings from the analysis that the HQUS project will not result in incremental curtailment of offshore wind could be embodied in the contract. Fifth, ACENY characterizes that NYSERDA applied the Supplier Energy Baseline and Supplier GHG Baseline with more flexibility than allowed by the CES Modification Order, by not including the Supplier Energy Baseline and allowing averaging across the contract term as well as excusing compliance in force majeure situations. ACENY requests that the Commission fully explore the questions raised regarding the HQUS contract and share additional rationale for the project as selected, direct NYSERDA to re-negotiate contract terms with HQUS, or rebid the project "to determine if these same values could be procured from one of more other projects more cost-effectively."

ACENY supports the re-sale of Tier 4 RECs to the City of New York and the voluntary market.

Assemblyman D. Billy Jones, 115th District

Assemblyman Jones supports the HQUS contract and urges the Commission to support the contract because it will reduce dependency on fossil fuels, create thousands of jobs and help environmental sustainability by establishing a \$117 million trust to fund projects to improve the water quality in several state waterways, including Lake Champlain. Assemblyman Jones

also notes that residents will save money on their energy bills since the contract provides a fixed electricity rate for over 25 years.

Assemblyman John T. McDonald III, 108th District

Assemblyman McDonald supports the HQUS project and encourages the Commission to support the HQUS contract. He states that the project will reduce carbon emissions, create jobs and support job training, increase tax revenue without associated demands on local services, establish an environmental trust and generate over \$19 billion in benefits for New York and its people. Assemblyman McDonald also notes that as part of the contract, Hydro-Québec will purchase electricity from the Apuiat wind farm, partially owned by Innu communities in Québec, and establish a partnership with the Mohawk Council of Kahnawà:ke for joint ownership of the transmission line in Québec.

Assemblyman Matthew Simpson, 114th District

Assemblyman Simpson supports the HQUS project, referencing its clean power contribution and economic benefits and characterizing it as a "stable and sustainable power source for the most populous part of our State that enhances security and provide[s] employment to thousands of individuals." He notes that the HQUS project will benefit not only NYC, but also the communities along the transmission line, including Washington County, which will be able to complete critical infrastructure projects, capital improvements and school district upgrades without placing new or higher tax burdens on residents.

Assemblyman Christopher Tague, 102nd District

Assemblyman Tague supports the CPNY project and urges the Commission to consider it favorably, referencing its economic benefits and contribution to climate goals.

Assemblywoman Carrie Woerner, 113th District

Assemblywoman Woerner supports the HQUS project and urges the Commission to consider it favorably, referencing its contribution to meeting climate goals and offering an option to replace the fossil fuel plants emitting harmful pollutants in NYC. She also references the project's \$117 million water quality improvement projects fund, job creation and other economic benefits. She states that the HQUS project will contribute significantly to the tax base without placing demands on local services and stabilize electricity prices.

Association for a Better New York, Inc. (ABNY)

ABNY supports the CPNY project as a once-in-a-generation opportunity to meet the State's green energy goals while building a climate for businesses to become more competitive in a green economy and providing "immense economic, environmental justice, and public benefits back to communities and businesses." ABNY references CPNY's economic benefits, including investment in the State's renewable infrastructure, jobs, community benefits funds focusing on workforce development, ratepayer savings, tax and PILOT revenues and environmental justice commitments. ABNY also notes that the CPNY project will likely serve the State for more than 70 years, well beyond the project's contract with NYSERDA, and will minimize construction impacts by using existing rights-of-way.

Astoria Tenant Organization

The Astoria Tenant Organization would like to see more presentations done in the Astoria Houses before giving input on behalf of residents without them being properly informed about the projects. The comments note further that the residents have suffered greatly, especially due to the removal of trees.

Boralex

In its initial comments, Boralex supports both the HQUS and CPNY projects based on their contribution to decarbonizing the electric sector, economic benefits, public health benefits and reducing greenhouse gas emissions. Boralex states that the contracts will allow for the combination of in-State and out-of-State resources with complementary generation profiles that will lead to greater system resilience. Boralex takes the position that "[t]he Supplier GHG Baseline was rigorously applied and satisfies the requirements of the Order." Boralex also states that making the Supplier Energy Baseline optional "avoids the continuation of high-volume baseload imports into upstate if these deliveries would harm or compete with existing/future New York renewable resources." Boralex states that ratepayers will benefit from stability and contractual upside if a federal transmission tax credit is adopted or through voluntary purchase of Tier 4 RECs in accord with Local Law 97.

In its reply comments, Boralex characterizes the assumptions reflected in the Tier 4 Petition as conservative and takes the position that the ratepayer impacts are overstated because the analysis did not consider avoided REC costs, reductions in Zone J capacity costs resulting from the Tier 4 program and price effects across the contract term rather than for just one year. Boralex also states that the Low Commodity

Case should be discounted "as it combines and conflates the effects of low commodity prices with price effects resulting from the Tier 4 program in a manner that is inconsistent with the principles of the BCA framework." Boralex asserts that the BCA should apply the ratepayer impact analysis based on a scenario where the State relies on Tier 4 to achieve its 70x30 and 100x40 CLCPA objectives, value the carbon reduction and public health across the full contract term, consistently apply generator margins in the calculation of system resource value and investment value and consider the value to the State of the HQUS and CPNY projects beyond the contract period.

In response to comments recommending that the Commission modify the Tier 4 program to prioritize the retirements of specific fossil generating units, Boralex states that specific fossil retirements do not need to be prioritized because the projects will cause fossil retirement through reduced energy prices. In responses to concerns by other commenters in respect of winter capacity, Boralex states that the HQUS project will have to run during the winter to meet its high Bid Quantity.

Borough of Queens

The President of the Borough of Queens submitted a separate support letter for each project. The support letter for the HQUS project states that the project "would represent an immeasurably important investment in not just helping New York State achieve its renewable energy goals . . . but in safeguarding and supporting the well-being of [] Queens constituents." The Borough President specifically highlights the public health benefits of the project because it will terminate in Astoria, where area residents have experienced an

unfortunate abundance of respiratory issues due to pollution. He also references the HQUS project's economic benefits.

The support letter for the CPNY project states that the project will build a portfolio of in-State resources, reduce reliance on fossil fuels and foster massive growth in the green economy, including the creation of thousands of jobs.

Bronx Community Board No. 1

Bronx Community Board No. 1 expresses support for projects and program goals to reduce dependence on fossil fuels and greenhouse gas emissions. The Board expresses concern that the community, which has borne an outsized share of the pollution burden associated with New York's electricity production, did not receive any formal notification during the Tier 4 solicitation process resulting in the community's disenfranchisement and inability to secure equitable benefits. The Board is additionally concerned that NYSERDA and the projects were not able to specify the number of jobs that would be created in its district or what benefits would accrue to the community from the Green Economy Fund, that no one from the district is on the board of the Green Economy Fund and that NYSERDA and the projects were not able to state when the four peaker plants would be shut down.

The Board asks the Commission to include provisions in the contracts that establish benefits to the community as a formal stakeholder, require the projects to apprise community residents about job opportunities, require the projects to do business with firms in the disadvantaged community, set specific dates for the NYPA peaker plants to be decommissioned, and require a qualified person from the district to serve on the Green Economy Fund.

Bronx Council for Environmental Quality (BCEQ)

BCEQ states that the Final Supplemental Generic Environmental Impact Statement (FSGEIS) that the Tier 4 Petition is based on is flawed because it does not consider the CLCPA, 2020 CES Modification Order and Tier 4 as new actions and ignores the new environmental impacts on the communities introduced by the Tier 4 contracts. BCEQ states that the completed environmental reviews "have not reached the appropriate level identifying critical impacts on the Harlem River from the Hudson River to the East River," and specifically have failed to consider "the impact of the transmission line on the Harlem River and possible landfall in Harlem River Yards." BCEQ notes that there is no commitment to closing the peakers, and that there has not been a transparent and public process for the people of the Bronx to participate prior to the contract approval stage. BCEQ notes that it is too late to gain party status in the Article VII certification of the HQUS project, and that BCEQ is concerned that the CPNY project will use the same route.

BCEQ states that the FSGEIS includes "[n]o mention of the people of the Bronx or other parts of the Harlem River Watershed, such as in Northern Manhattan" and that these areas "have not reached comparable agreement as upstate impacted communities" with the Tier 4 projects. BCEQ believes that before the contracts can be approved, they must include Project Labor Agreements (PLAs) for local employment, a locally-approved construction mitigation plan and a firm timeline to close the peakers and existing coal-fired plant in the Bronx. BCEQ states that the FSGEIS does not include a discussion of the rock at the bottom of the Harlem River and that the burial depth requirements in the Harlem River are less restrictive than in the Hudson and East Rivers, even though the water quality of the

Harlem River is on the States Listing of Impaired Waters. BCEQ also states that the FSGEIS had no examination of alternative routes within NYC, even though several power-related facilities are already in the Bronx and the Bronx is ranked 62 out of 62 in health outcomes in the State. BCEQ asks that the Commission "recognize the importance of new environmental reviews of the waterways and the communities that will be impacted by its decision."

Building and Construction Trades Council of Greater New York (BCTC)

BCTC supports the HQUS project, citing its permit status and timeline, \$3.5 billion investment, direct and secondary jobs, union labor commitment, \$40 million Green Economy Fund to create additional job training opportunities. BCTC also supports the CPNY project, citing its commitment to the creation of good union jobs, investment in communities and good faith negotiation of an appropriate PLA to cover construction work.

Building Owners and Managers Association of Greater New York (BOMA New York)

BOMA New York supports the proposed HQUS contract because it will reduce greenhouse emissions, include billions in private sector investments and create jobs. BOMA New York states that the project could replace a significant percentage of the dirty power plants in NYC environmental justice communities and create Tier 4 RECs to enable buildings to comply with Local Law 97.

Business Council of Westchester

The Business Council of Westchester supports both the CPNY and HQUS projects because they will help the County "continue to have the energy resources we need to not have a serious reliability problem" following the closure of Indian Point. The Business Council of Westchester notes that the region is almost entirely dependent on gas-fired generation at the same time that the State is pushing toward its 70x30 goal, and that "Westchester businesses have also faced the untenable situation of service prohibitions because it has become nearly impossible to get energy infrastructure built." If the Commission does not approve the contracts, the Business Council of Westchester takes the position that "we have no realistic chance of meeting the requirements of state law, and our grid will remain bottlenecked which will cause us to have a less reliable power grid." The Business Council of Westchester also references the economic, environmental and health benefits of the projects and urges the Commission to approve the contracts.

Canadian Electricity Association (CEA)

CEA supports the HQUS project because the project "exemplifies many of the characteristics that define the mutually beneficial Canada-U.S. electricity relationship." CEA cites a report from the U.S. International Trade Commission that finds that new projects with Canada like the HQUS project will help New York meet ambitious statewide and community goals to expand renewable power and decrease emissions. CEA states that the fixed cost of electricity delivered by the HQUS project will offer a stable, affordable alternative to fluctuations in fossil-fuel based pricing, in addition to generating \$1.4 billion in new tax revenue for New York localities and school districts. CEA characterizes Canada's electricity system as one

of the world's lowest-carbon electricity systems and notes that the system was overall reliable in 2020 despite unprecedented conditions.

Candela Renewables, LLC (Candela)

Candela is a utility scale solar project developer with a number of solar projects in New York. Candela supports the CPNY project and takes the position that the Commission should reject the HQUS contract because by not including a converter station in New York it creates a preference for foreign resources at the expense of New York resources, which are precluded from delivering energy and capacity on the transmission line. Candela states that instead of awarding the HQUS project now, a second solicitation should be held in the future "that encourages the development of in-state resources such as the project[s] being developed by Candela," which will "result in incremental development in New York and will allow the State to meet its ambitious climate goals without relying on foreign resources."

Capital Region Chamber

Capital Region Chamber supports both the HQUS and CPNY projects and requests Commission approval of the contracts because the projects will improve energy sustainability and grid reliability, reduce emissions and provide economic and public health benefits, including jobs, investments and tax revenue. Capital Region Chamber states that "the state must start approving new clean energy infrastructure now and get serious about the future needs of our grid."

Capital Region Chamber also references NYC's commitment to help reduce the costs of the projects and characterizes it as "an important added benefit."

Center for Climate and Energy Solutions (C2ES)

C2ES supports the full range of zero-emission electricity sources to support greenhouse gas emission reductions, including "importing Canadian hydroelectricity; expanding solar, onshore and offshore wind capacity; preserving existing nuclear power; encouraging the deployment of new technologies . . . and minimizing emissions from natural gas plants." C2ES applauds New York's commitment to climate change mitigation and resilience. C2ES submits a study published in May 2021 supporting the conclusions that importing electricity from Canada can help U.S. states and cities achieve clean energy goals and that "the inherent storage capability of Canadian hydropower can help states integrate greater quantities of intermittent renewable power."

Center for Economic Growth (CEG)

CEG supports both the HQUS and CPNY projects and requests Commission approval of the contracts because the projects will improve energy sustainability and grid reliability, reduce emissions and provide economic and public health benefits, including jobs, investments and tax revenue. CEG notes that approvals of new clean energy infrastructure are needed now with a view to the future needs of our grid.

CEG also references NYC's commitment to help reduce the costs of the projects and characterizes it as "an important added benefit."

Citizens Campaign for the Environment (CCE)

CCE supports both the CPNY and HQUS projects and urges the Commission to advance both projects. CCE supports transmitting both upstate wind and solar and Canadian hydropower

to NYC to resolve the "tale of two grids" and reduce NYC's reliance on fossil fuels. CCE states that NYC cannot be entirely reliant on offshore wind, and that the resources transmitted by the CPNY and HQUS transmission lines are a necessary, viable and meaningful addition to NYC's renewable mix. CCE references the CPNY project's carbon emissions reductions and economic benefits and the HQUS project's readiness to begin construction and supplementation, rather than curtailment, of in-state renewable energy sources. CCE notes further that clean energy from the HQUS project will replace the power lost from Indian Point and support closure of NYC peaker plants.

CCE submitted reply comments jointly with the New York League of Conservation Supporters reiterating support for both projects, characterizing requests to delay or divert the HQUS project as "misguided," and stating that the HQUS project "will bring critically needed clean, renewable hydropower to downstate New York's energy mix which will allow us to reach our ambitious renewable energy mandates in the [CLCPA]."

City of New York (NYC)

NYC supports both the HQUS and CPNY projects because the projects will facilitate meeting CLCPA goals, reduce NYC's dependence on fossil fuels, improve air quality and support thousands of jobs. NYC also states that the projects will allow NYC to "lead by example and procure all the electricity if uses for municipal purposes from renewable resources."

NYC's analysis shows that in 2030, adding the Tier 4 projects to the NYC resource mix would reduce power sector SO_x and NO_x emissions by 35% and reduce statewide reliance on fossil generation by over 15%. NYC states that the projects will improve system reliability by creating new transmission paths

into NYC from different generation resources and providing dispatchability and resiliency. NYC states that the projects will also facilitate electrification efforts and be complementary to demand-side actions.

NYC takes the position that the Tier 4 projects are cost effective and that there are several factors that will mitigate the overall cost impact. NYC's analysis estimated that in 2030, the addition of the Tier 4 projects would reduce wholesale energy prices in NYC by 10% to 15%. The RECs created by the projects are expected to be compliant with Local Law 97 and will help some buildings achieve, in part, the required reductions, further reducing the project costs borne by statewide ratepayers beyond the impact's of NYC's purchase of 20% of the Tier 4 RECs.

In its reply comments, NYC states that many of the criticisms of the HQUS project "pertain to issues that already have been decided by the Commission," while others "appear to be little more than incumbent generators seeking to block new entry" or "seem to disregard the need to achieve the State's policy goals in a manner that preserves system reliability." NYC states that its analysis shows that absent new transmission, the 2030 mandate of the CLCPA cannot be achieved. NYC does not dispute that the projects are expensive, but notes that any transmission will be expensive and states that the results of the BCA are exceedingly net positive. NYC states that calls to commence a new solicitation should be rejected because "[n]o proffer was made that any subsequent project would have lower costs, or even comparable costs or benefits." NYC highlights that the HQUS project has received its Article VII certificate and its generation resources are fully operational, and argues that the project is two years closer to operation than any other project and has less risk than any other large-scale renewable

project. NYC takes the position that both Tier 4 projects are needed to achieve state policy goals and notes the complementary nature and combined benefits of the projects.

NYC also reiterates in its reply comments its position that Commission approval is not required for NYC to proceed with the plan put forward in the NYC Notice.

Clean Path New York (CPNY)

CPNY states that the CPNY project is in the public interest and highlights its benefits with respect to economic development, environmental justice, ratepayer savings, congestion relief, resilience and long-term public ownership.

CPNY states that the ratepayer impact analysis presented in the Petition does not consider ratepayer costs that will be avoided because of the CPNY project, including infrastructure costs, storage costs and REC costs. CPNY cites an analysis by PowerGEM that found that the CPNY project has the potential to reduce energy prices for an extended period, compared to the one year of energy price effects presented in the Petition, and further states that the CPNY project will also reduce capacity prices in NYC. CPNY states that voluntary purchases under Local Law 97 will further reduce statewide ratepayer costs, citing a study commissioned by the Real Estate Board of New York showing that demand from building owners could be approximately 13 million RECs per year, in addition to NYC's purchase of about 4 million RECs each year and potential demand beyond Local Law 97.

In its reply comments, CPNY highlights that the CPNY project has broad-based support and that no commenter has asserted that NYSERDA's application of the Societal Cost Test in the Petition is flawed. CPNY states that the worst-case cost scenario presented in the Petition and referenced by those

commenters with cost and ratepayer impact concerns, which assumes low commodity prices and no offsets, is highly unlikely to occur.

Climate Concerned Citizens and Joint Frontline Intervenors

Climate Concerned Citizens and Joint Frontline Intervenors assert that the HQUS and CPNY projects combined "provide a net and absolute benefit to the state of New York" and are in the public interest. Climate Concerned Citizens and Joint Frontline Intervenors characterize the arguments in opposition to the HQUS project as "largely speculative, unsubstantiated at best, and illogical at worst." Climate Concerned Citizens and Joint Frontline Intervenors state that "[t]he issue of intermittency of the renewable sources for the CPNY [project] creates an insurmountable problems for the sole CPNY plan sans [the HQUS project]" and that the HQUS project is the only one of the two projects that can match Indian Point's lost baseload power. Climate Concerned Citizens and Joint Frontline Intervenors state that the Independent Power Producers of New York's "comparison chart defies logic" and that claims regarding greenhouse gas emissions from Canadian hydropower "are the most muddly and speculative of all the comments opposed to [the HQUS project]." Climate Concerned Citizens and Joint Frontline Intervenors also respond to other points in opposition to the HQUS project related to Indigenous communities, costs, methylmercury from dams and disruptions to the Hudson River.

Clinton County Legislature

The Clinton County Legislature supports the HQUS project, describing it as "a historic opportunity for New York and our neighbors to the north to further strengthen our cross-border relationship, which has lasted over a century and

provides mutual benefits to both sides of this invaluable economic partnership.” The Clinton County Legislature further notes that the HQUS project involves a \$3.5 billion private investment, 1,400 direct family-sustaining jobs, 3,200 secondary jobs and \$1.4 billion in new tax revenue for 73 municipalities and 59 school districts in its first 25 years. The County of Clinton Industrial Development Agency has reached an agreement for towns and school districts in the County to receive \$78 million. The Clinton County Legislature also references the HQUS project’s environmental benefits, including reducing carbon emissions by 37 million metric tons between 2025 and 2040, “the equivalent of removing half-a-million cars from New York roads,” and that the project’s transmission lines will be entirely buried or under water.

Columbia University in the City of New York

Columbia University urges the Commission to approve both the CPNY and HQUS contracts because they will “contribute significant carbon reductions to the electric grid and dramatically reduce the city’s fossil fuel use for electricity.” Columbia University states that the projects will enable the work to achieve net zero through electrification and alignment with NYC’s Local Law 97 and support organizations that want to participate in the clean energy transition. Columbia University also states that its ability to source net zero emission electricity is vital to the University’s ability to meet its own science-based targets and ten-year sustainability plan to achieve net zero emissions by 2050 or sooner.

Concerned Climate Citizens

Concerned Climate Citizens supports the HQUS project and urges the Commission to approve the project because it will

set the State on a rational course correction after the closure of Indian Point, reducing carbon emissions and improving public health.

Consolidated Edison Company Of New York, Inc. (CECONY) and Orange & Rockland Utilities, Inc. (O&R)

CECONY and O&R urge the Commission to approve both the CPNY and HQUS contracts because the projects will advance the State's clean energy goals by increasing renewable energy in NYC and help maintain the reliability of the electric grid as the State transitions to lower carbon electricity. CECONY and O&R also reference the project's economic benefits and benefits to disadvantaged communities.

In their reply comments, CECONY and O&R reiterate their support for both projects and state that "[t]he Tier 4 process, including the solicitation and approval of each project, to meet the State's goals has been thorough and reasonable" and that "[s]tarting the procurement over again ignores the work already undertaken pursuant to the Commission's direction" and "would slow progress toward reducing the use of fossil fuels for electric generation and hinder timely achievement of the CLCPA's goals."

Consumer Energy Alliance (CEA)

CEA supports the HQUS project because it "would create statewide economic opportunity, improve reliability by de-bottlenecking the grid and bring net societal benefits." CEA notes that the project would help keep consumer costs in check by reducing system resource costs and enabling voluntary purchase opportunities. CEA also references the HQUS project's economic and environmental benefits and that it is fully permitted and has undergone rigorous environmental reviews,

including refinements in response to community outreach. CEA notes that the contracts stipulate that any new federal incentives must directly result in lower program costs for customers.

In its reply comments, CEA reiterates its support for the HQUS project and highlights the societal, environmental and grid resiliency benefits and price stabilization associated with the project. CEA also cites the NYC analysis that the Tier 4 projects will reduce wholesale electricity prices in NYC. CEA notes that there is no other option that will provide the benefits of the HQUS project in the near term.

Counties of Warren and Washington Industrial Development Agency

The Counties of Warren and Washington Industrial Development Agency supports the HQUS contract, referencing the HQUS team's stakeholder outreach, the good wages and jobs the project will bring to the region, the project's readiness to start construction and the statewide tax revenue, including \$180 million delivered to Washington County over the next 30 years.

County of Albany

The County of Albany supports the HQUS project, highlighting its economic benefits, including \$164 million that the County is expected to receive from the project over the next 30 years. The County also references the project's societal benefits, created jobs and environmental benefits. The County highlights that "the transmission lines will be fully buried, meaning New York's stunning scenery will be preserved."

Cypress Creek Renewables (Cypress Creek)

Cypress Creek is a developer, owner and operator of solar energy and energy storage projects nationwide that has

been actively working in New York State since 2015. Cypress Creek supports the CPNY project and takes the position that the Commission should reject the HQUS contract because by not including a converter station in New York it creates a preference for foreign resources at the expense of New York resources, which are precluded from delivering energy and capacity on the transmission line. Candela states that instead of awarding the HQUS project now, a second solicitation should be held in the future "that encourages the development of in-state resources, such as the project[s] being developed by Cypress Creek," which will "result in incremental development in New York and will allow the State to meet its ambitious climate goals without relying on foreign resources."

Deignan Institute for Earth and Spirit & Thomas Berry Forum for Ecological Dialogue at Iona College

The Deignan Institute for Earth and Spirit & Thomas Berry Forum for Ecological Dialogue at Iona College are opposed to the HQUS project, taking the position that it cannot be considered clean safe renewable energy because of the impacts on Indigenous communities and the impacts on the Hudson River from jet plowing for the installation of the transmission cables.

Dutchess County Legislature

Members of the Dutchess County Legislature urge the Commission to reject the HQUS project and instead support projects "that avoid burying cable in the Hudson, support New York businesses, spare any harm to Indigenous or other populations, and rely on well-sited wind and solar power combined with appropriate storage - not Canadian hydropower." The commenters characterize dams as a major source of greenhouse gas emissions that have a history of destroying rivers and

damaging Indigenous communities. The commenters also state that jet plowing the Hudson River for cable installation would tear up the and river mobilize legacy contaminants that would affect drinking water, and that once installed, the cable would generate magnetic fields that could interfere with fish behavior.

Eastern New York Laborers' District Council

The Eastern New York Laborers' District Council writes on behalf of the New York State Laborers' Union (NYS Laborers), an affiliate of the Laborers' International Union of North America, to support the HQUS project and urge the Commission to approve the HQUS contract. The NYS Laborers have members in both the U.S. and Canada and "understand the joint beneficial relationship of the two countries" and state that "importing existing hydropower from where it is already being produced and delivering it to New York City where it is needed will deliver enormous economic and environmental benefits to the working men and women in this state and beyond." The Eastern New York Laborers' District Council states that the HQUS project is committed to using union labor and will create more than 1,400 direct jobs for union members, in addition to supporting secondary jobs and sustained economic activity and funding training programs through the \$40 million Green Economy Fund.

The Eastern New York Laborers' District Council, jointly with the New York State Conference of Operating Engineers, submitted reply comments in response to comments seeking the rejection of the HQUS project by characterizing that the opposition is "based on weak and abstract claims that obscure the reality that New York needs renewable power now, the men and women of organized labor need jobs, and the [HQUS project] is able to deliver both this year" and also that the

opposition is asking the Commission "to revisit, in the case of environmental issues, a decision made years ago, and in the case of Tier 4, a decision that was made months ago." The reply comments state that Sierra Club "ignores the facts that there are no other in-state options that are ready to begin construction this summer." The reply comments also note that "Riverkeeper, in fact, signed off on the issuance of the project's environmental permits and nothing about the project has changed since they did." The Eastern New York Laborers' District Council and New York State Conference of Operating Engineers also note that they are aligned with other environmental groups in supporting the two Tier 4 projects.

EDF Renewables (EDFR)

EDFR supports both the HQUS and CPNY projects, highlighting that the HQUS project is fully permitted and will provide substantial economic benefits. EDFR supports the innovative provisions in the CPNY contract regarding curtailment mitigations of other clean energy resources under specific conditions. EDFR states that additional protection in regards to basis costs for Tier 1 projects and misalignment in in-service dates between CPNY resources and the transmission upgrades that will mitigated the associated congestion. EDFR recommends that all studies related to Section 2.07 of the CPNY contract should be made public.

In its reply comments, EDFR expands on its recommendations regarding CPNY contract provisions related to curtailment. EDFR specifically references the CPNY resources located in two particular areas that are known to need transmission investments, and highlights the timeline for these improvements, which will likely not be in service before 2030, after the Tier 4 resource in-service dates. EDFR states that

the CPNY contract should address how impacted projects will be protected during this lag. EDFR also questions the 3% and 6% curtailment thresholds, stating instead that any incremental curtailment should be considered undue and trigger the contract provision. EDFR notes that the addition of a Tier 4 resource that causes curtailment will also create incremental basis risk. EDFR believes that the bidding and scheduling strategy for Limited Projects will be difficult to design, implement and track.

Empire State Development (ESD)

ESD supports both the CPNY and HQUS projects because the projects will advance clean energy and emission reduction goals and deliver significant economic development benefits. ESD acknowledges the resulting cost impact on businesses, particularly energy-intensive commercial and industrial businesses located upstate, and recognizes the need to work with other state partners to address these impacts and prevent the possibility of both economic and emissions leakage. ESD supports the mitigation strategies outlined in the Climate Action Council's Draft Scoping Plan and remains committed to providing economic incentives to help attract and retain industrial activities to New York State.

Engineers Labor-Employer Cooperative

The Engineers Labor-Employer Cooperative supports the HQUS project and encourages the Commission to approve the contract. The Cooperative notes that the project will create jobs, provide tax revenue and bring billions of dollars in economic development investments and emphasizes that the project developers have committed to using union labor to build the

project, and will also fund training programs through the Green Economy Fund.

Environmental Defense Fund (EDF)

EDF does not express an opinion as to the merits of the two contracts under consideration but recognizes “the fundamental importance of the Tier 4 program as a necessary component of a comprehensive, statewide approach to cleaning up New York’s electric supply and meeting our aggressive decarbonization goals.” EDF states that the Commission’s decision “must be shaped by the twin imperatives of eliminating most climate pollution *statewide* and particularly reducing pollution in vulnerable communities.” EDF urges the Commission to “seek out and take seriously the perspectives and insights of communities that are in need of relief from disproportionate pollution burdens that they face.”

Essex County Industrial Development Agency

The Essex County IDA supports the HQUS project, characterizing it as a “win-win” for County residents because the IDA has negotiated over \$82 million in PILOT payments. The Essex County IDA also references the emissions reduction and public health benefits of the project.

Grand Riverkeeper Labrador, Inc.

Grand Riverkeeper Labrador is opposed to the HQUS project receiving a Tier 4 contract because of the negative impacts of mega hydro projects, including environmental justice issues related to Indigenous communities and methyl mercury contamination. Grand Riverkeeper Labrador also takes the position that Québec hydropower is associated with greenhouse

gas emissions and will not enable the retirement of peakers in NYC.

Greater Rochester Chamber of Commerce

The Greater Rochester Chamber of Commerce supports bringing additional energy resources to New York State and opportunities to expand and enhance their relationship with Canada. They express concern with the proposed cost allocation that would lead to a five to eight percent bill increase for Rochester Gas & Electric customers, with larger increases for other upstate utilities, even though they understand that the vast majority of energy will be transmitted to and used by downstate customers. They characterize the rate increases as "profound" for homeowners and "significant" for businesses, potentially resulting in further out-migration. The Greater Rochester Chamber of Commerce requests that the Commission "alter the proposed plan to ensure the financial burden is appropriate shared with the New York City metro area customers who will benefit most from the project, or ensure that New York State itself steps into subsidize the cost."

Green Education and Legal Fund (GELF)

GELF opposes the HQUS project due to its negative impact upon the ecology and Indigenous communities. GELF expresses agreement with comments submitted by Riverkeeper, including that Canadian hydropower is not a low carbon source of energy and that the Hudson River should not be used as a conduit for power cables when there are viable land routes that would have less environmental impact. GELF also references the absence of the Supplier Energy Baseline and states that the HQUS contract is overly flexible about the timing and delivery of RECs and does not have the necessary guardrails around

greenhouse gas emissions reductions. GELF also objects to NYSERDA's decision not to apply program policy factors.

Greene County Industrial Development Agency

The Greene County IDA supports the HQUS project because it will deliver substantial and sustained financial benefits, including \$136 million in new revenue for Greene County that will provide towns in the County with opportunities to make new investments in local communities. The Greene County IDA highlights that the project is permitted and expected to start construction in 2022 and will provide good construction jobs and wages while helping the State meet its climate reduction goals.

Greene County Legislature

The Greene County Legislature supports the HQUS project and encourages the Commission to approve the contract because "it will deliver substantial and sustained financial benefits, and good construction jobs and wages throughout the region." Specifically, the Greene County Legislature notes that the HQUS project involves 1,400 direct construction jobs, 3,200 secondary jobs and \$1.4 billion in new tax revenue over the first 25 years of the project. Greene County is expected to receive approximately \$136 million in new revenue generated by the construction and operation of the HQUS project and the Greene County Industrial Development Agency "was able to establish multiple funding streams for the local communities focused both on long term contributions to the tax base and the establishment of funding streams that will be targeted at furthering economic development in the host communities."

H.Q. Energy Services (U.S.) (HQUS) and Transmission Developers Inc. (TDI)

HQUS and TDI request that the Commission approve the two selected REC contracts in order to respond to the urgent need to increase clean electricity supply to NYC and act to address the region's reliance on fossil fuel-based generation. HQUS and TDI state that the HQUS project is an interconnection approved project that has its major permits and can begin construction upon contract approval and start delivering clean energy in 2025. HQUS and TDI highlight benefits of the HQUS project including a long operating life that will continue for decades past the end of the contract term, the reliability and stability of a continuously available and geographically diverse baseload supply, commitments to protect the environmental integrity of the Hudson River and New York's waterways, specific economic benefits to disadvantaged communities and improving air quality and health benefits and fostering the partnership between Indigenous communities and Hydro-Québec. HQUS and TDI note that the Tier 4 program contains innovative features that will act to defray program costs to statewide ratepayers including the commitment by NYC to purchase approximately 20% of the total Tier 4 RECs, additional voluntary purchases and federal incentives for new transmission.

HQUS and TDI note that in addition to the \$40 million Green Economy Fund, they have recently created a \$9 million Community Engagement Fund to support the goals of the project in New York. The first commitment under this fund is for a \$1.25 million grant to support the creation of a STEM lab and programming in the Variety Boys & Girls Club of Queens. HQUS and TDI state that the HQUS project is committed to promoting diversity in the project's workforce and in January 2022 launched a working group comprised of representatives from New

York-based community and environmental justice organizations to provide recommendations to the HQUS project team. HQUS and TDI also reference the project's partnership with the Mohawk Council of Kahnawà:ke and anticipate further participation by Indigenous communities in new large-scale renewable projects. TDI has recently committed to increase funding under the \$117 million Environmental Trust Fund that is available during construction from \$2.5 million to \$15 million so that important water projects can be funded and started earlier. This amendment was submitted to the Commission on December 6, 2021 to memorialize the change. The TDI project team has established a Working Group to refine and implement a protocol proposed by the Hudson 7 to minimize impacts to water intakes and water quality during construction.

HQUS characterizes the Petition's assessment of energy price effects as conservative because it only included energy price effects in a single year, whereas a study by PA Consulting projects that price effects will persist for at least the full 25 years of the contract term. HQUS also takes the position that use of a higher near-term energy market price consistent with current futures market prices would reduce the ratepayer impacts calculation. HQUS notes that the health impact assessment in the BCA did not include benefits from reductions in ozone formation or reductions in emissions of other toxic air pollutants.

In their reply comments, HQUS and TDI highlight the depth and breadth of stakeholder support for the HQUS project. HQUS and TDI state the ratepayer impact analysis does not consider the cost of alternatives for delivering an equal amount of clean energy to New York, nor does it consider that the demand for Tier 4 RECs in NYC is expected to be so significant that the cost to statewide ratepayers may be zero. HQUS and TDI

respond to comments that the portfolio has lower net benefits than the CPNY project alone by noting that "as clean energy projects are added to the power system and reduce carbon emissions in the BCA model, subsequent energy projects will inherently have lower marginal societal value." HQUS and TDI respond to claims that the project lacks reliability and environmental benefits because it does not include winter UDRs by stating that HQUS is economically incentivized and fully intends to maximize capacity sales into NYC throughout the year, including in the winter, and notes that environmental benefits and avoided emissions are produced from energy deliveries, not capacity.

HQUS and TDI assert that it is in the ratepayers' best interest not to include the Supplier Energy Baseline in the contract because exports to New York will be complementary to the production of renewable energy upstate without the Baseline. HQUS. HQUS and TDI respond to comments criticizing the Supplier GHG Baseline implementation for being too flexible by stating that it is appropriately designed to ensure incrementality. HQUS and TDI describe the banking and borrowing mechanism as accounting for annual fluctuations of precipitation while balancing the hydropower supply to meet the Baseline while preserving affordability. HQUS and TDI also state that averaging over the contract term is more representative of the hydropower production used to establish the Supplier GHG Baseline. HQUS notes that the contract includes several environmentally beneficial options to compensate New York if a negative bank balance remains at the end of the contract term, and as a last resort it will pay back to New York the value of any shortfall plus accrued interest. HQUS agrees to clarify the language of Exhibit H such that low water levels by themselves do not constitute force majeure. HQUS states that once the

final generating station of Hydro-Québec's project is completed later this year, there is no on-going development of new hydropower impoundments.

HQUS and TDI state that the Green Economy Fund Board now includes members from Astoria, the South Bronx, Brooklyn and Manhattan. HQUS and TDI also state that the project will hire a dedicated workforce manager tasked with local stakeholder engagement to ensure outreach and notification of employment opportunities.

With respect to balancing offshore wind, HQUS and TDI note that once the project is in place, the infrastructure required to use Hydro-Québec's large reservoir system will be in place and New York will be able to take advantage of this operational flexibility.

HQUS and TDI state that several of the comments on the Petition are outside the scope of the Commission's current review, and this process should not be used to re-open issues previously settled in the CLCPA, CES Modification Order, or Article VII proceeding.

Harlem River Working Group

The Harlem River Working Group states that any commitment to renewable energy should ensure that the Bronx is not negatively impacted and benefits from the Tier 4 program. The Harlem River Working Group raises concerns that there is no commitment to remove the existing peaker plants and that the burial depth requirements are different in the Harlem River than in the Hudson and East Rivers.

HEC Montreal

HEC Montreal supports the HQUS project, citing NYISO's 2020 Climate Change Impact Study and submitting a peer-reviewed

paper titled "Deep decarbonization in Northeastern North America: The value of electricity market integration and hydropower" by Jesús A. Rodríguez-Sarasty, Sébastien Debia and Pierre-Olivier Pineau to document the regional value of interties within the Northeast Power Coordinating Council region and support its position that "if New York rejects [the HQUS project], it will incur much higher costs in the future, while Hydro-Québec will find alternative usages and buyers for its electricity."

International Brotherhood of Electrical Workers (IBEW)

IBEW supports the HQUS project because it is committed to using union labor and will create more than 1,400 direct jobs for IBEW members as well as those in other specialties, generating more than \$400 million in family-sustaining wages and benefits, which are needed as New York is recovering from the COVID pandemic. IBEW also notes the secondary jobs and other sustained economic activity. IBEW supports the HQUS project's commitment to job training through the \$40 million Green Economy Fund that will work with existing training programs to create additional job training opportunities and access to clean energy jobs for New Yorkers. IBEW urges the Commission to approve the HQUS contract.

IBEW Local Union No. 3

IBEW Local Union No. 3 supports the HQUS project and urges the Commission to approve the HQUS contract because it is "the type of clean energy infrastructure New York needs as the state transitions to a cleaner, greener economy and fights climate change."

Independent Power Producers of New York (IPPNY)

IPPNY takes the position that if the Commission approves the CPNY project, it should reject the HQUS project because the portfolio of two projects has lower net societal benefits than the CPNY project alone and is therefore not sufficiently compelling to warrant such a major commitment from the state. IPPNY states that NYSERDA and Staff failed to consider that the 2040 zero emissions goal can be met in a variety of ways that may have greater net benefits than the net benefits of the combined CPNY and HQUS projects. IPPNY further states that approving both contracts will lock the State into much higher cost and lower value outcome compared to the continued development of offshore wind. IPPNY takes the position that the Commission should require NYSERDA to complete its offshore wind procurement and then hold a new solicitation that allows all potential zero emitting technologies to compete.

IPPNY notes that NYSERDA did not apply the program policy factors in the evaluation and that the Petition does not explain why. IPPNY raises concerns that the HQUS project does not include an upstate converter station and that the contract does not include winter UDRs. IPPNY also raises concerns that the additionality provisions in the HQUS contract do not comply with the CES Modification Order because there is no Supplier Energy Baseline and the Supplier GHG Baseline averages production over the entire contract term and allows force majeure due to water flow shortages. IPPNY states that HQUS should not be able to satisfy the Supplier GHG Baseline with Tier 1 RECs or demand side management in Québec.

League of Women Voters of the Mid-Hudson Region

The League of Women Voters of the Mid-Hudson Region is opposed to the HQUS project because it is the "opposite of

actions required in order to save us from the worst effects of a warming climate" and "is in no way critical for the energy requirements of NYC." The League of Women Voters of the Mid-Hudson Region takes the position that wind, solar and other technologies can provide New York's future power needs.

Liberty Renewables Inc. (Liberty)

Liberty is an Albany-based renewable energy developer whose goal is to develop, construct, own and operate land-based wind energy projects in New York State. Liberty supports the CPNY project and takes the position that the Commission should reject the HQUS contract because by not including a converter station in New York it creates a preference for foreign resources at the expense of New York resources, which are precluded from delivering energy and capacity on the transmission line. Candela states that instead of awarding the HQUS project now, a second solicitation should be held in the future "that encourages the development of in-state resources, such as the land-based wind projects being developed by Liberty," which will "result in incremental development in New York and will allow the State to meet its ambitious climate goals without relying on foreign resources."

Long Island Association

The Long Island Association supports the HQUS project because the project will contribute to the State's economic development as well as its clean energy goals and should benefit the entire state. The Long Island Association also references the project's economic benefits, replacement of fossil fuels, reduction in greenhouse gases, alleviation of pressures on the power grid and that the transmission cable is fully buried.

The Long Island Association also supports the CPNY project, referencing its economic benefits.

Long Island Power Authority (LIPA)

LIPA supports the procurement of the Tier 4 resources described in the Petition and raises implementation issues related to the NYC Notice. LIPA takes the position that NYC's assumption of an exemption from purchasing ZECs is unjustified, that participation in the Tier 4 program "should have no bearing on the obligation to purchase ZECs from NYSERDA" and that RECs do not serve the same need as ZECs or reduce the State's total ZEC cost obligation. LIPA also states that NYC misinterprets LIPA's earlier proposal to credit its Tier 1 REC obligation to the extent LIPA interconnects a greater share of net metered solar resources.

Massachusetts Institute of Technology Center for Energy and Environmental Policy Research

The Massachusetts Institute of Technology Center for Energy and Environmental Policy Research brings to the Commission's attention the results of its team's research on the potentially valuable contribution transmission connections between New York State and Québec can make towards achieving the goal of a zero-emission grid and submits copies of peer-reviewed papers. The results of the research are stated to be consistent with the BCA presented in the Tier 4 Petition and show that new transmission to Québec would help New York reach its goal of a deeply decarbonized electricity system.

Mohawk Council of Kahnawà:ke (MCK)

MCK supports the HQUS project and has entered into a strategic partnership with Hydro-Québec for joint ownership of

the Canadian portion of the HQUS project's transmission line, which will pass through MCK's historic territory. MCK states that the claims raised regarding hydropower installations that were permitted and constructed on the traditional territories of Indigenous groups must be addressed, but takes the position that those installations were not built as part of the HQUS project. MCK acknowledges that the relationship with Hydro-Québec has not always been an easy one but that in the past two decades, Hydro-Québec has made a concerted effort to negotiate fair and reasonable accommodation measure for the ongoing use of MCK lands.

Monroe Community College (MCC)

MCC supports bringing additional energy resources to New York State and opportunities to expand and enhance their relationship with Canada. MCC expresses concern with the proposed cost allocation that would lead to a five to eight percent bill increase for Rochester Gas & Electric customers, including MCC, with larger increases for neighbors across the region, even though they understand that the vast majority of energy will be transmitted to and used by downstate customers. MCC characterizes this cost structure as "neither fair nor equitable" and takes the position that the upstate rate increases will be profound and could result in further out-migration. MCC estimates that the negative financial consequence to MCC could annually approach \$200,000, which will adversely affect the limited resources that it uses to educate and train students. MCC requests that the Commission "alter the proposed plan to ensure the financial burden is appropriately shared with the New York City metro area customers who will benefit most from the project, or ensure that New York State itself steps into subsidize the cost."

Multiple Intervenors (MI)

MI states that "the Commission should evaluate carefully the prohibitive potential cost impacts of the proposed contracts on electricity customers and take steps to mitigate such impacts," noting that large non-residential upstate customers could see cost increases of up to 20% or more due to the Tier 4 contracts. MI also states that the Tier 4 cost impacts should be considered in conjunction with other programs and initiatives that customers are already being required to fund, including Tier 1, Tier 2, Tier 3, offshore wind, a \$6 billion Clean Energy Fund, distributed solar incentives, electric and gas energy efficiency programs, heat pump programs, electric vehicle infrastructure investments, an Electric Generation Facility Cessation Mitigation Program, electric storage facility incentives, large-scale transmission projects, local transmission and distribution upgrades, Earnings Adjustment Mechanisms and Distributed Energy Resources incentives.

MI takes the position that the Commission should revisit the statewide cost allocation for Tier 4 and instead allocate the costs consistent with 75/25 beneficiaries pay principles because the stated purpose of the two projects is to increase the deliverability of renewable energy to Zone J. MI also takes the position that recovering Tier 4 costs on an energy-only basis is inequitable and that transmission expenses are routinely allocated on a demand basis in New York.

National Hydropower Association (NHA)

NHA supports the HQU's project because hydropower, especially reservoir hydro, can act as an emission-free balancing resource for other renewables, including wind and

solar. NHA believes that additional flexible hydropower could aid the State in meeting CLCPA goals.

Natural Resources Defense Council (NRDC) & Regional Plan Association (RPA)

NRDC and RPA jointly express strong support "for the goal of incentivizing more renewable energy that is deliverable into the New York City area through the Tier 4 Program." Citing the fact that "New York City hosts many of the State's oldest and most highly polluting fossil power 'peaker' plants," NRDC and RPA additionally state their support for the goal of ensuring "that New York City residents are finally able to more fully access the climate and local health benefits of renewable energy under the Clean Energy Standard." NRDC and RPA note that they "will closely monitor the implementation of the Tier 4 Program to assure that it advances the public interest, particularly with respect to avoiding impacts to Indigenous Peoples and frontline communities."

New York Association of Public Power (NYAPP)

NYAPP takes the position that the costs of the Tier 4 RECs should be paid for by their beneficiaries in Zone J, rather than on a load ratio share basis among Load Serving Entities. NYAPP supports use of the 75/25 approach in this case, under which 75% of the costs are allocated to the NYISO Zone(s) where the beneficiaries reside and 25% are allocated on a load ratio share basis. NYAPP states that this application of established cost allocation principles for transmission projects is appropriate in this case because new transmission is being used to deliver renewable generation to Zone J. NYAPP also objects to the load ratio share cost allocation because of the disparate cost impacts on upstate customers compared to Zone J customers,

with upstate bill twice as high (or more) than the average statewide bill impacts.

NYAPP conditionally supports the NYC government's offer to purchase more than its load ratio share of Tier 4 RECs in return for a reduction in other Tier obligations, subject to additional and sufficient details being provided in the coming months. NYAPP states that the City's plan "appears premised on the proposition that no entity should be required to purchase more than its load ratio share of RECs," which is a concept that NYAPP supports. NYAPP also states that its members are paying more than their load ratio share of the currently produced renewable generation in the State, and therefore are already more than meeting their CES obligations.

New York Building Congress

The New York Building Congress supports the HQUS project because it represents an outstanding opportunity to advance the organization's goals focused on economic and infrastructure investment, job creation and professional exchange. The Building Congress references the project's economic benefits, 2022 construction start, commitment to union labor and job training support.

New York City Council Members

Council Member James Gennaro (District 24), Chair of the New York City Council's Committee on Environmental Protection, supports the CPNY project because it "will support new renewable energy production, immediately reduce our reliance on fossil fuels, and present bold new investment in the green economy." He notes the project's 7+ TWh of clean energy directly into New York City ad portfolio of 3,000+ MW of new onshore wind and solar resources with 10+ TWh of clean energy

generation capability. He also references the project's environmental and economic benefits in characterizing the project as "a necessary step towards meeting our state's energy goals."

Council Member Gennaro is joined by Council Members Julie Menin (District 5), Francisco Moya (District 21), Jennifer Gutiérrez (District 24) and Kamillah Hanks (District 49), who are also members of the Committee on Environmental Protection, in supporting the HQUS project. Council Member Gennaro notes the project's benefits to his home borough of Queens, "which has been polluted by power and peaker plants for years, and now can begin to enter a new era of reducing local emissions." He also references the project's economic benefits.

New York City Environmental Justice Alliance (NYC-EJA)

NYC-EJA urges the Commission to deny the HQUS contract and direct NYSERDA to negotiate a contract for a second in-State transmission line that would better address environmental justice concerns in NYC. NYC-EJA takes the position that Canadian hydropower is a false solution to NYC's climate justice goals and that the HQUS project makes New York dependent on foreign imports for the next 25 years. NYC-EJA objects to the HQUS project because the BCA shows that the portfolio reduces net benefits relative to the CPNY project alone and believes that a new solicitation would produce better projects than the HQUS project. NYC-EJA also states that the HQUS project will not create as many jobs as other projects because it relies on Canadian hydropower and does not include a converter station that would allow New York resources to access the transmission line. NYC-EJA states that the absence of a Supplier Energy Baseline means that there will be no obligation for the HQUS project to provide reliable energy in the winter and that as a

result, New York's fossil fleet would still be needed to keep the lights on in the winter. NYC-EJA is concerned that the Supplier GHG Baseline provides inadequate assurance that the HQUS project will provide the emission reduction benefits that it promises, and that the delivered energy will be replaced with more carbon-intensive energy elsewhere on the Canadian or New York grid. NYC-EJA states that the CPNY project provides more than a sufficient amount of Tier 4 RECs to satisfy building owner needs under Local Law 97.

NYC-EJA states that the Commission can deliver better justice to NYC communities by ordering NYSERDA to run another solicitation that properly values in-State and in-City climate solutions and gets better value for the State.

New York Energy Consumers Council, Inc. (NYECC)

NYECC requests that the Commission approve both the CPNY and HQUS contracts. NYECC states that commenters opposed to the HQUS project "in seeking perfection are the enemy of the good and the public interest" and "appear to be revisiting again in the current context environmental issues and matters that the Commission has already resolved in favor of [the HQUS project]." NYECC notes that the pricing of RECs will need to be set at a level that affords NYC building owners an incentive to comply with Local Law 97 through the purchase of RECs.

New York League of Conservation Voters (NYLCV)

NYLCV supports the CPNY and HQUS projects because the projects will help achieve the State's clean energy goals, bring renewable energy to NYC, reduce greenhouse gas emissions, create green jobs and invest in disadvantaged communities.

NYLCV submitted reply comments jointly with Citizens Campaign for the Environment reiterating support for both

projects, characterizing requests to delay or divert the HQUS project as "misguided," and stating that the HQUS project "will bring critically needed clean, renewable hydropower to downstate New York's energy mix which will allow us to reach our ambitious renewable energy mandates in the [CLCPA]."

New York Municipal Power Agency (NYMPA)

NYMPA takes the position that the Tier 4 Petition is not in the public interest, because the projects will result in unacceptably high bill impacts to all upstate Load Serving Entities, and NYMPA members in particular. Based on the information provided in the Petition, NYMPA estimates that its members are "all but certain to see double-digit bill impacts caused by these projects alone." NYMPA states that if the Commission approves the Petition, it should adjust the cost allocation to "avoid outsized bill impacts on NYMPA members, especially since NYMPA members are already entirely carbon free."

With respect to NYC's Notice, NYMPA takes the position that the Commission should reject NYC's "attempt to avoid compliance with the CES mandates" and that NYC should be required to procure its load ratio share of all CES Tiers because "[t]he Commission has repeatedly considered and rejected allowing LSEs to pick and choose how they would comply with CES requirements." NYMPA also argues that the NYC purchase is not voluntary because it is "grounded in longstanding executive policy and legislation." NYMPA states that in 2021, 88% of NYMPA member energy requirements were supplied by hydroelectric generation, with the balance served by a combination of nuclear and other renewable generation. According to NYMPA, any incremental requirements simply force overcompliance and unfairly increase costs to municipal customers, and "[i]f NYPA's

compliance obligations in Tiers 1-3 are lowered to eliminate the City's load, NYMPA's, and all other jurisdictional LSEs' obligations will increase commensurately."

New York Power Authority (NYPA)

NYPA is collaborating with the CPNY project team and supports the CPNY project because it will provide economic, environmental justice and public health benefits to all New Yorkers. NYPA specifically references job creation and the \$270 million community benefits fund, along with the project's alleviation of congestion on New York's energy grid. NYPA asserts that its participation in the CPNY project will benefit ratepayers due to NYPA's extensive experience in developing and maintaining bulk transmission in the State, because several components of the project will be developed on existing NYPA rights-of-way and because NYPA will take ownership of the northern portion of the transmission line upon the completion of construction and the southern portion of the line at the end of the contract term.

NYPA supports the NYC Notice and commends NYC's efforts to lead by example and serve the entire load associated with governmental operations with renewable Tier 4 and offshore wind electricity.

In its reply comments, NYPA commits to helping the State achieve its clean energy goals while simultaneously carrying out its statutory mandates to provide its customers with low-cost energy and to continuing to provide low-cost power programs statewide.

New York State Conference of Operating Engineers

The New York State Conference of Operating Engineers supports the HQUS project and urges the Commission to approve

the HQUS contract, referencing the project's economic benefits, commitment to using union labor to build the project and support for training programs.

The New York State Conference of Operating Engineers, jointly with the Eastern New York Laborers' District Council, submitted reply comments in response to comments seeking the rejection of the HQUS project by characterizing that the opposition is "based on weak and abstract claims that obscure the reality that New York needs renewable power now, the men and women of organized labor need jobs, and the [HQUS project] is able to deliver both this year" and also that the opposition is asking the Commission "to revisit, in the case of environmental issues, a decision made years ago, and in the case of Tier 4, a decision that was made months ago." The reply comments state that Sierra Club "ignores the facts that there are no other in-state options that are ready to begin construction this summer." The reply comments also note that "Riverkeeper, in fact, signed off on the issuance of the project's environmental permits and nothing about the project has changed since they did." The Eastern New York Laborers' District Council and New York State Conference of Operating Engineers also note that they are aligned with other environmental groups in supporting the two Tier 4 projects.

New York Department of State's Utility Intervention Unit (UIU)

UIU requests that the Commission monitor the cumulative costs associated with CLCPA compliance and "include on its website the incremental costs of each decision associated with the CLCPA as allocated to each [LSE] and cumulative costs, so that the Commission and stakeholders can monitor and prepare for related impacts on energy affordability."

New York State Economic Development Council (NYSEDC)

NYSEDC supports both the HQUS and CPNY projects because they will re-energize New York's economy, invest in local communities, create thousands of construction jobs and support the creation of jobs across New York. NYSEDC also refers to the projects' contribution to de-bottleneck the State's electric transmission system, reduce greenhouse gas emissions and offer sustained economic development. NYSEDC notes that the U.S. portion of the HQUS project is fully permitted and is expected to be in service by 2025.

New York State Electric and Gas Corporation (NYSEG) & Rochester Gas and Electric Corporation (RG&E)

NYSEG and RG&E identify possible unintended consequences related to cost allocation of the Tier 4 projects., noting that "the percentage impact on utility bills for those customers not directly served by the two projects . . . are materially larger than the percentage impact for those customers more directly served by the two projects." NYSEG and RG&E ask that the Commission consider revisiting the prior guidance related to cost allocation in light of these observations.

New York State Energy Resource and Development Authority (NYSERDA)

NYSERDA submits updated BCA results reflecting actual planned commercial operation dates (CODs) for the two projects. The updated results show somewhat reduced resource investment amounts relative to the common 2025 COD results presented in the Petition due to the impact of the later timing of the costs on the net present value metric. NYSERDA shows reduced carbon and health benefit values because these are only counted through 2040 and delaying the CODs results in fewer years of benefits.

The updated results for system resource value remain broadly the same. These effects are more pronounced for the CPNY project due to its later COD. NYSERDA states that the key conclusion from the BCA analysis presented in the Petition, that each project individually as well as the portfolio provides material net societal benefits, remains unchanged.

North Country Chamber of Commerce

In its initial comments, the North Country Chamber of Commerce expresses its support for the HQUS project, noting that it will bring enough Canadian hydropower to New York via the fully buried transmission cable to power more than one million homes. The North Country Chamber of Commerce also characterizes the project's economic benefits as enormous, including 1,400 family-supporting construction jobs, 3,200 secondary jobs, and \$1.4 billion in added tax revenues to 73 municipalities and 59 school districts over the 25 year contract term, without placing an additional burden on local government services.

In its reply comments, the North Country Chamber of Commerce reiterates its support for the HQUS project and urges the Commission to approve the HQUS contract, asserting that without the project the state will not meet its 70x30 clean energy target. In response to comments expressing concern regarding the upstate vs downstate cost allocation, the North Country Chamber of Commerce states that the cost of the Tier 4 program will be shouldered significantly or entirely by NYC through City government purchasing and Local Law 97 compliance. The North Country Chamber of Commerce cites the LEVEL Agency for Infrastructure study's estimate that Local Law 97 penalties will range from \$35/MWh to \$77/MWh, higher than NYSERDA's estimated Tier 4 REC price.

North Country Regional Economic Development Council

The North Country Regional Economic Development Council supports the HQUS project because it advances cross border economic linkages, creates jobs, maximizes Canadian connections and creates the greenest energy economy in New York State.

Northland Power U.S. Projects Inc. (Northland Power)

Northland Power supports the CPNY project. Northland Power and CPNY have executed an indicative term sheet and are working toward definitive contracts regarding the participation of Northland Power's Ball Hill, Bluestone and High Bridge wind projects in the CPNY resource portfolio.

Nuclear New York

Nuclear New York "strongly believes in long-term investments in zero-emission infrastructure and approaches NYSERDA's proposed contracts . . . accordingly." Nuclear New York characterizes the comments as being based on "long-held general positions or self-interest rather than an inspection of the contracts themselves." Nuclear New York states that the CPNY project would be much less valuable without the Blenheim-Gilboa pumped storage facility. Nuclear New York expresses confusion around the relative emissions reductions and air quality benefits of the two projects. Nuclear New York asserts that the carbon benefits for the CPNY project should be lower than those for the HQUS project because several of the CPNY resources are already tallied as Tier 1 resources. Nuclear New York states that NYSERDA and the Commission should examine how extreme weather will impact New York's expected energy imports on the HQUS project when both New York and Québec are experiencing high demand. Nuclear New York states that the HQUS

contract does not guarantee New York access to hydropower at times when it is needed to balance intermittent generation and to protect against power shortages. Nuclear New York acknowledges that NYSERDA will pay nothing for RECs delivered during the first 200 hours in a year when the marginal price of electricity in NYC is zero or negative, but estimates that with the expansion of offshore wind there could be thousands of hours every year with negative prices. Nuclear New York objects to the HQUS project not including winter UDRs. Nuclear New York states that the carbon benefit in the BCA should be calculated using the same 3.68% discount rate used elsewhere in the analysis rather than the 2% and 3% values used. Nuclear New York calls for the contracts to be renegotiated to assure that electricity will be provided when it matters most and to state pricing on a Fixed REC rather than Index REC basis and for NYSERDA to improve the quality of information shared with the public.

Nucor Steel Auburn, Inc. (Nucor)

Nucor asserts that the Tier 4 contracts appear to represent transmission selection divorced from a coherent planning process, placing New York' energy policies on an inefficient track that is not in the public interest. Nucor states that the absence of any Tier 4 proposals located in Zone J should be grounds for concern by itself and that the Commission should eschew any further Tier 4 solicitations until a comprehensive planning process is established. Nucor also asserts that the Tier 4 REC costs are excessive at roughly double the cost of comparable indexed Tier 1 RECs and that the Petition does not examine the overall reasonableness of the proposed strike prices. Nucor states that allocating Tier 4 REC costs statewide is not commensurate with the expected project

benefits which will accrue to NYC, particularly given the scale of potential impacts to upstate ratepayers. Nucor also states that the ratepayer impact assessment is understated because it is based on the Bid Quantities rather than the Annual Tier 4 cap amounts. Nucor asserts that NYSERDA should be required to fully disclose the input assumptions and modeling results associated with its cost and benefit conclusions.

NY Renews

NY Renews supports the CPNY project because it will invest directly in communities, provide good-paying jobs and reduce reliance on fossil fuels. NY Renews also highlights that the project will deliver significant emissions reductions and economic benefits and will have clear public health benefits. NY Renews supports the comments of South Bronx Unit calling for a coordinated plan to retire the NYC peakers, which would substantially advance environmental justice.

Old Astoria Neighborhood Association (OANA)

OANA supports the HQUS project because it is the only shovel-ready project that can deliver large amounts of affordable, reliable clean power in 2025 to start displacing expensive fossil peaker plants in frontline communities experiencing negative health impacts due to pollution. OANA states that the HQUS project is permitted and will be fully buried and will provide additional local benefits including a \$117 million environmental trust fund, a \$40 million jobs training fund, 1,400 unionized construction jobs and 3,200 secondary jobs. OANA highlights the partnership between the HQUS project and the Variety Boys & Girls Club of Queens that will expand the Club's educational programming.

Orange County Partnership

The Orange County Partnership supports the HQUS project because it will help meet CLCPA mandates and provide \$50 billion in benefits to the State over the life of the project, including over \$17 billion in expected electricity cost savings. The Orange County Partnership states that the project will also provide economic development opportunities, improve air quality and reduce carbon emissions. The Orange County Partnership urges the Commission to approve both projects "and give New York State a fighting chance to meet its emissions requirements in a responsible and reliable way."

Partnership for New York City

The Partnership for New York City supports the HQUS contract, citing its \$19 billion in benefits to New Yorkers, permitted transmission that will be fully buried, jobs and wages, number of homes power, emissions equivalent in cars taken off the road, and \$40 million Green Economy Fund that will provide resources to existing job training programs to create additional opportunities for New Yorkers. The Partnership for New York City also supports the CPNY project, citing its economic and environmental benefits, including a \$270 million community benefits fund that will help support opportunities in the green economy for the next generation.

The Partnership responds to comments in opposition to the HQUS project by citing a PA Consulting study that every year the project is delayed costs New York approximately \$1.5 billion in benefits. The Partnership states that both the HQUS and CPNY projects offer valuable, long term fixed price stability to New York ratepayers. The Partnership also notes that "the cost of the Tier 4 REC program will be shouldered significantly or entirely by New York City" through government purchasing and

Local Law 97's significant economic incentive for building owners to purchase RECs, which in total could represent up to 16.5 million of the approximately 18 million RECs produced by the HQUS and CPNY projects. The Partnership cites a study by LEVEL Agency for Infrastructure that Local Law 97 penalties are estimated to range from \$35/MWh to \$77/MWh, which is above NYSERDA's estimated price for Tier 4 RECs. The Partnership states that they anticipate that "many of our members will be eager to purchase Tier 4 RECs to meet decarbonization and emissions goals."

The Partnership strongly encourages the Commission to approve both projects, stating that they are "critical to the energy future of the city and the seamless transition from fossil fuel to renewables."

President's Coop & Condo Council

The President's Coop & Condo Council supports the HQUS project because it is the only permitted and shovel-ready firming solution to accomplish the Tier 4 objective years before any intermittent alternative and will also reduce whole electricity price volatility and supply RECs in response to market need under Local Law 97.

Queens Chamber of Commerce

The Queens Chamber of Commerce supports the HQUS project because it is permitted and will be fully buried and will have economic and environmental benefits. The Chamber states that the project will create over \$19 billion in benefits, including \$1.4 billion in new tax revenue, and thousands of jobs and is committed to using union labor. The Chamber states that the projects will help to reduce air pollution and improve the quality of life in Queens,

specifically in neighborhoods and communities that host fossil fuel plants, including "asthma alley." The Queens Chamber of Commerce also refers to the HQUS project's partnership with the Variety Boys & Girls Club of Queens to expand educational programming.

In its reply comments, the Queens Chamber of Commerce highlights the competitive and rigorous process executed by NYSERDA. In response to concerns about cost allocation, the Chamber states that 90% of the costs of the Tier 4 program are expected to be paid by NYC and NYC building owners. The Chamber also states that the Index REC structure is designed to insulate ratepayers from long-term price increases and short-term price spikes. The Chamber asserts that forgoing the HQUS project would have costly negative impacts on Queens.

Queens Together

Queens Together applauds the HQUS project for helping to make the community a healthier place to live and prosper.

Randall's Island Park Alliance (RIPA)

RIPA acknowledges the responsiveness of TDI during an extensive evaluation process toward installation of the HQUS project's transmission line along the northern end of Randall's Island Park. RIPA states that TDI has participated in meetings and stakeholder outreach and complied with requests from RIPA and the NYC Department of Parks and Recreation to adjust the planned route to minimize impact. As a result, "the planned route runs entirely within roadway and paved pathway. RIPA believes the impact of the cable upon parkland as agreed will be minimal." RIPA attests to TDI's good corporate citizenship and supports the HQUS project's installation at Randall's Island Park "from the perspective of responsible park stewardship."

Real Estate Board of New York (REBNY)

REBNY supports both the CPNY and HQUS projects because they will help the State to meet CLCPA targets and boost the State's growing green economy. REBNY states that the projects will provide a pathway for real estate owners in NYC to participate directly in supporting clean energy by purchasing Tier 4 RECs to meet their ambitious emission reduction obligations. REBNY expects that demand from its membership will be robust as they procure RECs to comply with Local Law 97.

In its reply comments, REBNY states that the approval of both projects will allow for the more rapid decarbonization of electricity in NYC. REBNY commissioned a study by the Level Agency for Infrastructure that estimated the probably range of demand from building owners for Tier 4 RECs to comply with Local Law 97. REBNY reports that the study found that, when combined with combined with the NYC government purchase, demand for RECs could range between 16.0 TWh/yr and 18.3 TWh/yr. REBNY also believes that there will be ample building owner demand for Tier 4 RECs outside of Local Law 97 compliance as owners work to meet their own corporate sustainability goals and the demands of tenants.

REBNY also submitted a letter from thirteen large property owners in NYC encouraging the Commission to approve both contracts. The signatories are: Boston Properties, Brookfield Properties, Empire State Realty Trust, Fisher Brothers, Jack Resnick & Sons Inc., L&L Holding Company, Rudin Management Co Inc, RXR Realty, Silverstein Properties, SL Green Realty Corp., The Durst Organization, Tishman Speyer Properties and Vornado Realty Trust. The letter states: "[a]s real estate companies with our own corporate decarbonization commitments and as owners of buildings subject to New York City's Local Law 97 building emissions limits, we are eager to explore participating

in this voluntary market to determine how purchasing these RECs can enhance our corporate goals and local law compliance strategies.”

Rise Light & Power (RLP)

RLP urges the Commission to approve the CPNY contract and decline to approve the HQUS contract, without prejudice. RLP states that adding the HQUS project decreases the net benefits compared to the CPNY project alone and that the approval of two projects at this time is not adequately supported. RLP states that the HQUS contract is inconsistent with State policy because it does not include winter UDRs and places New York ratepayers second-in-line behind Québec, with the result that the project will not displace existing fossil fuel-fired generating resources in the NYC. RLP states that the HQUS project’s incremental ratepayer cost is inconsistent with the CLCPA because it relies on out-of-state generation and sends the vast majority of revenues to a foreign government. RLP states that the energy delivered by the HQUS project may not be incremental and could be backfilled by fossil-fired resources because the contract does not include the Supplier Energy Baseline. RLP states that the HQUS project does not support renewable energy development in New York because it does not include an upstate converter station.

RLP petitions the Commission to order a subsequent competitive solicitation under a “New York Clean Capacity Program” that would fulfill Governor Hochul’s recent directive to retire fossil-fired electricity generation facilities. RLP assumes from the schedule outlined in the Petition that a project contracted in 2023 can reasonably expect to begin operations in 2029. RLP states that Staff has projected that the levelized cost of energy for utility-scale solar and land-

based wind resources will decline considerably in the near future, providing ample reason to believe that a subsequent solicitation would result in more in-State benefits and lower ratepayer costs. RLP expects that cost-efficient, in-State renewable generation remains plentiful for future procurements. RLP requests that the Commission direct NYSERDA and Staff to submit a blueprint for the New York Clean Capacity Program within 180 days that prioritizes replacing and redeveloping specific, existing NYC-based fossil fueled generation with zero-emission solutions, initiate a proceeding on such blueprint within 60 days and issue an order regarding implementation of the blueprint by July 30, 2023.

Riverkeeper

Riverkeeper believes that there are two fatal flaws with the HQUS project, first, that Canadian hydropower is not a low carbon source of energy and will not directly reduce greenhouse gas emissions and second, that the Hudson should not be used as a conduit for power cables when there are viable land routes that would have less environmental impact. Riverkeeper states that the exclusion for dams under construction allows emissions to increase, and that Hydro-Québec could serve its existing customers in Canada with new dams while directing power from existing dams to New York State. Riverkeeper states that it asked Hydro-Québec for a commitment not to build new dams but the company refused. Riverkeeper cites Indigenous community opposition to new transmission lines enabling exports of hydropower from stations that flooded their territorial lands and also states that methylmercury in impoundments bioaccumulates in food webs.

Riverkeeper states that the implementation of the Supplier GHG Baseline in the HQUS contract is highly permissive

because Hydro-Québec can take credit for demand side efficiency improvements in Canada and Hydro-Québec can accrue a deficit by failing to generate additional energy for a long time before the requirement is applied. Riverkeeper cites a study by NorthBridge Energy Partners that concluded that in the absence of the New England Clean Energy Connect and HQUS projects, neither the construction of any additional hydropower facilities nor completion of the Romaine 4 dam would be necessary. Without the Supplier Energy Baseline, Riverkeeper states that it is highly likely that the power HQUS will move to NYC through the new transmission line is actually being sold on the spot market, primarily in upstate New York.

Riverkeeper states that the planned installation methods for the transmission cable in the Hudson River will stir up contaminants and could affect drinking water intakes, could result in anchor snags of the cable and would affect fish behavior through magnetic fields. Riverkeeper acknowledges that it had previously negotiated a settlement with the developers of the HQUS project, and states that they have had the courage to take a second hard look at the project.

In its reply comments, Riverkeeper states that NYSERDA should have adjusted its price comparison to look at the cost of GHG emissions avoided rather than the cost of RECs and that if NYSERDA had used the program policy factors, it is likely that the HQUS project would have scored lower than its preliminary ranking. In addition to reiterating its initial comments, Riverkeeper also states that the HQUS project has no supply obligations in the winter. Riverkeeper requests that the Commission reject the HQUS contract and remand the issue back to NYSERDA for a reevaluation of the bids when the flaws identified by multiple commenters are eliminated.

Rochester Institute of Technology (RIT)

RIT supports bringing additional energy resources to New York State and opportunities to expand and enhance their relationship with Canada. RIT notes further that 100% of the campus's purchased electricity comes from green/renewable sources. RIT expresses concern with what they characterize as "the inequality of cost distribution" because the program cost as described in the Tier 4 Petition would lead to a five to eight percent increase in utility bills, with larger increases for larger customers like RIT. They state that one of the attractions of upstate New York to the business community, especially for high-tech manufacturing, is low cost electricity, including virtually limitless hydroelectric power. RIT urges that the Commission "alter the proposed plan to ensure the financial burden is appropriately shared with the New York City metro area customers who will benefit most from the project, or ensure that New York State itself steps into subsidize the cost."

Save Ontario Shores, Inc.

Save Ontario Shores objects to the funding arrangement that will "raise rates for all ratepayers in New York State and will raise rates for people and industries in Western New York to a greater percentage than in other parts of the State." Save Ontario Shores states that upstate and Western New York, which have 90% emissions free electricity generation, bear the burden of the placement of large-scale renewable generation projects and a large portion of the extended transmission projects. Save Ontario Shores further states that while the benefits of the State's implementation of clean energy goals are easy to track, the costs and burdens are not. Save Ontario Shores questions whether the CPNY resources will be able to generate energy that

reaches NYC, and notes that the City needs baseload and readily dispatchable energy, which wind and solar projects cannot provide, to shutter poorly sited electric generating plants.

Schenectady County Legislature

Schenectady County supports the HQUS project because it will result in the community and ongoing tax revenues to communities and local school districts, in addition to boosting energy resilience in New York's power grid, delivering substantial financial benefits and good construction jobs and wages while helping New York meeting its aggressive climate goals. Schenectady County also notes that the HQUS project's transmission line is fully permitted with construction hopefully starting in 2022 and is an important project for New York's economy and environment. Schenectady County strongly encourages the Commission to approve the contract as quickly as possible.

Senator Neil D. Breslin, 44th District

Senator Breslin urges the Commission to re-visit its prior determination on cost allocation and rate recovery for Tier 4 and implement a more fair and consistent approach. He states that there is a fundamental problem with the cost allocation because customer bill impacts for upstate customers and businesses will be nearly double those for NYC, even though Tier 4 is expressly intended to benefit NYC. Senator Breslin states that "[s]ocializing the large costs of the proposed Tier 4 projects will improperly discourage development of crucial clean in-City generation."

Senator Todd Kaminsky, 9th District

Senator Kaminsky, Chair of the state Senate Environmental Conservation Committee, supports the HQUS project

because it is shovel-ready and will deliver approximately 20% of New York City's renewable generation, which leads him to "believe that its 2025 expected in-service date should be a near-term priority for New York State." Senator Kaminsky also supports the project because of its economic benefits, including 1,400 direct and 3,200 secondary jobs, the \$40 million Green Economy fund to develop job training opportunities and the \$117 million fund to improve the health of Lake Champlain and the Hudson and Harlem Rivers.

Senator Kaminsky also supports the CPNY project, stating that it will reduce the State's emissions from electric generation by 22% by 2030 and that its 2027 in-service date should also be a near-term priority for the State. He also cites the project's economic benefits, including thousands of jobs and \$1.8 billion invested in New York Communities, include a \$270 million community benefits fund to support future opportunities in the green economy.

Senator Kaminsky urges the Commission to approve both contracts so that the projects can be part of New York's clean energy future.

Senator Anna Kaplan, 7th District

Senator Kaplan urges the Commission to approve the HQUS contract, characterizing it as a "unique shovel-ready \$3.5 billion private sector investment" that will help boost the State's COVID recovery. She also references the project's direct and secondary jobs, \$19 billion in overall societal benefits and \$40 million Green Economy Fund that will provide competitive grant funding to job training programs available to underserved and disadvantaged communities.

Senator Daniel Stec, 45th District

Senator Stec supports the HQUS project, referencing its stakeholder outreach and economic benefits, including jobs and over \$270 million delivered to Washington County over the next 30 years as part of approximately \$1.4 billion in new statewide tax revenue.

Sheet Metal Workers' International Association Metropolitan Local Union No. 28

Sheet Metal Workers' International Association Metropolitan Local Union No. 28 supports the HQUS project and urges the Commission to approve the HQUS contract, referencing its jobs creation benefits and commitment to using union labor for construction and supporting worker training.

Sierra Club

Sierra Club urges the Commission to approve the CPNY contract, deny the HQUS contract and authorize NYSERDA to negotiate a contract for a second in-State transmission line to provide New York-based renewables into Zone J. Sierra Club states that there are deficiencies in the HQUS contract that render it incompatible with the public interest and inconsistent with the CES Modification Order, namely that the contract does not include winter UDRs, the Supplier Energy Baseline or a New York converter station. Sierra Club also notes that the HQUS project produces fewer economic benefits and has a higher levelized net REC cost than the CPNY project.

Sierra Club states that absent the Supplier Energy Baseline, the provisions in the HQUS contract "in no way obligate HQUS to deliver energy in quantities or at times when doing so would result in curtailment of renewable energy in New York State." Sierra Club states that the contract's Supplier

GHG Baseline does not comply with the CES Modification Order because it authorizes averaging across the entire contract term, excuses compliance in force majeure type circumstances and allows HQUS to compensate for a deficiency with Tier 1 RECs and count savings from demand side management programs and other programs to reduce electricity and energy consumption in Québec.

Sierra Club notes that NYSERDA did not apply program policy factors, and states that application of the program policy factors could have substantially influenced the relative ranking of the projects to favor selection of in-State projects.

In its reply comments, Sierra Club reiterates its initial comments and adds that ensuring the complementarity of offshore wind and Tier 4 is critical to minimizing the cost of supplying NYC with clean energy and that the Commission should therefore fully evaluate the potential interaction of the HQUS contract with ongoing offshore wind procurement efforts.

Sisters of Charity of New York Office of Peace, Justice and Integrity of Creation

The Sisters of Charity of New York Office of Peace, Justice and Integrity of Creation ask that the Commission rejects the HQUS project because of the effects of hydroelectric dams on Indigenous communities and the effects of jet plow installation of the transmission in the Hudson River on drinking water supplies and fish behavior.

Solidarity Committee of the Capital District

The Solidarity Committee of the Capital District opposes the HQUS project because the project would provide only a few hundred temporary jobs and maintaining it only a few dozen. The Solidarity Committee also opposes the HQUS project because paying for electricity from Canada would export those

funds from the State's economy. The Solidarity Committee states that Canadian hydropower is not low carbon, has caused ecological and cultural devastation and Hydro-Québec refuses to commit to not build new dams. The Solidarity Committee states that installing the cable in the Hudson River would dislodge more than 200,000 cubic yards of contaminated sediment that could in turn contaminate drinking water and, once the cable is installed, it could cause cable snags and negatively impact aquatic wildlife.

South Bronx Unite

South Bronx Unite states that NYPA has operated four natural-gas fired peaker plants in the Mott Haven and Port Morris neighborhoods since 2001 and that while these plants were initially expected to be temporary, "they have instead become permanent fixtures, burdening [the] community with additional air pollution," which has been linked to higher rates of respiratory illnesses. South Bronx Unite notes that NYPA "has as yet made no commitment whatsoever to shutter these peaker plants despite the success of its Tier 4 application," and has publicly stated that it has no plans to decommission the peakers before 2035. South Bronx Unite urges the Commission to reject the CPNY contract "until NYPA makes a clear commitment to decommission the four South Bronx peakers as soon as there is a commensurate level of renewable energy introduced to Zone J, projected to be 2026 by TDI."

Stony Point Action Committee for the Environment (SPACE)

SPACE expresses concerns that the HQUS project has segmented their application and is conducting negotiations with the New York State Department of Transportation and U.S. Coast Guard regarding the Hudson River installation without public

knowledge and consent. SPACE states that New York state residents should not be forced to subsidize the HQUS project because the Article VII Certificate says that it shall be deemed invalid in the event that the Certificate Holders seem to recover costs through cost-based rates set by a Federal or State regulatory authority.

SPACE supports Riverkeeper's reply comments that NYSERDA should have conducted the price comparison based on avoided greenhouse gas emissions and that NYSERDA should have applied the program policy factors, and also echoes concerns that the HQUS project has no Supplier Energy Baseline and a weak Supplier GHG Baseline, the project uses impoundments with some of the highest greenhouse gas emissions in the world, the completion of Romaine 4 is allowed, there is no commitment to deal with Indigenous community environmental justice issues in Canada, and there is no supply obligation in the winter. SPACE also asks whether NYSERDA has reviewed the MOUs and tax considerations and how these agreements will affect the NYSERDA contract.

Terra-Gen Development (Terra-Gen)

Terra-Gen is a New York-based solar, wind and energy storage development company developing several on-shore wind projects in New York. Terra-Gen supports the CPNY project and takes the position that the Commission should reject the HQUS contract because by not including a converter station in New York it creates a preference for foreign resources at the expense of New York resources, which are expressly precluded from delivering energy and capacity on the transmission line. Candela states that instead of awarding the HQUS project now, a second solicitation should be held in the future "that encourages the development of in-state resources," which will

“result in incremental development in New York and will allow the State to meet its ambitious climate goals without relying on foreign resources.”

The Business Council of New York State, Inc.

The Business Council of New York State supports the HQUS and CPNY projects. The Business Council references the HQUS project’s economic benefits, including jobs and infrastructure investment, and notes that the HQUS project can replace half of Indian Point’s generation with clean, renewable hydropower.

The Greater Hunts Point Economic Development Corporation & Greater Hunts Point Chamber of Commerce

The Greater Hunts Point Economic Development Corporation & Greater Hunts Point Chamber of Commerce state that the South Bronx perennially has very poor public health indicators and express concern regarding the CPNY project and urge the Commission to reject the CPNY contract “until NYPA makes a clear commitment to decommission the four gas-fired peaker plants in the South Bronx as soon as there is a commensurate level of renewable energy introduced to Zone J, projected to be 2026 by TDI.”

The Nature Conservancy NY

The Nature Conservancy NY supports both the CPNY and HQUS projects because the contracts will help the State to achieve its clean energy goals and deliver renewable energy to NYC, as well as reduce greenhouse gas emissions and air pollution and further the transition to a clean energy economy by creating thousands of good-paying jobs and investing in disadvantaged communities.

The New Bronx Chamber of Commerce Inc.

The New Bronx Chamber of Commerce supports the CPNY project and urges the Commission to advance the project, citing the project's contribution to helping the State meet its climate and public health goals, including cutting air pollution in the areas around fossil fuel generation facilities such as the Bronx, while investing in New York businesses, creating savings and building lasting, meaningful impacts in Bronx communities.

Town of Chesterfield

The Town of Chesterfield supports the HQUS project because it will bring meaningful economic benefits to the area while ridding New York's air of millions of metric tons of carbon. The Town states that it will receive close to \$2 million over 30 years and the AuSable Valley School District will receive close to \$7 million pursuant to an \$82 million PILOT agreement between the HQUS project and the Essex County Industrial Development Agency.

Town of Clarkstown

The Town of Haverstraw supports the HQUS project and encourages the Commission to approve the contract, describing its stakeholder outreach efforts and offer to improve restoration of the Town's prime business corridor, Route 9W, where the transmission line will be installed. The Town also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction goals." The Town of Clarkstown also references the HQUS's projects tax payments, implementation of a PILOT, direct job creation, family-sustaining wages and benefits, secondary jobs and expectation to start construction in 2022 for a 2025 in-service date.

Town of Essex

The Town of Essex supports the HQUS project because it will help reduce carbon emissions by at least 37 million metric tons between 2025 and 2040 and grow the economy through societal benefits, tax revenues and jobs. The Town notes that because the transmission lines will be buried, the scenic areas along the Hudson River will be preserved. The Town also notes that the project is permitted and ready to begin construction this year.

Town of Glenville

The Town of Glenville supports the HQUS project, noting its stakeholder engagement and responsiveness to Town requests, such as agreeing to fund sidewalks in the area that will host construction, linking previously isolated residential neighborhoods to the local school. The Town also notes that the HQUS project will deliver good jobs and wages throughout the region and pay substantial taxes to municipalities including Glenville for the 60+ year life of the project. The Town states that because the line is fully buried, it will not require municipal services normally associated with local taxes, while the PILOT will provide tax certainty for many years to come.

Town of Haverstraw

In its initial comments, the Town of Haverstraw supports the HQUS project and encourages the Commission to approve the contract, describing its stakeholder outreach efforts and offer to improve restoration of the Town's prime business corridor, Route 9W, where the transmission line will be installed. The Town also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction

goals.” The Town of Haverstraw also references the HQUS’s projects tax payments, implementation of a PILOT, direct job creation, family-sustaining wages and benefits, secondary jobs and expectation to start construction in 2022 for a 2025 in-service date.

In its reply comments, the Town of Haverstraw confirms its continued strong support for the HQUS project and responds to comments that ask for a delay or rejection of the project with the position that “[e]ntertaining any of these options will cripple [] New York’s efforts to achieve its carbon reduction goals and put the state’s effort to transition to [a] greener, cleaner economy far behind pace,” considering New York’s 8% increase in carbon emissions since 2016. The Town of Haverstraw further states that “[r]ejecting the only project that will be able to deliver enough clean power for one million homes in three years just doesn’t make sense. It especially doesn’t make sense when there are no alternatives anywhere near ready to produce results.”

The Town of Haverstraw states that the CPNY project is a worthy project that they would like to see go forward, but notes the risk associated with the development and permitting process and the longer period of time before the resources and transmission line will be available.

Town of Milton

The Town of Milton supports the HQUS project and encourages the Commission to approve the project. The Town supports the HQUS project because “it will deliver substantial and sustained financial benefits in increase[d] revenues to our community, and good construction jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction goals,” including \$1.4 billion in new tax revenue over

the first 25 years of the project, more than 1,400 construction jobs, more than \$400 million in family-sustaining wages and benefits, and approximately 3,200 secondary jobs during construction. The Town of Milton also references that the HQUS projects will be fully buried, is permitted and is expected to start construction in 2022 for a 2025 in-service date.

Town of Putnam

The Town of Putnam supports the HQUS project and urges the Commission to approve the contract, noting that the Town expects to receive approximately \$22 million in new revenue generated by the construction and operation of the transmission line, which will provide the Town with opportunities to make new investments in the local community. The Town also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping New York to meet its aggressive climate reduction goals."

Town of Stony Point

In its initial comments, the Town of Stony Point supports the HQUS project and encourages the Commission to approve the contract, describing its stakeholder outreach efforts and offer to improve restoration of the Town's prime business corridor, Route 9W, where the transmission line will be installed. The Town also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction goals." The Town of Stony Point also references the HQUS's projects tax payments, implementation of a PILOT, direct job creation, family-sustaining wages and benefits, secondary jobs and expectation to start construction in 2022 for a 2025 in-service date.

In its reply comments, the Town of Stony Point confirms its continued strong support for the HQUS project and responds to comments that ask for a delay or rejection of the project with the position that “[e]ntertaining any of these options will cripple [] New York’s efforts to achieve its carbon reduction goals and put the state’s effort to transition to [a] greener, cleaner economy far behind pace,” considering New York’s 8% increase in carbon emissions since 2016. The Town of Stony Point further states that “[r]ejecting the only project that will be able to deliver enough clean power for one million homes in three years just doesn’t make sense. It especially doesn’t make sense when there are no alternatives anywhere near ready to produce results.” The Town of Stony Point states that the CPNY project is a worthy project that they would like to see go forward, but notes the risk associated with the development and permitting process and the longer period of time before the resources and transmission line will be available.

Town of Westport

The Town of Westport supports the HQUS project because it provides jobs, tax relief and clean renewable energy for New Yorkers.

T'ruah, The Rabbinic Call for Human Rights

T'ruah is opposed to the HQUS project in solidarity with the Innu Nation of Canada and because of harm to the Hudson River. T'ruah takes the position that investing in New York’s own renewable resources, large energy efficiency programs and a strong transmission backbone that can alleviate congestion and shuttle renewable energy from upstate to downstate would be better solutions. T'ruah asks that NYSERDA swap out the HQUS

project for a second transmission project among the remaining candidates.

U.S. Representative Ritchie Torres, 15th District New York

Congressman Torres supports the CPNY project, citing its commitment to environmental justice, 20% annual reduction in electric sector PM_{2.5} emissions and associated environmental and health benefits, and economic investments and benefits. He states that the CPNY project "will deliver meaningful climate justice to frontline communities that have long borne the harshest burdens of climate change."

Urban Green Council

Urban Green Council supports both the CPNY and HQUS projects because they would deliver more than one-third of NYC's current annual electricity demand. Urban Green Council also states that the projects will improve regional public health, invest over \$8 billion in in-State economic development, create approximately 10,000 family-sustaining jobs, invest \$460 million in community benefit funds, direct significant investment toward disadvantaged communities and deliver \$3 billion to \$7 billion in net economic benefits.

In its reply comment, Urban Green Council reiterates its support for the two projects and additionally notes that approval of two projects will mitigate development risks, diversify the downstate energy supply and provide supply to meet significant demand opportunities for the voluntary purchase of Tier 4 RECs.

Urban Upbound

Urban Upbound supports both the HQUS and CPNY projects because the projects will reduce the greenhouse gas emissions

and air pollutants produced by burning fuels, resulting in cleaner air and healthier communities. Urban Upbound states that the projects will also have positive economic impacts on disadvantaged communities and stabilize electricity prices.

In its reply comments, Urban Upbound implores the Commission to approve the HQUS project because it is the only permitted shovel-ready project that will bring clean power around-the-clock and year-round to begin displacing fossil generation in NYC.

Utility Workers Union of America, Local 1-2

Utility Workers Union of America, Local 1-2 supports the just transition to renewable energy but is opposed to the HQUS project because “[i]ncentivizing the procurement of foreign energy will undercut the ability and incentive for new, clean generation in the State, ultimately costing jobs, economic activity, and new resources.” The Union asks whether Hydro-Québec will need to supplement with fossil generation or more impoundments if demand exceeds supply in the future. The Union encourages the Commission “to make the decision most aligned with the holistic values and goals of the people of New York.”

Variety Boys & Girls Club of Queens

The Variety Boys & Girls Club of Queens supports both the HQUS and CPNY projects. The Boys & Girls Club states that the projects will reduce reliance on fossil fuels in disadvantaged communities in NYC that have experienced increased incidences of asthma and other health problems that are the direct result of pollution. The Boys & Girls Club also cites the economic benefits associated with the projects. The HQUS project has partnered with the Boys & Girls Club on a new STEM

lab that will go from serving 4,000 young people to 16,000 young people, many of whom live in low to medium income housing.

Village of Haverstraw

In its initial comments, the Village of Haverstraw supports the HQUS project and encourages the Commission to approve the contract, describing its stakeholder outreach efforts and offer to improve restoration of the Village's prime business corridor, Route 9W, where the transmission line will be installed. The Village also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction goals." The Village of Haverstraw also references the HQUS's projects tax payments, implementation of a PILOT, direct job creation, family-sustaining wages and benefits, secondary jobs and expectation to start construction in 2022 for a 2025 in-service date.

In its reply comments, the Village of Haverstraw confirms its continued strong support for the HQUS project and responds to comments that ask for a delay or rejection of the project with the position that "[e]ntertaining any of these options will cripple [] New York's efforts to achieve its carbon reduction goals and put the state's effort to transition to [a] greener, cleaner economy far behind pace," considering New York's 8% increase in carbon emissions since 2016. The Village of Haverstraw further states that "[r]ejecting the only project that will be able to deliver enough clean power for one million homes in three years just doesn't make sense. It especially doesn't make sense when there are no alternatives anywhere near ready to produce results." The Village of Haverstraw states that the CPNY project is a worthy project that they would like to see go forward, but notes the risk associated with the

development and permitting process and the longer period of time before the resources and transmission line will be available.

Village of West Haverstraw

In its initial comments, the Village of West Haverstraw supports the HQUS project and encourages the Commission to approve the contract, describing its stakeholder outreach efforts and offer to improve restoration of the Village's prime business corridor, Route 9W, where the transmission line will be installed. The Village also supports the HQUS project because "it will deliver good jobs and wages throughout the region while helping [] New York to meet its aggressive climate reduction goals." The Village of West Haverstraw also references the HQUS's projects tax payments, implementation of a PILOT, direct job creation, family-sustaining wages and benefits, secondary jobs and expectation to start construction in 2022 for a 2025 in-service date.

In its reply comments, the Village of West Haverstraw confirms its continued strong support for the HQUS project and responds to comments that ask for a delay or rejection of the project with the position that "[e]ntertaining any of these options will cripple [] New York's efforts to achieve its carbon reduction goals and put the state's effort to transition to [a] greener, cleaner economy far behind pace," considering New York's 8% increase in carbon emissions since 2016. The Village of West Haverstraw further states that "[r]ejecting the only project that will be able to deliver enough clean power for one million homes in three years just doesn't make sense. It especially doesn't make sense when there are no alternatives anywhere near ready to produce results." The Village of West Haverstraw states that the CPNY project is a worthy project that they would like to see go forward, but notes the risk associated

with the development and permitting process and the longer period of time before the resources and transmission line will be available.