



**NY Power
Authority**

**Canal
Corporation**

**MINUTES OF THE REGULAR JOINT MEETING
OF THE
POWER AUTHORITY OF THE STATE OF NEW YORK AND
NEW YORK STATE CANAL CORPORATION**

July 30, 2019

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Minutes of the Regular Meeting of the Power Authority of the State of New York held at the Clarence D. Rappleyea Building, 123 Main Street, White Plains, New York at approximately 9:16 a.m.

Members of the Board present were:

John R. Koelmel, Chairman
Eugene L. Nicandri, Vice Chairman
Dr. Anne M. Kress
Anthony J. Picente, Jr.
Michael A.L. Balboni

Tracy McKibben – Excused
Dennis G. Trainor – Excused

Gil Quiniones	President and Chief Executive Officer
Justin Driscoll	Executive Vice President and General Counsel
Adam Barsky	Executive Vice President and Chief Financial Officer
Joseph Kessler	Executive Vice President and Chief Operating Officer
Sarah Salati	Executive Vice President and Chief Commercial Officer
Lee Garza	Senior Vice President – Financial Operations
Soubhagya Parija	Senior Vice President & Chief Risk Officer
Robert Piascik	Senior Vice President & Chief Information Officer
Angela Gonzalez	Senior Vice President – Internal Audit
Keith Hayes	Senior Vice President – Clean Energy Solutions
Kristine Pizzo	Senior Vice President – Human Resources
Karen Delince	Vice President and Corporate Secretary
John Canale	Vice President – Strategic Supply Management
Ruth Colón	Vice President – Enterprise Shared Services
Joseph Leary	Vice President – Community & Government Relations
Patricia Lombardi	Vice President – Project Management
Daniella Piper	Vice President – Digital Transformation Office and Chief of Staff
Karina Saslow	Vice President – Total Compensation & HRIS
Thakur Sundeep	Controller
Susan Craig	Director – Media Relations
Christopher Fry	Director – Business Development
Danny Padron	Director of Operations – SENY
Tim Zandes	Regional Manager – SENY
Emily Alkiewicz	Manager – Business Power Allocations & Compliance
Mary Cahill	Manager – Executive Office
Gerard McLoughlin	Manager – Business Power Allocations & Compliance
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Quatrocci	Associate Corporate Secretary

Chairman Koelmel presided over the meeting. Corporate Secretary Delince kept the Minutes.

Introduction

Chairman Koelmel welcomed the Trustees/Directors and staff members who were present at the meeting. He said that the meeting had been duly noticed as required by the Open Meetings Law and called the meeting to order pursuant to the Authority's Bylaws, Article III, Section 3.

1. **Adoption of the July 30, 2019 Proposed Meeting Agenda**

Upon motion made by member Michael Balboni seconded by member Anne Kress, the meeting Agenda was adopted.

Conflicts of Interest

Chairman Koelmel, Vice Chair Nicandri and members Picente and Balboni declared no conflicts of interest based on the list of entities previously provided for their review.

The following member declared conflicts of interest as indicated below and said she would not participate in the discussion or vote as it relates to those matters.

Member Anne Kress:

- *Cannon Industries, Inc. (#4b iv)*
- *JPMorgan Chase Bank, National Association (#4b iv)*
- *O'Connell Electric Company, Inc. (#4c i and #5d i-3)*

2. **Motion to Conduct an Executive Session**

“Mr. Chairman, I move that the NYPA and Canal Boards conduct an Executive Session to discuss the appointment of a particular person.” On motion made by member Michael Balboni and seconded by member Anne Kress, the members held an executive session.

3. **Motion to Resume Meeting in Open Session**

“Mr. Chairman, I move to resume the meeting in Open Session.” On motion made by Vice Chair Nicandri and seconded by member Anne Kress, the meeting resumed in Open Session.

Chairman Koelmel said that no votes were taken during the Executive Session.

4. CONSENT AGENDA:

On motion made by member Michael Balboni and seconded by member Anne Kress, the Consent Agenda was approved.

a. Governance Matters:

i. Approval of the Minutes

The Minutes of the Regular Joint Meeting of the New York Power Authority's Trustees and Canal Corporation's Board of Directors held on May 21, 2019 were unanimously adopted.

b. Power Allocations:

i. Transfer of Recharge New York Power, Expansion Power and Replacement Power Allocations

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve the transfer of the following two groups of power allocations previously awarded by the Authority:

1. An 1,800 kilowatt ('kW') Expansion Power ('EP') allocation, 1,300 kW Replacement Power ('RP') allocation, 675 kW RP allocation, and 500 kW RP allocation awarded to E.I. du Pont de Nemours & Co., Inc. ('E.I. DuPont') for use at its 3115 River Road, Buffalo, New York facility (collectively, the 'DuPont Allocations'), to DuPont Specialty Products USA, LLC ('DuPont Specialty'), in order to address organizational changes.
2. A 1,210 kW Recharge New York ('RNY') Hydropower allocation, 2,520 kW RNY Hydropower allocation, 2,476 kW RNY Hydropower allocation, and 1,510 kW RNY Power allocation awarded to Kraft Foods Global, Inc. ('Kraft Foods') for use at various facilities identified below (collectively, the 'Kraft Foods Allocations'), to Kraft Heinz Foods Company ('Kraft Heinz'), in order to address organizational changes.

Transfers of RNY Power allocations are subject to review and approval by the Economic Development Power Allocation Board ('EDPAB'). EDPAB, at its July 16, 2019 meeting, approved the transfer of the Kraft Foods Allocations.

The Trustees have previously approved transfers of Authority power allocations in circumstances similar to those that pertain in this report.

DISCUSSION

1) E.I. du Pont de Nemours & Co., Inc.

E.I. DuPont develops and manufactures products out of two materials – Tedlar, a polyvinyl fluoride film that protects surfaces from harsh weather, UV rays and chemicals, and Corian, a material for counter tops and building cladding. The Authority awarded E.I. DuPont the four DuPont Allocations to support of E.I. DuPont's Buffalo facility operations.

E.I. DuPont's parent company, Dow DuPont, Inc. which was formed by a merger of The Dow Chemical Company and E.I. du Pont de Nemours and Company in 2017, separated its agricultural business, specialty products business and material science business. E.I. DuPont will be part of the agricultural business in a company called Corteva Agriscience. The Buffalo facility will be part of the company's specialty products business operated by DuPont Specialty.

In light of the reorganization, the companies have asked that the DuPont Allocations be transferred from E.I. DuPont to DuPont Specialty. The reorganization will not result in changes to the operations at the facility and DuPont Specialty has indicated that it will honor all terms and commitments made by E.I. DuPont under its EP and RP sale agreements with the Authority, if the transfers are approved.

2) Kraft Foods Global, Inc.

The Authority awarded Kraft Foods the following four RNY Power program-related allocations for use at the facilities indicated:

1. A 1,210 kW RNY Hydropower allocation for use at its facility at 261 Delaware Street, Walton, New York, which produces packaged dairy products, primarily cottage cheese;
2. A 2,520 kW RNY Hydropower allocation for use at its facility at 140 Spring Street, Avon, New York, which produces Cool Whip and Oscar Mayer Lunchables;
3. A 2,476 kW RNY Hydropower allocation for use at its facility at 7388 Utica Boulevard, Lowville, New York ('Lowville Facility'), which produces Philadelphia-brand cream cheese; and
4. A 1,510 kW RNY Power allocation for use at the Lowville facility, although this allocation has not yet been placed into service.

Kraft Foods recently merged into Kraft Heinz, and, as a result, Kraft Heinz will now operate the facilities listed above. In light of the merger, the companies have asked that the Kraft Food Allocations be transferred to Kraft Heinz.

The merger will not result in changes to operations at any of the facilities, and Kraft Heinz has indicated that it will honor all terms and commitments made by Kraft Foods under Kraft Foods' RNY Power sale agreements with the Authority if the transfers are approved.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees approve the transfers of the DuPont Allocations and the Kraft Food Allocations as discussed above, subject to the following conditions: (1) the proposed transferees will commit to assume the contractual commitments made by the original awardees of the allocations as described in this report; and (2) the transfers are addressed in contract documents containing such other terms and conditions determined by the Authority to be appropriate to effectuate the transfer of each allocation.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

WHEREAS, the Authority previously awarded E.I. DuPont de Nemours & Co., Inc. ("E.I. DuPont") an 1,800 kilowatt ("kW") Expansion Power ("EP") allocation, 1,300 kW Replacement Power ("RP") allocation, 675 kW RP allocation, and 500 kW RP allocation for use at its 3115 River Road, Buffalo, New York facility (collectively, the "DuPont Allocations"); and

WHEREAS, as a result of a corporate reorganization, the Buffalo facility at which the DuPont Allocations are used is now operated by DuPont Specialty Products USA, LLC ("DuPont Specialty"); and

WHEREAS, the Authority previously awarded Kraft Foods Global, Inc. ("Kraft Foods") the following four Recharge New York ("RNY") Power program allocations: (1) a 1,210 kW RNY Hydropower allocation for use at its facility at 261 Delaware Street, Walton, New York; (2) a 2,520 kW RNY Hydropower allocation for use at its facility at 140 Spring Street, Avon, New York; (3) a 2,476 kW RNY Hydropower allocation for use at its facility at 7388 Utica Boulevard, Lowville, New York ("Lowville Facility"); and (4) a 1,510 RNY Power allocation for use at the Lowville Facility (collectively, the "Kraft Food Allocations"); and

WHEREAS, Kraft Foods has merged into Kraft Heinz Foods Company ("Kraft Heinz"), and as a result Kraft Heinz is now operating the aforementioned facilities at which the Kraft Food Allocations are used;

NOW THEREFORE BE IT RESOLVED, That the transfer of the DuPont Allocations from E.I. DuPont to DuPont Specialty, as described in the foregoing report be, and hereby is, approved subject to (i) such terms and conditions as are set forth in the foregoing report, and (ii) such other terms and conditions as are contained in contract documents prepared by the Authority to effectuate the transfers; and be it further

RESOLVED, That the transfer of the Kraft Foods Allocations from Kraft Foods to Kraft Heinz, as described in the foregoing report be, and hereby is, approved subject to (i) such terms and conditions as are set forth in the foregoing report, and (ii) such other terms and conditions as are contained in contract documents prepared by the Authority to effectuate the transfers; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

ii. **Contracts for the Sale of Preservation Power –
Transmittal to the Governor**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to:

- (1) approve the following proposed final contracts for the sale of Preservation Power ('PP'):
 - (a) the contract for the sale of 240,000 kilowatts ('kW') of PP to Alcoa USA Corp. ('Alcoa'), which, along with applicable Service Tariff No. AL-1 (the 'Alcoa Contract'), is attached as Exhibit '4b ii-A';
 - (b) the contract for the sale of 5,000 kW of PP to Arconic Inc. ('Arconic'), which, along with applicable Service Tariff No. 20-A (the 'Arconic Contract'), is attached as Exhibit '4b ii-B';
 - (c) the contract for the sale of 1,000 kilowatts kW of PP to North American Forest Group Inc. ('NAFG'), which, along with applicable Service Tariff No. 20 (the 'NAFG Contract'), is attached as Exhibit '4b ii-C'; and
 - (d) the contract for the sale of 850 kW of PP to Upstate Niagara Cooperative, Inc. ('Upstate Niagara'), which, along with applicable Service Tariff No. 20, is attached as Exhibit '4b ii-D'; and
- (2) authorize transmittal of the Alcoa Contract, Arconic Contract, NAFG Contract, and Upstate Niagara Contract to the Governor for his review and for the purpose of seeking his authorization for the New York Power Authority (the 'Authority' or 'NYPA') to execute each of these contracts pursuant to Public Authorities Law ('PAL') §1009.

BACKGROUND

Under PAL §1005(13), the Authority may allocate and sell directly or by sale for resale, 490 megawatts ('MW') of PP to businesses located in Jefferson, Franklin and St. Lawrence Counties.

As required by PAL §1009, when the Authority has reached agreement with its co-party on a power sale contract, it is required to transmit the proposed contract to the Governor and other elected officials and hold a public hearing on the proposed contract. At least 30-days' notice of the hearing must be given by publication once in each week during such period in each of six selected newspapers. Following the public hearing, the contract may be modified, if advisable.

Upon approval of the final proposed contract by the Authority, the Authority 'reports' the proposed contract, along with its recommendations and the public hearing record, to the Governor and other elected officials. Upon authorization of the Governor, the Authority may execute the contract.

DISCUSSION

1. Alcoa Contract

At their meeting on March 26, 2019, the Trustees authorized an extension of a 240,000 kW PP allocation to Alcoa (the 'Alcoa Allocation') to support smelting operations at Alcoa's 'West Plant' located at Park Avenue East, Massena, New York.

The Alcoa Contract and Service Tariff No. AL-1 provide the terms and conditions for the sale of the Alcoa Allocation to Alcoa. The following is a summary of some of the pertinent provisions of the Alcoa Contract and Service Tariff No. AL-1:

- The term of the Alcoa Allocation and associated electric service would run from April 1, 2019, through March 31, 2026, subject to termination/cancellation as provided for in the Alcoa Contract.
- The Alcoa Allocation will continue to be sold under a direct sale arrangement.
- The Alcoa Allocation would be sold at rates provided for in the Alcoa Contract and Service Tariff No. AL-1. The base rates are tied to aluminum prices on the London Metals Exchange and Midwest aluminum premium prices. The base rates include the hydroelectric commodity and the NYPA Transmission Service Charge. Additionally, Alcoa will compensate the Authority for other transmission charges and other charges, costs and assessments.
- Alcoa would be subject to monthly charges, which are intended to support compliance programs that the Authority is implementing for the purpose of complying with state energy and environmental policies as specified in the Alcoa Contract.
- Alcoa will agree to supplemental commitments which include an annual capital investment commitment of \$2,000,000, and an employment commitment requiring Alcoa to employ at least 450 full-time employees at the West Plant Facility.

2. Arconic Contract

At their meeting on December 11, 2018, the Trustees made a 5,000 kW PP allocation to Arconic (the 'Arconic Allocation') to support operations at facilities that Arconic operates on the Alcoa industrial campus in Massena. Arconic was formed through a corporate reorganization involving Alcoa Inc. that resulted in two new entities, Alcoa USA Corp. and Arconic.

The Arconic Contract and Service Tariff No. 20-A would provide the terms and conditions for the sale of the Arconic Allocation to Arconic. The following is a summary of some of the pertinent provisions of the Arconic Contract and Service Tariff No. 20-A:

- The term of the Arconic Allocation and associated electric service would run from April 1, 2019 through December 31, 2028, subject to termination/cancellation as provided for in the Arconic Contract.
- The Arconic Allocation would be sold to Arconic under a direct sale arrangement.
- The Arconic Allocation would be sold at rates provided for in the Arconic Contract and Service Tariff No. 20-A.
- Arconic would be subject to monthly charges, which are intended to support compliance programs that the Authority is implementing for the purpose of complying with state energy and environmental policies.
- Arconic will agree to supplemental commitments, which include an annual capital investment commitment of at least \$500,000, an employment commitment requiring Arconic to employ at least 145 full-time employees at the facility receiving the Arconic Allocation, and an obligation to perform an energy audit at the facility at least twice during the term of the Arconic Allocation.

3. NAFG

At their meeting on December 11, 2018, the Trustees awarded a 1,000 kW PP allocation to NAFG (the 'NAFG Allocation'), to support sawmill operations to be located in the Town of Oswegatchie, along the St. Lawrence Seaway.

The NAFG Contract and Service Tariff No. 20 would provide the terms and conditions for the sale of the NAFG Allocation to NAFG. The following is a summary of some of the pertinent provisions of the NAFG Contract and Service Tariff No. 20:

- The term of the NAFG Allocation is for 7 years, subject to termination/ cancellation as provided for in the NAFG Contract.
- The NAFG Allocation would be sold to NAFG under a direct sale arrangement.
- The NAFG Allocation would be sold at rates provided for in the NAFG Contract and Service Tariff No. 20.
- NAFG would be subject to monthly charges which are intended to support compliance programs that the Authority is implementing for the purpose of complying with state energy and environmental policies.
- NAFG will agree to supplemental commitments which include a capital investment commitment of at least \$2,000,000, an employment commitment requiring NAFG to employ at least 21 full-time employees at the facility receiving the NAFG Allocation, and an obligation to perform an energy audit at the facility at least twice during the term of the NAFG Allocation.

4. Upstate Niagara

At their meeting on January 30, 2019, the Trustees made an 850 kW PP allocation to Upstate Niagara (the 'Upstate Niagara Allocation') to support an expansion of its North Lawrence location to include a new filling line to produce Greek-style yogurt.

The Upstate Niagara Contract and Service Tariff No. 20 would provide the terms and conditions for the sale of the Upstate Niagara Allocation to Upstate Niagara. The following is a summary of some of the pertinent provisions of the Upstate Niagara Contract and Service Tariff No. 20:

- The term of the Upstate Niagara Allocation is for 7 years, subject to termination/ cancellation as provided for in the Upstate Niagara.
- The Upstate Niagara Allocation would be sold to Upstate Niagara under a direct sale arrangement.
- The Upstate Niagara Allocation would be sold at rates provided for in the Upstate Niagara Contract and Service Tariff No. 20.
- Upstate Niagara would be subject to monthly charges which are intended to support compliance programs that the Authority is implementing for the purpose of complying with state energy and environmental policies.
- Upstate Niagara will agree to supplemental commitments which include a capital investment commitment of at least \$3,400,000, an employment commitment requiring Upstate Niagara to employ at least 97 full-time employees at the facility receiving the

Upstate Niagara Allocation, and an obligation to perform an energy audit at the facility at least twice during the term of the Upstate Niagara Allocation.

5. Public Hearing

In accordance with PAL §1009, a public hearing was held on the Alcoa Contract, Arconic Contract, NAFG Contract and Upstate Niagara Contract. The public hearing was held at the Authority's Frank S. McCullough, Jr. Hawkins Point Visitors Center, St. Lawrence/FDR Power Project, Massena, New York, on June 13, 2019. A copy of the official transcript of the public hearing is attached as Exhibit '4b ii-E.'

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees: (1) approve the final Alcoa Contract, Arconic Contract, NAFG Contract and Upstate Niagara Contract for the sale of PP to the companies discussed herein; and (2) authorize the transmittal of the Contracts to the Governor for his review and to seek his authorization for the Authority to execute these contracts pursuant to PAL §1009.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the contract for the sale of 240,000 kilowatts ("kW") of Preservation Power ("PP") to Alcoa USA Corp. ("Alcoa Contract"), the contract for the sale of 5,000 kW of PP to Arconic Inc. ("Arconic Contract"), the contract for the sale of 1,000 kW of PP to North American Forest Group Inc. ("NAFG Contract"), and the contract for the sale of 850 kW of PP to Upstate Niagara Cooperative, Inc. ("Upstate Niagara Contract"), which are attached to the accompanying Report of the President and Chief Executive Officer ("Report") as Exhibits "4b ii-A," "4b ii-B," "4b ii-C" and "4b ii-D," respectively (collectively, the "Contracts"), are approved and are in the public interest, and in accordance with Public Authorities Law §1009, may be submitted to the Governor for his review and to seek his authorization for the Authority to execute the Contracts, and that a copy of such Contracts, along with the record of the public hearing thereon, be forwarded to the Speaker of the Assembly, the Minority Leader of the Assembly, the Chairman of the Assembly Ways and Means Committee, the Temporary President of the Senate, the Minority Leader of the Senate and the Chairman of the Senate Finance Committee; and be it further

RESOLVED, That the Chairman and the Corporate Secretary be authorized and directed to execute the Contracts in the name of, and on behalf of, the Authority, whenever the Contracts are approved by the Governor; and be it further

RESOLVED, That the Senior Vice President – Clean Energy Solutions, or his designee, be, and hereby is, authorized, subject to the approval of the form thereof by the Executive Vice President and General Counsel, to negotiate and execute any and all documents necessary or desirable to implement the Contracts; and be it further

RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

iii. **Municipal Electric Utility and Rural Electric Cooperative Systems Hydropower Contracts – Transmittal to the Governor**

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to:

- (1) approve the final form of the contract ('Contract'), in accordance with Public Authorities Law ('PAL') §1009, for sale of existing allocations of New York Power Authority ('Authority') hydropower (the 'Allocations') to 51 municipal electric utility and rural electric cooperative systems (collectively, the 'Customers') for an extended term through September 1, 2040; and
- (2) authorize transmittal of the Contract to the Governor for his review and for the purpose of seeking his authorization for the Authority to execute the Contract with each of the Customers pursuant to PAL §1009.

The Contract, and the associated Authority Service Tariffs, Nos. 38A and 39A (the 'Tariffs'), are attached as Exhibit '4b iii-A'. A list of the Allocations held by each of the respective Customers is attached as Exhibit '4b iii-B.'

BACKGROUND

The Authority currently sells 764.8 MW of firm hydropower from the Niagara Power Project ('Project') as 'preference power' to the Customers pursuant to the Niagara Redevelopment Act ('NRA'), 16 U.S.C. §836(b)(1) and Public Authorities Law §1005(5). The Customers are the only entities in New York that qualify as public bodies and non-profit cooperatives entitled to preference power and priority in the allocation of Project power under the NRA.

Preference power is sold at the Authority's cost-based rates to the Customers who then resell the hydropower to the electricity consumers located within their service territories under the Customers' respective retail service tariffs. The Customers' resale of Niagara hydropower to their consumers is regulated pursuant to either (a) the Authority's rules and regulations (contained in Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York) in the case of the 12 Customers that are 'full requirement Customers,' or (b) Public Service Commission's rules and regulations in the case of the 39 'partial requirement Customers,' without profit but allowing for a reasonable return on the Customers' investments in their electric distribution systems. In addition, the Authority sells 3.6 MW of firm peaking hydropower from the Project to the Customers at preference power rates.

As required by PAL §1009, when the Authority has reached agreement with its co-party on a power sale contract, it is required to transmit the proposed contract to the Governor and other elected officials and hold a public hearing on the proposed contract. At least 30-days' notice of the hearing must be given by publication once in each week during such period in each of six selected newspapers. Following the public hearing, the contract may be modified, if advisable.

Upon approval of the final proposed contract by the Authority, the Authority 'reports' the proposed contract, along with its recommendations and the public hearing record, to the Governor and other elected officials. Upon authorization of the Governor, the Authority may execute the contract.

At their meeting on March 26, 2019, the Trustees approved an extension to the term of the Allocations from September 1, 2025 to through September 1, 2040. The Trustees also authorized a

public hearing on the proposed form of Contract that would be used for the sale of the Allocations to the Customers.*

DISCUSSION

The following is a summary of some of the pertinent provisions of the Contract:

- The term of the Allocations would be extended through September 1, 2040.
- The Customers agreed to take actions to support the goals underlying the Clean Energy Standard ('CES'), Renewable Energy Standard ('RES') and the State Energy Plan ('SEP'). As more specifically described in the SEP and CES, such goals, which are targeted to be achieved statewide by 2030, include: a) reduction of greenhouse gas emissions from 1990 levels of 40%; b) achievement of a goal of 50% of the statewide generation of electricity coming from carbon-free renewable energy sources, such as solar, wind, hydropower and biomass; and c) a 23% decrease in energy consumption in buildings statewide from the baseline of 2012 levels.
- For the purpose of supporting the CES, RES and SEP goals, the Customers, working with their respective representative association,[†] agreed to work with the Authority to, among other things, revise existing Customer retail tariffs in order to encourage efficient off-peak usage and to implement distribution-level technologies that encourage the adoption of cost-effective distributed energy resources ('DER') and other energy services, consistent with the ultimate objectives of the CES and the goals of the SEP. The Customers and the Authority agreed to work together and with the Customer Associations to implement these type of activities in a cost-effective and efficient manner, consistent with the unique characteristics of the individual Customers.
- The new Contract incorporates a more developed approach by the Authority to administering its Project sales to the Customers in a manner that is consistent with the State Energy Plan and Clean Energy Standard.
- The Customers agreed to continue expanding energy efficiency and energy conservation activities to benefit their respective service territories. There is a mandatory 1 mil (one-thousandth of a dollar/kWh) added charge to their retail rates, at a minimum, to fund such energy projects including implementing energy efficiency, renewable energy or other related technologies.
- The Contract creates a joint Customer/Authority 'Implementation Task Force' to meet regularly to track Energy Projects funded through this mechanism, and provides for the Authority's assistance in project development and creation for all Customers.
- The Contract also creates a 'Technology & Innovation Task Force' comprised of Authority and Customer Associations' staff to investigate and pursue, as appropriate, technologies and innovations at the locus of New York State energy policy, Customer needs, and Authority leadership.
- The full requirement Customers ('FRCs'), currently comprised of 8 municipal electric systems and 4 rural electric cooperatives that receive all of their power and energy needs from the Authority, agreed to pay a the Zero Emissions Credit Charge and Renewable Energy Credit Charge. In this manner, the Authority recovers these costs incurred through the New York Independent System

* Each Customer would execute a copy of the Contract once it is populated with the relevant, Customer-specific information.

[†] The Customers are represented by the Municipal Electric Utility Association of New York State and/or the New York Association of Public Power (collectively, the 'Associations').

Operator ('NYISO') as the Load Serving Entity ('LSE') for the FRCs. The 39 partial requirement Customers ('PRCs') who receive only their individual Allocation from the Authority, with the remaining requirements provided by a third-party supplier, will also pay these CES-related charges through such third-party supplier that acts as the PRCs' LSE.

- The Allocations will continue to be sold pursuant to existing Tariffs (No. 38A in the case of FRCs and No. 39A in the case of the PRCs). While there are no changes to preference power demand and energy rates (i.e. cost-based rates based on the Authority's hydropower cost of service) contained in the Tariffs, certain non-rate related provisions of the Tariffs have been modified to ensure their language comports with the proposed new Contract language.
- The Contract clarifies the Authority's obligations to supply 'substitute energy' in the event of 'adverse water conditions' that impacts Project operations and continues to maintain the Authority's right to curtail hydropower sales in such an event.
- The Contract contains updated provisions to address a number of matters, including customer metering arrangements, scheduling and settlement procedures, and early outreach concerning future allocation extensions.
- Customers would be able to utilize, at their option and at no cost, a base level of service of the Authority's New York Energy Manager ('NYEM'). The Customers could participate at higher levels of NYEM service provided that any service fees and associated equipment costs would be paid for by the individual Customer.

A public hearing on the proposed Contract was held on June 10, 2019, at the Authority's Albany Office.

The Customer Associations read statements into the record in support of the contract extensions which reiterated how essential the assurance of continued receipt of this power under a renewed long-term contract is for the Customers' electric system power supply plans and the desire to continue working closely with the Authority to implement expanded energy efficiency, energy conservation, and economic development programs to make optimal use of Authority-generated low-cost hydroelectric power. There were no other comments from the general public. A copy of the transcript of the public hearing is attached as Exhibit '4b iii-C.' In addition, attached hereto as Exhibits '4b iii-D' and '4b iii-E' are the written statements of support offered by the Municipal Electric Utilities Association of New York State and the New York Association of Public Power, respectively.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions, recommends that the Trustees approve the Contract for the sale of the Allocations to the Customers and authorize the transmittal of the Contract to the Governor for his review and requested approval pursuant to PAL §1009.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

**RESOLVED, That the form of the contract ("Contract")
for the sale of New York Power Authority ("Authority")
Hydropower (the "Allocations") to 51 municipal electric utility
and rural electric cooperative systems as detailed in the
foregoing report of the President and Chief Executive Officer
("Report"), a copy of which is attached to the Report as Exhibit**

“4b iii-A,” is in the public interest, and in accordance with Public Authorities Law §1009 should be submitted to the Governor for his review and to seek his authorization for the Authority to execute the Contract, and that a copy of such Contract, along with the record of the public hearing thereon, be forwarded to the Speaker of the Assembly, the Minority Leader of the Assembly, the Chairman of the Assembly Ways and Means Committee, the Temporary President of the Senate, the Minority Leader of the Senate and the Chairman of the Senate Finance Committee; and be it further

RESOLVED, That the Executive Vice President and Chief Commercial Officer, or his or her designee, be, and hereby is, authorized, subject to the approval of the form thereof by the Executive Vice President and General Counsel, to negotiate and execute any and all documents necessary or desirable to implement the Contract as set forth in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Chairman and the Corporate Secretary be, and hereby is, authorized and directed to execute the final Contract in the name of, and on behalf of, the Authority whenever the Contract shall be approved by the Governor; and be it further

RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

iv. **Recharge New York Power – Allocation Extensions**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to authorize the extension of each of the existing 28 allocations of Recharge New York (‘RNY’) Power (‘Allocation’ or collectively ‘Allocations’) awarded to the businesses listed in Exhibit ‘4b iv-A’ for a term of seven years, to commence on the expiration of each such Allocation, or, in the Authority’s discretion, on a date to be agreed upon by the Authority and the customer for a term not to exceed seven years (collectively, the ‘Extended Term’), subject to the following conditions:

- a) The sale of any Allocation extended as proposed herein will be governed by the revised form of RNY Power contract that was approved by the Trustees on March 26, 2019, and existing Authority Service Tariff RNY-1.
- b) A customer whose Allocation would be extended would have to agree to provide supplemental commitments for, among other things, jobs and capital investments, as it has in its current RNY Power agreement(s) with the Authority (collectively, ‘Current RNY Power Agreement’) for the length of any Extended Term, through the incorporation of such supplemental commitments in the proposed final contract that is executed by the parties. With respect to capital investments, the vast majority of RNY Power customers (i.e., those who do not have project/expansion capital investment commitments) would be expected to meet a minimum capital investment commitment, which may be satisfied through capital expenditures made over a five-year period.
- c) The customer is in compliance with its contractual obligations to the Authority under its Current RNY Power Agreement.

The Economic Development Power Allocation Board (‘EDPAB’), at its meeting held on July 16, 2019, recommended to the Trustees that each of the Allocations listed on Exhibit ‘4b iv-A’ be extended for seven years as further described herein.

The Trustees are further requested to approve modifications related to previously approved RNY Power allocations for the customers listed in Exhibit ‘4b iv-B.’ The Allocations for these customers were conditionally extended on the basis of the commitments made in their existing RNY power sale contracts with the Authority. Since that time, the Authority has received additional information relating to these customers’ circumstances and has conferred with the customers concerning such issues as power, employment and capital investment commitments, and/or other relevant matters. Based on this information, staff is requesting that the Trustees modify the allocations and/or supplemental commitments for the customers as described in Exhibit ‘4b iv-B’ for the reasons detailed in Exhibit ‘4b iv-B.’ EDPAB, at its meeting held on July 16, 2019, recommended to the Trustees that the modifications listed on Exhibit ‘4b iv-B’ be approved.

BACKGROUND

On April 14, 2011, Governor Andrew M. Cuomo signed into law the RNY Power Program as part of Chapter 60 (Part CC) of the Laws of 2011. The RNY Power Program is codified primarily in Economic Development Law (‘EDL’) §188-a and Public Authorities Law (‘PAL’) §1005(13-a) (the ‘Statutes’). The program makes available 910 megawatts (‘MW’) of ‘RNY Power,’ 50% of which will be provided by the Authority’s resources and 50% of which will be procured by the Authority from other sources. RNY Power contracts can be for a term of up to seven years in exchange for job and capital investment commitments. RNY Power is available to businesses and not-for-profit corporations for job retention and business expansion and attraction.

'Eligible applicant' is defined by statute to mean an eligible business, eligible small business, or eligible not-for-profit corporation; however, an eligible applicant shall not include retail businesses as defined by EDPAB, including, without limitation, sports venues, gaming or entertainment-related establishments or places of overnight accommodations.

RNY Power allocation awards are comprised of 50% hydropower and 50% Authority-procured market power. Prior to entering into a contract with an eligible applicant for the sale of RNY power, and prior to the provision of electric service relating to the RNY power allocation, the Authority shall offer each eligible applicant the option to decline to purchase the RNY market power component of such allocation. If an eligible applicant declines to purchase the RNY market power component, the Authority has no responsibility for supplying such market power to the eligible applicant.

Under applicable law, applications for RNY Power are first considered by EDPAB. EDPAB is authorized to recommend applicants to the Authority's Trustees that it believes should receive an award of RNY Power based on applicable statutory criteria and other pertinent considerations. The statutory criteria are listed in Exhibit '4b iv-C' to this report. An allocation recommended by EDPAB qualifies the subject applicant to enter into a contract with the Authority for the purchase of the RNY Power if the Authority makes an allocation award.

At their meeting held on October 2, 2018, the Trustees authorized extensions for 180 RNY Power Allocations. An additional 62 RNY Power Allocations were approved for extension by the Trustees on December 11, 2018. Most recently, on March 26, 2019, the Trustees authorized extensions for 72 additional RNY Power Allocations.

EDPAB, at its meeting held on July 16, 2019, recommended that the Trustees approve extensions for the 28 RNY Power allocations that are now before the Trustees. In addition, EDPAB recommended that the Trustees approve the modifications related to previously extended RNY Power allocations as described in Exhibit '4b iv-B' for the reasons discussed below and in Exhibit '4b iv-B.'

DISCUSSION

1. Extension of Existing Allocations

For the current round of recommendations, Authority staff has reviewed applications from 28 RNY Power customers who have filed applications requesting that their existing RNY Power allocations be extended. Staff has analyzed the applications of the RNY Power customers listed on Exhibit '4b iv-A' and a copy of each application has been made available to the Board. Staff's review has included, on a customer-specific basis, consideration of such issues as the amount of each Allocation that would be extended, the supplemental commitments that these customers have made under their Current RNY Power Agreement and are prepared to make as consideration for an extension, and the customer's compliance status under its Current RNY Power Agreement, including its compliance with supplemental commitments for jobs and capital investments.

The businesses listed on Exhibit '4b iv-A,' which are located throughout the State, bring valuable benefits to the State. In total, the Allocations listed in Exhibit '4b iv-A' are supporting the retention of some 37,700 jobs and over \$1.4 billion in capital investments throughout the State, and the Authority will require customers to commit to the same or substantially similar supplemental commitments for jobs and capital investments that are summarized in Exhibit '4b iv-A' for the Extended Term.

At its meeting held on July 16, 2019, EDPAB recommended to the Trustees that each of the Allocations listed on Exhibit '4b iv-A' be extended for seven years as described above. As part of its recommendation that these Allocations be extended, EDPAB, consistent with provisions of applicable Statutes, also recommended that the contract for the sale of the Allocations contain:

- (1) provisions for effective periodic audits of the recipient of an allocation for the purpose of determining contract and program compliance, and for the partial or complete withdrawal of an allocation if the recipient fails to maintain commitments, relating to such things as employment levels, power utilization, capital investments, and/or energy efficiency measures;
- (2) requirements for an agreement by the recipient of an allocation to undertake, at its own expense, an energy audit of its facilities at which the allocation is consumed, modified by the Authority on a showing of good cause by the recipient, and that the recipient provide the Authority with a copy of any such audit or a report describing the results of such audit;
- (3) a requirement for an agreement by the recipient of an allocation to make its facilities available at reasonable times and intervals for energy audits and related assessments that the Authority desires to perform; and
- (4) a recommendation shall require that if the actual metered load at the facility where the allocation is utilized is less than the allocation, such allocation will be reduced accordingly.

Staff believes that an extension of each Allocation listed on Exhibit '4b iv-A' is appropriate and is consistent with the statutory criteria that are used to evaluate applications for an award of RNY Power, which are listed in Exhibit '4b iv-C.'

In addition, the terms and conditions in the revised RNY Power contract form that was previously approved by the Trustees on March 26, 2019 are consistent with the terms and conditions recommended by EDPAB.

Based on the foregoing discussion, staff recommends that the Trustees extend the Allocations listed on Exhibit '4b iv-A' subject to the following conditions:

- (a) The sale of any Allocation extended as proposed herein will be governed by the revised RNY Power contract form that was approved by the Trustees on March 26, 2019, and Authority Service Tariff RNY-1.
- (b) In order to receive an extension of its Allocation, the customer must agree, for the Extended Term, to provide the supplemental commitments for jobs and capital investments that are the same or substantially similar to those that are summarized generally in Exhibit '4b iv-A,' through the incorporation of such supplemental commitments in the final contract that is executed by the parties. With respect to capital investments, RNY Power customers who do not have current project/expansion capital investment commitments would be expected to meet a minimum capital investment commitment, which may be satisfied through capital expenditures made over a five-year period.
- (c) The customer is in compliance with its contractual obligations to the Authority under its Current RNY Power Agreement.

2. Modifications Relating to Previously-Extended Allocations

At its meeting held on July 16, 2019, EDPAB recommended to the Trustees that they approve modifications relating to the previously-extended RNY Power allocations listed on Exhibit '4b iv-B' for the reasons described in Exhibit '4b iv-B.'

The allocations for these customers were recently extended on the basis of the amounts of their existing allocations and the supplemental commitments for jobs and capital investments made in their existing power sale contracts with the Authority. Since this time, the Authority has received additional information from these customers concerning such matters as the customer's power needs, ability to sustain employment and capital investment commitments, and/or other relevant matters.

Staff believes that the modifications listed on Exhibit '4b iv-B' are appropriate and consistent with the statutory criteria that are used to evaluate applications for an award of RNY Power, which are listed in Exhibit '4b iv-C.' For these reasons, staff recommends that the Trustees approve the modifications listed on Exhibit '4b iv-B.'

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees accept the recommendations of the Economic Development Power Allocation Board ('EDPAB'), and authorize the extension of each of the existing 28 Allocations of RNY Power for the customers listed on Exhibit '4b iv-A' for a term of seven years to commence on the expiration of the Allocation, or commencing on a date to be agreed upon by the parties for a term not to exceed seven years, subject to the following conditions:

- (a) The sale of any Allocation extended as proposed herein will be governed by the revised RNY Power contract form that was approved by the Trustees on March 26, 2019, and Authority Service Tariff RNY-1.
- (b) In order to receive an extension of its Allocation, the customer must agree, for the Extended Term, to provide supplemental commitments for jobs and capital investment that are the same or substantially similar to those that are summarized in Exhibit '4b iv-A,' through the incorporation of such supplemental commitments in the final contract that is executed by the parties. With respect to capital investments, RNY Power customers who do not have ongoing project/expansion capital investment commitments would be required to meet a minimum capital investment commitment, which may be satisfied through capital expenditures made over a five-year period.
- (c) The customer is in compliance with its contractual obligations to the Authority under its Current RNY Power Agreement.

In addition, the Senior Vice President – Clean Energy Solutions recommends that the Trustees accept the recommendation of EDPAB, and approve the modifications to the previously extended allocations and/or supplemental commitments described in Exhibit '4b iv-B' for the reasons discussed in Exhibit '4b iv-B.'

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was adopted with Trustee Kress being recused as it relates to Cannon Industries, Inc. and JPMorgan Chase Bank, National Association.

RESOLVED, That the Trustees hereby accept the recommendations of the Economic Development Power Allocation Board and approve the extension of each of the existing 28 Recharge New York ("RNY") Power allocations ("Allocation" or collectively "Allocations") previously awarded to the customers listed in Exhibit "4b iv-A" for a term of seven years, to commence on (1) the expiration of the term of the Allocation, or (2) in the Authority's discretion, commencing on a date to be agreed upon by the Authority and the customer for a term not to exceed seven years (collectively, the "Extended Term"), subject to the following conditions:

- (a) the sale of the Allocations as extended hereunder shall be made pursuant to the revised contract form approved by the Board on March 26, 2019, and Authority Service Tariff RNY-1;
- (b) in order to receive an extension of its Allocation, the customer agrees to provide the supplemental commitments for jobs, capital investment and power utilization that are the same or determined by the Authority to be substantially similar to those contained in Exhibit "4b iv-A" for the Extended Term, through the incorporation of such supplemental commitments in the final contract that is executed by the parties, and RNY Power customers who do not have an ongoing project/expansion capital investment commitment shall meet a minimum capital investment commitment which may be satisfied through capital expenditures made over a five-year period; and
- (c) that the customer is in compliance with its contractual obligations to the Authority under its current RNY Power agreement(s) with the Authority; and be it further

RESOLVED, That the Trustees hereby accept the recommendation of the Economic Development Power Allocation Board and approve the modifications/ adjustments to the previously extended allocations and/or supplemental commitments described in Exhibit "4b iv-B" for the reasons indicated in Exhibit "4b iv-B"; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

v. Recharge New York Power Program – Annual Compliance Review

The President and Chief Executive Officer submitted the following report:

SUMMARY

Authority staff has conducted its sixth annual compliance review of customers receiving power allocations under the Recharge New York ('RNY') Power Program for the reporting period from July 1, 2017 through June 30, 2018 (the 'Reporting Period'). The compliance review examined RNY Power customer contract compliance in three areas: (1) job creation and retention (collectively, 'job retention'); (2) capital investment; and (3) power utilization. The purpose of this report is to inform the Trustees of the results of the compliance review for the specified Reporting Period, and to make recommendations regarding compliance action.

In summary:

- (1) The compliance level of the 6 RNY Power customers described in Exhibit '4b v-A' fell below 90% of the contractual job retention commitments for the Reporting Period. Staff recommends that the RNY Power allocation and contract demand for each such customer be reduced to the amounts indicated in Exhibit '4b v-A.' In addition, staff recommends that the Trustees authorize adjustments to the job commitments of these customers as indicated in Exhibit '4b v-A.'
- (2) The compliance level for the 16 RNY Power customers described in Exhibit '4b v-B' fell below 90% of the contractual commitment for job retention for the Reporting Period. As detailed in Exhibit '4b v-B,' staff is not recommending reductions to the allocations and contract demands for these customers for the reasons described below and in Exhibit '4b v-B.' In most cases, the shortfall (a) was due to process efficiency improvements which the Authority encourages, or (b) was too insignificant to result in a reduction to the customer's allocation based on compliance methodologies the Authority employs. Staff is recommending that the Trustees authorize adjustments to the job commitments of these customers to the amounts indicated in Exhibit '4b v-B' for the reasons described below and in Exhibit '4b v-B.'
- (3) The compliance level of the 1 RNY Power customer described in Exhibit '4b v-C' fell below 90% of the contractual job retention commitment and power utilization commitment for the Reporting Period. The original allocation has already been reduced. Therefore, staff is recommending that the job commitment for this customer be adjusted to the amount indicated in Exhibit '4b v-C.'
- (4) The compliance level of the 1 RNY Power customer described in Exhibit '4b v-D' fell below 90% of the contractual job retention commitment and five-year facility capital expenditure commitment ('FCEC'). For the reasons stated in Exhibit '4b v-D,' staff recommends that the customer's allocation remain at its current level, but that the job retention commitment for this customer be adjusted to the amount indicated in Exhibit '4b v-D.'
- (5) The compliance level of the 1 RNY Power customer described in Exhibit '4b v-E' fell below 90% of the contractual job retention commitment and five-year FCEC for the Reporting Period. Staff recommends that the RNY Power allocation and contract demand of this customer be reduced, and the job commitment and the five-year FCEC be adjusted to the amounts indicated in Exhibit '4b v-E.'
- (6) The compliance level of the 1 RNY Power customer described in Exhibit '4b v-F' fell below 90% of the power utilization commitment for the Reporting Period. Staff recommends that the RNY Power allocation and contract demand of this customer be reduced and that the job commitment for this customer be adjusted to the amount indicated in Exhibit '4b v-F.'

- (7) Each of the 72 RNY Power customers listed in Exhibit '4b v-G' reported information indicating it failed to meet one or more Supplemental Commitments. These matters are discussed in detail below and Exhibit '4b v-G.' In the case of several customers, application of the methodology that the Authority uses to calculate possible reductions in allocation and contract demand does not yield a reduction of the allocation and contract demand. Several customers have provided the Authority with information relating to their individual circumstances which has caused staff to conclude that compliance action should be deferred and considered, if at all, at a later time. The allocations of other customers have expired or are poised to expire shortly. Where such customers have been awarded an RNY Power allocation extension, the allocations, contract demands, and/or Supplemental Commitments have been adjusted to address the customer's ability to meet Supplemental Commitments, or to address a customer's request for adjustments to Supplemental Commitments. Therefore, staff is not recommending compliance action for these customers at this time. Staff may return to the Trustees at a later date with recommendations for compliance action regarding one or more of these customers.
- (8) Nineteen RNY Power customers failed to file a timely annual compliance report as required by their RNY Power contract ('Compliance Report'). Two of these customers did file late Compliance Reports. The RNY allocations for the other 17 RNY Power customers have been suspended effective January 31, 2019. No compliance action is being requested for these customers at this time. Staff may return to the Trustees at a later time to recommend compliance action for one or more of these customers.

Attached as Exhibit '4b v-H' are schedules that provide a tabular summary of the information presented in Exhibits '4b v-A' through '4b v-G.'

DISCUSSION

1. Background

On April 14, 2011, Governor Andrew M. Cuomo signed into law Chapter 60 (Part CC) of the Laws of 2011 which, among other things, created the RNY Power program. The program makes available 910 megawatts ('MW') of 'RNY Power,' 50% of which will be provided by the Authority's hydropower resources and 50% of which will be procured by the Authority from other sources. RNY Power contracts are for a specified term corresponding to a customer's allocation.

RNY Power is made available to businesses and not-for-profit corporations for job retention and business expansion and attraction purposes. Applications for RNY Power are subject to a competitive evaluation process and are evaluated based on statutory criteria, including (1) the number of jobs created and/or retained and the extent to which the applicant will agree to commit to creating or retaining such jobs as a condition to receiving a RNY Power allocation; and (2) the extent to which a RNY Power allocation will result in new capital investment in the state by the applicant.

Successful applicants are awarded RNY Power allocations and offered a contract with the Authority for the purchase of the RNY Power. In addition to the basic requirement to pay for electric service, the contract provides for several 'supplemental' customer commitments relating to such matters as (1) job creation or retention, (2) capital investment, and (3) power utilization (the 'Supplemental Commitments'). With respect to jobs, the RNY Power contract may contain commitments to create and retain jobs, or simply to retain jobs. On capital investment, the Authority's standard contract provides for an aggregate FCEC over a five-year period.

To facilitate compliance review and contract enforcement, the RNY contract requires customers to report on performance of their respective Supplemental Commitments. Customers are required to report pertinent information on the first three Supplemental Commitments in the Compliance Report no later than August 31 of each year for the prior 12-month reporting period from July through June.

2. Compliance Review

Staff has completed its sixth annual compliance review of all in-service RNY Power allocation contracts for compliance with Supplemental Commitments.[‡]

A total of 645 customers have been receiving RNY Power for the entire 12-month period beginning on or before July 2017 during the Reporting Period (July 1, 2017 through June 30, 2018) and are in a position to be evaluated for compliance with their Supplemental Commitments. Staff reviewed the data reported by all customers that submitted compliance reports for this Reporting Period.

In total, 626 of the 645 customers receiving RNY Power for the entire 12-month period filed a Compliance Report as required by the Program, representing power allocations totaling 625 MW and existing employment commitments totaling 347,967 jobs. In aggregate, these customers reported actual employment of 426,109 jobs. This represents 122% of the total job commitments for all RNY customers reporting for the full year.

Regarding capital investment commitments, all retention-based RNY Power customers have an aggregate FCEC measured over a five-year period.

In total, for this Reporting Period, staff determined that 98 RNY Power customers did not meet a 90% compliance threshold for one or more of the Supplemental Commitments.

From an aggregated perspective, the annual compliance review process yielded the following information about FCEC. The 626 RNY Power customers that submitted compliance data have reported cumulative facility capital spending totaling \$5.6 billion during this specific Reporting Period (i.e., out of an aggregate five year commitment of \$23.3 billion). To date, the facility capital expenditure reported cumulatively for all customers is \$35.5 billion for a \$23.3 billion aggregate commitment, which represents a 155% compliance ratio for the total RNY Power program.

Finally, eighteen customers have had their RNY Power allocations suspended for not filing a Compliance Report as required by the RNY Power contract. Service for one of these customers was restored because it subsequently filed a Compliance Report. Staff is not requesting that the Trustees take additional compliance action regarding these customers at this time.

3. Compliance Approach

Based on the RNY Power Contract terms, the applicable tariff and the Authority's regulations, the Authority has a number of options available to respond to a customer that is in breach of contractual obligations, including, for example, termination of the allocation, suspension of electric service, and reduction of the amount of a customer's RNY Power allocation.

As more specifically detailed in the RNY contract, if a customer's Compliance Report or an audit indicates that the customer's (i) annual average monthly employment for the reporting period is below 90% of the customer's job retention commitment, (ii) its reported average monthly kW utilization is below 90% of the allocation amount for the highest six months, or (iii) its capital investment spending is below 90% of the customer's FCEC, the Authority may take compliance action against the customer which includes a reduction of the customer's power allocation and contract demand pursuant to a methodology provided for in the contract.

[‡] In addition to this compliance review, each year the Authority's audit program randomly selects customers whose annual Compliance Report is reviewed for accuracy. This year, a job reporting audit and a capital investment spending audit were performed under the auditing program. The audits are designed to help staff validate reported information. Audited customers will receive feedback on the audit results, including guidance for future submittals.

Although the Authority has the right to enforce a customer to comply with Supplemental Commitments at a 100% level, it has the discretion to enforce Supplemental Commitments at a discounted performance level, and has done so in the past based on special circumstances. At this time, Authority staff is recommending that the reductions to the allocations and contract demands for these customers be calculated based on a 90% performance standard as authorized by the contract.

As indicated below and in the accompanying Exhibits, staff is also recommending that the job commitments and/or FCECs of customers that have not satisfied a 90% compliance rate, and whose allocation and contract demand are being reduced, be adjusted downward to establish a revised commitment based on the information reported by the customer or determined by the audit. This approach yields a more realistic commitment, as it reflects the apparent ability of affected customers to retain jobs or make capital investments after the allocation of such customers has been in service. It also minimizes the chances that such customers, particularly customers who have been subject to compliance action in previous years, will be subject to compliance action under the contract in the near future.

4. Failure to Meet Supplemental Commitments – **Compliance Action Requested**

This section discusses RNY Power customers who have failed to meet a 90% compliance rate for one or more Supplemental Commitments, and recommended compliance action. The information supporting staff's recommendations is contained in the referenced Exhibits.

a) Job Retention Commitments (*recommended for reductions in RNY Power allocations and contract demands, and adjustments to job retention commitments*)

The vast majority of RNY Power customers – a total of 529 of the 626 RNY Power customers reviewed – were found to be compliant with their Supplemental Commitment for job creation and/or retention. A total of 66 of the 626 RNY Power customers were found to be below a 90% compliance rate for this Supplemental Commitment.

Staff recommends that the Trustees approve reductions in the RNY Power allocations and contract demands for the 6 customers identified in Exhibit '4b v-A' who fell below a 90% compliance rate for their job retention commitment, to the amounts indicated in Exhibit '4b v-A' and for the reasons indicated in Exhibit '4b v-A.' In addition, staff recommends that the Trustees authorize adjustments to the job commitments for these 6 customers to the amounts indicated in Exhibit '4b v-A' based on the job levels reported by such customers.

b) Job Retention Commitments (*recommended for adjustments to job retention commitment*)

Each of the 16 customers identified in Exhibit '4b v-B' fell below a 90% compliance rate for their job retention commitment.

In some cases, the job commitment shortfall was due to process efficiency improvements. Generally, the Authority has exercised discretion to not reduce allocations/contract demands where job levels are reduced due to efficiency improvements (which may also result in power usage reductions in the long term). In other cases, non-compliance was relatively insignificant, and as a result, a reduction in the allocation and contract demand was not supported by application of the methodology that the Authority uses to calculate potential reductions to allocations/contract demand.[§]

[§] Some non-compliant customers whose allocation had expired or was poised to expire shortly before or after the close of the Compliance Period were given extension allocations that reflected revised allocation amounts and/or revised commitment levels based on reported job values, thus obviating the need for formal compliance action.

Accordingly, staff is recommending that the Trustees authorize adjustments to the job commitments of these 16 customers to the amounts indicated in Exhibit '4b v-B' based on the actual job levels reported by each customer for the Reporting Period.

- c) Job Retention Commitment and Power Utilization Commitment (recommended for adjustment to job retention commitment)

The RNY Power customer identified in Exhibit '4b v-C' fell below a 90% compliance rate for its job retention commitment and power utilization commitment. The customer, outside the compliance process, has already relinquished a large portion of its RNY Power allocation. Accordingly, staff recommends that no further reduction to this customer's allocation and contract demand be made, and that the Trustees authorize an adjustment to this Customer's job retention commitment to the amount indicated in Exhibit '4b v-C.'

- d) Job Retention Commitments and Capital Investment Commitments (recommended for adjustments to job retention commitment)

The RNY Power Customer identified in Exhibit '4b v-D' fell below a 90% threshold for its job retention commitment and FCEC. For the reasons described in Exhibit '4b v-D,' staff recommends that the Trustees authorize an adjustment to this customer's job commitment to the amount indicated in Exhibit '4b v-D.'

- e) Job Retention Commitment, Capital Investment Commitment, and Power Utilization Commitment (*recommended for reductions in RNY Power allocation and contract demand, and adjustments to FCEC and job retention commitment*)

The RNY Power customer identified in Exhibit '4b v-E' fell below a 90% compliance rate for its job retention commitment and FCEC. Based on the information provided in Exhibit '4b v-E', staff recommends that the Trustees approve a reduction to the RNY Power allocation and contract demand for this customer to the amount indicated in Exhibit '4b v-E.' In addition, staff recommends that the Trustees authorize an adjustment to this customer's job commitment and FCEC to the amounts indicated in Exhibit '4b v-E.'

- f) Power Utilization Commitment (*recommended for adjustment to job retention commitment and reduction in RNY Power allocation*)

The customer identified in Exhibit '4b v-F' fell below a 90% compliance rate for its power utilization commitment. Accordingly, staff recommends that the Trustees approve a reduction to the customer's RNY Power allocation and contract demand, and request that the Trustees authorize an adjustment to this Customer's job retention commitment, to the amounts indicated in Exhibit '4b v-F.'

5. Failure to Meet Supplemental Commitments – **No Compliance Action Requested**

The 72 customers identified in Exhibit '4b v-G' each reported data indicating that they failed to achieve at least a 90% compliance rate for one or more Supplemental Commitments. For the reasons discussed below and in Exhibit '4b v-G,' staff is recommending that no compliance action be taken at this time regarding these customers.

- a) Job Commitments

Compliance reporting indicates that the 34 customers listed in Exhibit '4b v-G,' Section 1, fell below the 90% compliance threshold for job retention. However, based on the information recited in Section 1, staff is proposing that no compliance action be taken at this time for the reasons indicated in Exhibit '4b v-G' and summarized below:

- Staff is contemplating contract amendments for 6 customers with multiple facilities to address the assignment of the customers' employees to multiple facilities. These customers have exceeded job commitments for their facilities on a collective basis.
- Ten customers have not submitted applications to extend their allocations, and, therefore, the allocations of these customers will terminate upon expiration of the term of the allocation.
- For 17 customers, staff is proposing to address non-compliance in contracts that will be issued for extended allocations. The new contracts will reflect revised allocations and/or commitments based on the result of compliance reporting and/or audits.
- Four allocations have been terminated pursuant to the customers' request.
- A few customers have recently submitted supplemental information on their current employment levels for the post-Reporting Period, the five-month period from July 2018 to November 2018, which indicates that employment levels have trended upward. If these levels are sustained, each customer would be at or above a 90% compliance rate for its current and/or expended allocation.
- In the case of the remaining customers, the methodology that the Authority uses to calculate potential reductions to allocations/contract demand did not calculate a reduction to the allocation and contract demand.

Accordingly, staff is not recommending compliance action for these customers at this time. Staff will continue to monitor the commitment performance of these customers and, where appropriate, will assess the appropriateness of compliance action at a later time.

b) Power Utilization Commitments

Compliance reporting indicated that each of the 3 RNY Power customers listed in Exhibit '4b v-G,' Section 2, were underutilizing its RNY Power allocation over the Reporting Period, and as a result, fell below a 90% compliance rate for power usage.

In the case of one customer, staff was notified of a temporary reduction in power usage due to a building renovation. The remaining customers relinquished a portion of their RNY allocation or voluntarily left the program.

Accordingly, staff is not recommending compliance for these customers at this time. Staff will continue to monitor power usage for these customers and will reassess compliance at a later time.

c) Facility Capital Expenditure Commitments

Compliance reporting for the 28 customers listed in Exhibit '4b v-G,' Section 3, indicates that these customers failed to meet at least a 90% compliance level for their FCEC. In summary:

- Seven customers have not submitted applications to extend their RNY Power allocations, and therefore, the allocations will terminate upon expiration of the term of allocation.
- One customer purchased a new facility, and given its unique circumstances, the Authority agreed to allow the customer to count capital expenditures at this building toward its FCEC. Staff is considering whether to require the customer to apply for a separate RNY Power Allocation for the new facility that is not currently receiving RNY Power.
- Eleven customers have been approved for allocation extensions with newly approved commitments that will align with reported values.

- In the case of the remaining customers, either the customers have provided additional information during the period from July 2018 through November 2018 indicating that a cumulative capital spending level that meets or exceeds its FCEC, or the methodology used to calculate potential reductions in allocation and contract demand does not result in a reduction.

Accordingly, staff is not recommending compliance for these customers at this time.

d) Capital Investment and Job Commitments

Compliance reporting for the 7 RNY Power customers listed in Exhibit '4b v-H,' Section 4, indicates that these customers failed to meet at least a 90% compliance level for their FCEC and jobs commitment.

Five of these customers have either opted out of the RNY Power program or failed to file an extension application, which will result in a termination of their allocation upon expiration of its term.

Another customer was conditionally approved for an allocation extension and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. Reported capital spending and job levels are in compliance with the customer's new commitments.

The seventh customer has requested a contract modification that would allow employment from other facilities within close proximity of the facility receiving RNY Power to be counted toward its employment commitment due to the nature of its business. Under a separate item submitted to the Trustees today, staff is recommending that the Trustee approve a contract modification to accommodate this request.

Accordingly, staff is not recommending compliance action for these customers.

6. Other Compliance Matters – **No Compliance Action Requested**

Nineteen RNY Power customers did not file a timely Compliance Report as required by their RNY Power contract. Two of these customers did file late Compliance Reports. The RNY allocations for the other 17 RNY Power customers have been suspended effective January 31, 2019. No compliance action is being requested for these customers at this time. Staff may return to the Trustees at a later time to recommend compliance action for one or more of these customers.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees:

- (1) Authorize (a) reductions of the RNY Power allocations and contract demands for the 6 RNY Power customers identified in Exhibit '4b v-A' to the amounts indicated in Exhibit '4b v-A,' and (b) adjustments to the job retention commitments for these customers to the amounts indicated in Exhibit '4b v-A,' for the reasons discussed in this Report and Exhibit '4b v-A.'
- (2) Authorize adjustments to the job commitments for the 16 RNY Power customers identified in Exhibit '4b v-B' to the amounts indicated in Exhibit '4b v-B' for the reasons discussed in this Report and Exhibit '4b v-B.'
- (3) Authorize adjustments to the job retention commitment for the one customer listed in Exhibit '4b v-C' to the amount indicated in Exhibit '4b v-C' for the reasons discussed in this Report and Exhibit '4b v-C.'

- (4) Authorize an adjustment to the job retention commitment of one customer listed in Exhibit '4b v-D' to the amount indicated in Exhibit '4b v-D' for the reasons discussed in this Report and Exhibit '4b v-D.'
- (5) Authorize (a) a reduction of the RNY Power allocation and contract demand for the RNY Power customer identified in Exhibit '4b v-E' to the amount indicated on Exhibit '4b v-E,' and (b) an adjustment to the job commitment and FCEC of this customer to the amounts indicated in Exhibit '4b v-E,' for the reasons discussed in this Report and Exhibit '4b v-E.'
- (6) Authorize (a) reduction of the RNY Power allocation and contract demand for the RNY Power customer identified in Exhibit '4b v-F' and authorize an adjustment to the job commitment for the RNY Power customer identified in Exhibit '4b v-F' to the amount indicated in Exhibit '4b v-F.'
- (7) Take no compliance action at this time with respect to the Customers identified in Exhibit '4b v-G,' for the reasons discussed in this Report and Exhibit '4b v-G.'

For the reasons stated, I recommend the approval of the above-requested actions by adoption of the resolution below."

Mr. Keith Hayes, Senior Vice President of Clean Energy Solutions provided highlights of staff's recommendation to the Board. He said that the number of jobs reported and the amount of capital investment reported versus contractual commitments exceeded the commitments by 122 percent, respectively, for jobs and 155 percent for capital investment on a programmatic basis. Therefore, the program is doing extremely well.

In terms of non-compliance, the result is consistent with what the Authority have seen, historically. For this reporting period, it is actually low. Overall, the program continues to be effective.

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Trustees hereby approve the reduction of the Recharge New York ("RNY") Power allocations and contract demands for each of the RNY Power customers identified in Exhibit "4b v-A" to the amounts indicated therein, and authorize the Authority to adjust the job commitments for these customers to the amounts indicated in Exhibit "4b v-A," for the reasons described in Exhibit "4b v-A" and the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Trustees hereby authorize the Authority to adjust job commitments for the sixteen RNY Power customers identified in Exhibit "4b v-B" to the amounts indicated therein, for the reasons described in Exhibit 'B' and the foregoing report; and be it further

RESOLVED, That the Trustees hereby authorize the Authority to adjust the job commitment for the customer identified in Exhibit "4b v-C" to the amount indicted therein, for the reasons described in Exhibit "4b v-C" and the foregoing report; and be it further

RESOLVED, That the Trustees hereby authorize the Authority to adjust the job commitment for the customer identified in Exhibit "4b v-D" to the amount indicated therein, for the reasons described in Exhibit "4b v-D" and the foregoing report; and be it further

RESOLVED, That the Trustees hereby approve the reduction of RNY Power allocation and contract demand for the RNY Power customer identified in Exhibit "4b v-E" to the amount indicated therein, and authorize the Authority to adjust the job commitment and facility capital expenditure commitment for this customer to the amounts indicated in Exhibit "4b v-E," for the reasons described in Exhibit "4b v-E" and the foregoing report; and be it further

RESOLVED, That the Trustees hereby approve the reduction of the RNY Power allocation and contract demand for the RNY Power customer identified in Exhibit "4b v-F," and authorize the Authority to adjust the job commitment for this customer to the amount indicated in Exhibit "4b v-F," for the reasons described in Exhibit "4b v-F" and the foregoing report; and be it further

RESOLVED, That the Trustees hereby accept the recommendations concerning the RNY Power customers identified in Exhibit "4b v-G" for the reasons described in Exhibit "4b v-G" and the foregoing report; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

c. Procurement (Services) Contracts:

**i. Procurement (Services) Contracts –
Business Units and Facilities –
Awards, Extensions and/or Additional Funding**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve the award and funding of the multiyear procurement (services) contracts listed in Exhibit '4c i-A,' as well as the continuation and/or funding of the procurement (services) and other contracts listed in Exhibit '4c i-B,' in support of projects and programs for the Authority's Business Units/Departments and Facilities. Detailed explanations of the recommended awards and extensions, including the nature of such services, the bases for the new awards if other than to the lowest-priced, lowest total cost of ownership or 'best valued' bidders and the intended duration of such contracts, or the reasons for extension and the projected expiration dates, are set forth in the discussion below.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year.

The Authority's current Expenditure Authorization Procedures ('EAPs') require the Trustees' approval for the award of non-personal services, construction, equipment purchase or non-procurement contracts in excess of \$6 million, as well as personal services contracts in excess of \$2 million if low bidder or best value, or \$1 million if sole-source, single-source or other non-competitive award.

The Authority's current EAPs also require the Trustees' approval when the cumulative change order value of a personal services contract exceeds \$500,000, or when the cumulative change order value of a non-personal services, construction, equipment purchase, or non-procurement contract exceeds the greater of \$6 million or 25% of the originally approved contract amount not to exceed \$6 million.

DISCUSSION

Awards

The Trustees are requested to approve the award and funding of the multiyear procurement (services) contracts listed in Exhibit '4c i-A,' where the EAPs require approval based upon contract value or the terms of the contracts will be more than one year. Except as noted, all of these contracts contain provisions allowing the Authority to terminate the services for the Authority's convenience, without liability other than paying for acceptable services rendered to the effective date of termination. Approval is also requested for funding all contracts. Except as noted, these contract awards do not obligate the Authority to a specific level of personnel resources or expenditures.

The issuance of multiyear contracts is recommended from both cost and efficiency standpoints. In many cases, reduced prices can be negotiated for these long-term contracts. Since these services are typically required on a continuous basis, it is more efficient to award long-term contracts than to rebid these services annually.

Extensions

Although the firms identified in Exhibit '4c i-B' have provided effective services, the issues or projects requiring these services have not been resolved or completed and the need exists for continuing these contracts. The Trustees' approval is required because the terms of these contracts will exceed one year including the extension, the term of extension of these contracts will exceed one year and/or because the cumulative change-order limits will exceed the levels authorized by the EAPs in forthcoming change orders. The subject contracts contain provisions allowing the Authority to terminate the services at the Authority's convenience, without liability other than paying for acceptable services rendered to the effective date of termination. These contract extensions do not obligate the Authority to a specific level of personnel resources or expenditures.

Extension of the contracts identified in Exhibit '4c i-B' is requested for one or more of the following reasons: (1) additional time is required to complete the current contractual work scope or additional services related to the original work scope; (2) to accommodate an Authority or external regulatory agency schedule change that has delayed, reprioritized or otherwise suspended required services; (3) the original consultant is uniquely qualified to perform services and/or continue its presence and rebidding would not be practical or (4) the contractor provides proprietary technology or specialized equipment, at reasonable negotiated rates, that the Authority needs to continue until a permanent system is put in place.

The following is a detailed summary of each recommended contract award and extension.

Contract Awards in Support of Business Units/Departments and Facilities:

Business Services – Treasury

Due to the need to meet and maintain the Authority's project schedule, the proposed non-personal services contract (**4500310979**) with **Kyriba Corp. ('Kyriba')** for the Treasury Workstation Software and System Implementation became effective June 28, 2019, for the initial interim award amount of \$350,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The project would require the acquisition of SaaS licenses and implementation services. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Ten firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Three proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Kyriba which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$1,591,849.31.

Commercial Operations – Business & Project Development

Due to the need to meet and maintain the Authority's project schedule, the proposed personal services contract (**4500309906**) with **Submersive Media LLC ('Submersive')** for the St. Lawrence Region Digital Marketing Project became effective June 28, 2019, for the initial interim award amount of \$150,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The project would provide design, implementation and maintenance of a digital marketing program to promote economic development in the St. Lawrence County region of New York State. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Twenty-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Seven proposals were received

electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Submersive which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$500,000.

Human Resources & Administration – Recruiting

The proposed personal services contracts with **Ampcus, Inc. ('Ampcus'), Infojini, Inc. ('Infojini'), Judge Technical Services, Inc. dba Judge Technical Staffing ('Judge'), Rangam Consultants, Inc. ('Rangam') and Robert Half International, Inc. ('Robert Half') (Q18-6581JW)** would provide recruitment services for all level of positions due to the recent forthcoming retirement announcements and an emergent need for such services. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Seventy-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Twenty-nine proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to Ampcus, Infojini, Judge, Rangam and Robert Half each of which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. Each contract is for an intended term of three years with a two year option, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$1 million in the aggregate.

Human Resources & Administration – Transactional Procurement

The proposed non-personal services contract with **Auctions International, Inc. ('Auctions') (C19-001273MG)** would provide off-site Auctions Services for the sale and disposal of surplus Personal Property for both the New York Power Authority and the Canal Corporation. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Three firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. One proposal was received electronically via Ariba and was evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Auctions which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. There is no specific value associated with this award as successful bidders will remit a ten percent fee on sales of Authority consignments to Auctions. This contract will begin on August 1, 2019 and end on July 31, 2024.

Public & Regulatory Affairs – Environmental Justice & Sustainability

The proposed personal services contract with **CEC Stuyvesant Cove, Inc. dba Solar One ('CEC') (Q19-6672JGM)** would provide weatherization and energy literacy workshops for the Authority's environmental justice stakeholders. On January 30, 2019, the Trustees approved the Environmental Justice Implementation Plan (2019-2023). The Environmental Justice (EJ) team intends to enhance and expand on its current Community Energy Literacy programs and offerings to eligible EJ communities throughout the state. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Twenty-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to CEC which is technically and commercially

qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of two years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$71,000.

Public & Regulatory Affairs – Environmental Justice & Sustainability

The proposed personal services contracts with **CEC Stuyvesant Cove, Inc. dba Solar One ('CEC')**, **BioBus, Inc. dba Cell Motion Laboratories, dba BioBase ('BioBus')** and **Adelaide E. Falco dba Curious-on-Hudson LLC ('Adelaide') (Q19-6673JGM)** would provide STEM educational programming for the Authority's environmental justice stakeholders. On January 30, 2019, the Trustees approved the Environmental Justice Implementation Plan (2019-2023). The Environmental Justice (EJ) team intends to enhance and expand on its current STEM education programs to eligible EJ communities throughout the state. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Forty-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Eight proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to CEC, BioBus and Adelaide which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. Each of the contracts is for an intended term of two years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$392,000 in the aggregate.

Strategic Planning – Strategy Planning & Delivery

Due to the need to meet and maintain the Authority's project schedule, the proposed personal services contracts with **M. Arthur Gensler Jr. & Associates, Inc. ('Gensler') (4600003674)** and **The Visual Brand LLC ('Visual') (4600003675)** would provide EVolve charging station design and fabrication became effective July 8, 2019, for the initial interim award amount of \$200,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Eighty-four firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to Gensler and Visual which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$2.5 million in the aggregate.

Utility Operations – Air & Sustainability Program

The proposed sole source, non-personal services contract with **Cemtek Environmental, Inc. dba Cemtek KVB-Enertec ('CEMTEK') (4600003677)** would provide for the software support and maintenance of the Authority's Programmable Logic Controllers ('PLC's') and Continuous Emissions Monitoring Systems ('CEMS') at all SENY sites. A sole source justification memorandum is included in the Award Recommendation documents. The nature of this work is associated with proprietary software (NetDAHS Edge and CEMSpeak) and hardware (Inet PLC platform) which can only be performed by CEMTEK. The software is custom configured to specific compliance parameters and pollutant emission limits of each site according to its Title V Air Operating Permit. CEMTEK possesses complete historical records of all customization made to each individual system since installation. This maintenance contract includes both routine trouble shooting and emergency 24-hour support of these CEMS components. This

software support contract is required in order to maintain environmental compliance of the SENY sites. The contract is for an intended term of 3 years, subject to the Trustees' approval, which is hereby requested. This contract will begin on August 1, 2019 and end on July 31, 2022. Approval is also requested for the amount expected to be expended for the term of the contract, \$577,065.

Utility Operations – Electrical & Controls (SENY)

The proposed non-personal services contract with **Benfield Control Systems, Inc. ('Benfield') (A19-001252PH)** would provide Metering Cabinet Fabrication for the Charles Poletti Power Project. The metering cabinet houses the revenue meters and communication equipment for NYPA's transmission lines, generations and municipal/cooperative customers. The metering cabinets are to be installed at substations for upgrade of existing metering or new installations. These services will be performed off-site with NYPA staff supervision. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Fourteen firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Three proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Benfield which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on August 1, 2019 and end on July 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$300,000.

Utility Operations – Electrical Maintenance (NIA)

The proposed non-personal services contract with **Industrial Electrical and Technical Services, Inc. ('Industrial') (N19-20135401GJ)** would provide repair, refurbishment, recondition and remanufacture of the NPP 480VAC circuit breakers, on-site pick up, delivery and assistance on diagnosing a breaker during acceptance testing at the site. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Sixteen firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Five proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Industrial which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of three years, subject to the Trustees' approval, which is hereby requested. This contract will begin on August 1, 2019 and end on July 31, 2022. Approval is also requested for the amount expected to be expended for the term of the contract, \$750,000.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contract with **Hayes Pump, Inc. ('Hayes') (A19-001241DW)** would provide pump services and repairs for the SENY region Power Plants. Hayes will perform repairs and replace equipment as needed. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Two firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Hayes which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin

on August 1, 2019 and end on July 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contract with **Pro-Quip, Inc. ('Pro-Quip') (A19-001240DW)** would provide valve actuator services and repairs for the SENY region Power Plants. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Two firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. One proposal was received electronically via Ariba and was evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Pro-Quip which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on August 1, 2019 and end on July 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contracts with **E-J Electric Installation Co. ('E-J Electric')** and **Haugland Energy Group LLC ('Haugland') (A19-001294DW)** would provide general electrical services for the SENY region Power Plants. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Eight firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Three proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to E-J Electric and Haugland which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. Each of the contracts is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Each contract will begin on September 1, 2019 and end on August 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million in the aggregate.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contracts with **Acme Industrial, Inc. ('Acme')** and **Fresh Meadow Power LLC ('Fresh Meadow') (A19-001291DW)** would provide general maintenance services for the SENY facilities. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Nine firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Three proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to Acme and Fresh Meadow which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. Each of the contracts is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million in the aggregate.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contract with **H.O. Penn Machinery Company, Inc. ('H.O. Penn') (A19-001306DW)** would provide emergency diesel generator and equipment services for the

SENY region Power Plants. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Five firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. One proposal was received electronically via Ariba and was evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to H.O. Penn which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on January 1, 2020 and end on December 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$500,000.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contract with **RFJ Insulation Contractor, Inc. ('RFJ Insulation') (A19-001243JV)** would provide new insulation and repair existing insulation for the SENY region. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Three proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to RFJ Insulation which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on January 30, 2020 and end on January 29, 2025. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million.

Utility Operations – Maintenance Resource Management (SENY)

The proposed non-personal services contracts with **Vertical Access Solutions LLC ('Vertical')** and **York Scaffold Equipment Corp. ('York') (A19-001373DW)** would provide general scaffolding services for the Southeast New York SENY region. Vertical and York will perform repairs and replace equipment as needed. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Five firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to Vertical and York which are technically and commercially qualified and meet the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on September 1, 2019 and end on August 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$5 million in the aggregate.

Utility Operations – Project Management

The proposed equipment contract with **Midal Cables Ltd. ('Midal') (Q19-6662HM)** would provide furnishing and delivery of Aluminum Conductor Steel Reinforced ('ACSR') Conductor for the Moses-Adirondack Smart Path Reliability Project. The Moses-Adirondack Smart Path Reliability Project ('Project') will rebuild a portion of the Moses-Adirondack 1 and 2 transmission lines ('MA1 and MA2'). Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Ten firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Five proposals were received electronically via Ariba and

were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Midal which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$7,106,484. An additional \$1,208,102 is requested for managing aluminum pricing inflation risks over the five year period with a total authorization amount of \$8,314,586.

Utility Operations – Project Management

The proposed non-personal services contract with **Rotundo Plumbing Corp. ('Rotundo') (Q18-Q176337JM)** would provide on-call plumbing services for the Clarence D. Rappleyea building. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Three firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. One proposal was received electronically via Ariba and was evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to Rotundo which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on August 1, 2019 and end on July 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$375,000.

Utility Operations – Project Management

The proposed construction services contract with **O'Connell Electric Company, Inc. ('O'Connell') (Q19-6666KS)** would provide upgrades to the power circuit breakers, relays, disconnect switches, control cables and the station service equipment for the Plattsburgh Substation Breaker Replacement Project. The existing circuit breakers have reached the end of their useful life, and there are also issues with non-availability of spare parts and frequent oil leaks necessitating replacement. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Seventeen firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to O'Connell which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$3,166,430.

Utility Operations – Project Management

Due to the need to meet and maintain the Authority's project schedule, the proposed construction services contract **(4600003672)** with **TRC Engineers, Inc. ('TRC')** for the Smart Generation & Transmission (SG&T) Communication Backbone (Southeast NY) SENY Microwave Project became effective June 21, 2019, for the initial interim award amount of \$1,485,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The project would provide design, furnish, deliver, install and maintain a microwave system in the SENY region. The Communication Backbone Program (Program) is part of the Authority's Smart Generation & Transmission Initiative. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. Twenty-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Two proposals were

received electronically via Ariba and were evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contract to TRC which is technically and commercially qualified and meets the bid requirements on the basis of 'best value', which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of seven years (which includes five years of maintenance support), subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$9,504,654.42.

Utility Operations – Technology and Innovation

The proposed sole source, personal services contract with **Rensselaer Polytechnic Institute ('RPI')** would provide for the performance of research work as part of the New York Research and Development Authority ('NYSERDA') funded project (funded in the amount of \$350,000 by NYSERDA) entitled 'Deep Learning Computer System for Grid Operations'. A sole source justification memorandum is included in the Award Recommendation documents. Due to the need to commence services, **Contract # 4500310387** became effective on June 24, 2019 for the initial interim award amount of \$20,000, subject to the Trustees approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The contract is for an intended term of 18 months, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$350,000 which includes the interim request of \$20,000, noting that the NYSERDA grant referenced above will reimburse the Authority for the \$350,000 expenditure.

Utility Operations – Technology and Innovation

The proposed sole source, personal services contract with **Rensselaer Polytechnic Institute ('RPI')** would provide for the performance of research work as part of the New York Research and Development Authority ('NYSERDA') funded project (funded in the amount of \$300,000 by NYSERDA) entitled 'Model Translations for SMART Grid Applications Study'. A sole source justification memorandum is included in the Award Recommendation documents. Due to the need to commence services, **Contract # 4500310386** became effective on June 24, 2019 for the initial interim award amount of \$20,000, subject to the Trustees approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The contract is for an intended term of two years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$300,000 which includes the interim request of \$20,000, noting that the NYSERDA grant referenced above will reimburse the Authority for the \$300,000 expenditure.

Utility Operations – Technology and Innovation

The proposed sole source, personal services contract with **University of Wisconsin Madison ('UW-Madison')** would provide for the performance of research work as part of the New York State Energy Research and Development Authority ('NYSERDA') funded project (funded in the amount of \$100,000 by NYSERDA) entitled 'Low Frequency Alternating Current (LFAC) Transmission Line Study'. A sole source justification memorandum is included in the Award Recommendation documents. Due to the need to commence services, **Contract # 4500310950** became effective on July 9, 2019 for the initial interim award amount of \$7,000, subject to the Trustees approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The contract is for an intended term of 19-months, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the amount expected to be expended for the term of the contract, \$100,000 which includes the interim request of \$7,000, noting that the NYSERDA grant referenced above will reimburse the Authority for the \$100,000 expenditure.

Extensions and/or Additional Funding Requests:

Information Technology – Application Development

On July 15, 2015 the Trustees approved the original awards for advisory and consulting services, system integration and implementation services, end-to-end consulting services and turnkey solutions associated with the Authority's SAP Enterprise Resource Management ('ERM') system to **A-1 Technology, Inc. (4600002996), Ernst & Young U.S. LLP (4600002987), Grom Associates, Inc. (4600002997), Gyansys, Inc. (4600003004), Hewlett Packard Enterprise Company (4600002998), NTT Data, Inc. (4600002999), Quintel-MC, Incorporated (4600003000), Sage Group Consulting, Inc. (4600003001), Sierra Infosys, Inc. (4600003002) and Utegration LLC (4600003003)** in the aggregate amount of \$10.5 million for a term of up to three years. Subsequently, additional funding of \$15 million was approved by the Trustees at their December 15, 2016 meeting bringing the total aggregate contract value to \$25.5 million. The contracts were extended by management in accordance with the Guidelines for Procurement Contracts and EAPs through June 30, 2019. To date, \$23,842,619.69 has been issued via Purchase Order Releases. Management has authorized an interim extension from July 1, 2019 through July 30, 2019 pending Trustee approval and further requests for Trustee approval for the extension of the contracts through June 30, 2020 as this will support the continued need and demand for these services while affording time for preparations to be made to go out to bid for future requirements. No additional funding is being requested. A-1 Technology is a certified NYS Minority Business Enterprise.

Law – Legal Services

The **Hinckley, Allen & Snyder LLP ('Hinckley') (PO# 4500300827)** law firm provides legal representation to the Authority in connection with a federal government investigation. The matter continues and the representation needs to be extended. This contract was effective as of August 29, 2018 for a term of one year with an approved amount of \$50,000. The Trustees are requested to approve a two-year extension through August 28, 2021 with no additional funding requested at this time.

Law – Legal Services

The **Covington & Burling LLP ('Covington') (PO# 4500304105)** law firm provides legal representation to the Authority in connection with a review in the U.S. Court of Appeals for the District of Columbia of the U.S. Environmental Protection Agency's Mid-term Evaluation of Greenhouse Gas Emissions Standards. The matter continues and the representation needs to be extended. The Authority is sharing the cost of the representation with three other electric power companies. This contract was effective as of August 1, 2018 for a term of one year with an approved amount of \$25,000. The Trustees are requested to approve a two-year extension through July 31, 2021 with no additional funding requested at this time.

Utility Operations – Project Management

The contract with **Gensler Architecture / Design, Inc. ('Gensler') (4500300595)** provides for review of the layout and architectural aesthetics of the Authority's headquarters site, the White Plains Office ('WPO'), as part of its overall WPO Life Extension and Modernization ('LEM') Program and also provides Engineer / Architect of Record services for the WPO 15th Floor Refresh Construction Project. Gensler was awarded the subject contract, effective July 9, 2018, in the amount of \$507,575 to study the overall building stacking, design a typical workspace concept that matches the Authority's goal of becoming a more agile workspace and create schematic level designs for several specific projects. Subsequent change orders issued in accordance with the Authority's EAPs increased the value of the contract by \$126,680 to \$634,255 and extended the time of the contract to one-year, ending on July 8, 2019. To ensure Gensler can fulfill their responsibilities wherein accurate as-built submittals will be received and reviewed/accepted by their staff, management requests the Trustees approval for a contract

extension for the interim period from July 9, 2019 to July 30, 2019 and an additional full extension through December 31, 2019. No additional funding is being requested.

FISCAL INFORMATION

Funds required to support contract services for various Business Units/Departments and Facilities have been included in the 2019 Approved Operating or Capital Budget. Funds for subsequent years, where applicable, will be included in the budget submittals for those years. Payment will be made from the Operating or Capital Fund, as applicable.

Funds required to support contract services for capital projects have been included as part of the approved capital expenditures for those projects and will be disbursed from the Capital Fund in accordance with the project's Capital Expenditure Authorization Request, as applicable.

RECOMMENDATION

The Senior Vice President – Operations Support Services and Chief Engineer; the Senior Vice President – Power Supply; the Senior Vice President – Public & Regulatory Affairs; the Vice President – Project Management; the Senior Vice President – Technology & Innovation; the Senior Vice President – Financial Operations & Acting CFO; the Vice President – Environmental Justice & Sustainability; the Vice President – Engineering; the Vice President – Strategy; the Vice President – HR & Organizational Development; the Vice President – Economic Development; the Regional Manager SENY; the Regional Manager Western NY; Director Transactional Procurement; recommend that the Trustees approve the award of multiyear procurement (services) and other contracts to the companies listed in Exhibit '4c i-A' and the extension and/or funding of the procurement (services) contracts listed in Exhibit '4c i-B,' for the purposes and in the amounts discussed within the item and/or listed in the respective exhibits.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was adopted with Trustee Kress being recused as it relates to O'Connell Electric Company, Inc.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, the award and funding of the multiyear procurement services contracts set forth in Exhibit "4c i-A," attached hereto, are hereby approved for the period of time indicated, in the amounts and for the purposes listed therein, as recommended in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, the contracts listed in Exhibit "4c i-B," attached hereto, are hereby approved and extended for the period of time indicated, in the amounts and for the purposes listed therein, as recommended in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions

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and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

ii. **Procurement (Services) Contracts –
Membership in Electric Power Research Institute**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to authorize the Authority's membership in the Electric Power Research Institute ('EPRI') effective January 1, 2020 for a five-year term. While the current membership term does not expire until December 31, 2019, authorization is being sought at this time to enable the Authority to participate in certain multi-year supplemental EPRI projects commencing during calendar year 2019. The membership dues for this five-year agreement are \$3 million dollars in year one with escalation in each subsequent year.

BACKGROUND

EPRI is a non-profit corporation organized to promote, conduct and sponsor scientific research, development and demonstration relating to the generation, delivery and use of electricity for the benefit of the public. It is considered the premier electric utility research organization, bringing together scientists and engineers, as well as experts, from academia and the industry to help address challenges in electricity.

EPRI's current worldwide membership base in excess of 1,000 organizations consists of electric utilities, government agencies, corporations and other energy enterprise organizations that are engaged in some aspect of the generation, delivery or use of electricity. EPRI's large membership enables its members to collaboratively support and leverage a broad array of large-scale research and demonstration projects of mutual interest, some of which could not be funded by an individual entity.

The EPRI organization is aligned with various segments of the electric market in developing technologies, information and methods related to generation, delivery and use of electricity, with special attention to cost reduction, cost-effectiveness, environmental concerns and customer retention. Its programs are planned, developed and implemented by market segments guided by an Industry Committee Structure consisting of member representatives selected for expertise in their particular fields.

DISCUSSION

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees approval for procurement contracts involving services to be rendered for a period in excess of one year. The Authority's Expenditure Authorization Procedures for non-personal services contracts in excess of \$6,000,000 requires the Trustees' approval.

The Authority has been a member of EPRI since July 1, 1987. The Authority's Chief Executive Officer served as chairman of the EPRI Board and the Authority is represented at all levels of the EPRI advisory structure -- the Research Advisory Council, the Generation, Power Delivery and Utilization, and Energy and Environmental Councils, including their associated work groups.

EPRI members realize the value of their membership through successful applications of the more than 1,200 research products annually that range from white papers, project updates and newsletters, to comprehensive reports, field guides and software that inform its members and the public on their efforts to help shape the future of electricity. EPRI's portfolio of research programs is defined and guided by advisors from both industry and public stakeholders.

The Authority derives benefit from using EPRI's products and services by participation in a research program that affords the Authority a degree of control over the nature and scope of a

particular research project within the program; through participation in supplemental projects; and from an EPRI platform that allows direct access to member utilities facing similar technology challenges. Financial benefit is derived from a co-funding program where a group of interested utilities fund a program or project allowing the contributing members access to the results generated for a fraction of the cost had the program or project been funded independently.

Over the duration of the current contract, the Authority has been effective in obtaining several million dollars of EPRI co-funding for projects of interest to the Authority and has worked or is working closely with EPRI to develop and implement technologies at the Authority's facilities. Examples include the AGILE Lab, support for implementing the integrated system operating center ('iSOC'), auto tuning, combined cycle performance, gas turbine catalyst remaining life assessment and Desuperheater Performance Tuning and Optimization for the 500MW Plant, transformer sensors for Niagara, a corrosion tool for Transmission, a sustainable and holistic integration of energy storage and PV for CUNY Queens, a New York State Electrification Study, a study of the impact of electromagnetic pulse, algorithms for utility infrared inspection and monitoring in substations, population assessment of porcelain insulators, substation on-line monitor evaluation transformer sensor suite and unmanned aircraft systems for storm response.

Membership dues are collected by EPRI based on a formula that takes into account generation assets and transmission system peak capacity in MW. Membership dues are pooled by EPRI to fund research, development and demonstration programs. Members may access programs in the annual research portfolio and/or select specific EPRI programs or projects for participation. A portion of the membership dues is allocated to focus on longer-term research opportunities, and to look for breakthrough technologies and innovations that can be applied in the electricity industry.

EPRI allows its members to set aside 25 percent of their membership dues for participation in supplemental research projects with other member utilities. These 'Tailored Collaboration' ('TC') funds enable the Authority to design or join projects that address specific research priorities. Such projects are approved by the Trustees as part of the Authority's annual budget process. In the past, the Authority has participated in numerous EPRI collaborative projects through the use of its TC funds. Since the existing five-year membership contract with EPRI will expire on December 31, 2019, and new supplemental projects need to be initiated that will carry past this date, early approval of a new five-year membership contract is being requested. This will ensure that a contract is in place for the entire length of these projects. Examples of projects of interest that will be initiated under the current EPRI contract that will carry into the new EPRI contract are managing the Advanced Grid Innovation Lab, solar forecasting, and the Physical Security – Transmission project. Under the current EPRI membership contract, expiring on December 31, 2019, the Authority would be unable to enter into a contract for these projects because they extend past the current contract expiration date.

On an annual basis, the Authority's Research and Development Department works closely with other departments to target EPRI programs from which the Authority and its customers would derive benefits from EPRI products and services. For 2019, staff selected approximately 42 programs in the areas of power generation, transmission, environment, distributed energy resources, electric transportation, energy storage, information and communication technologies, cyber security, and end-use customer energy efficiency. The 5% increase in the request, over the previous Trustee approved amount is based on previous annual increases and EPRI projections over the life of the new agreement.

FISCAL INFORMATION

Funds required for the Authority's 2020 EPRI membership will be included in the 2020 O&M Budget Plan. Dues associated with future years will be included in the budget submittals for those years. Payments will be made from the Operating Fund.

RECOMMENDATION

The Senior Vice President – Technology and Innovation and the Senior Director – Research, Technology Development and Innovation recommend that the Trustees authorize the President and Chief Executive Officer to enter into a five-year extension of the Authority’s existing membership in the Electric Power Research Institute effective January 1, 2020 at a cost of \$3 million dollars in year one with escalation in each subsequent year.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Mr. Joseph Kessler, Chief Operations Officer, provided highlights of staff’s recommendation to the Board. He said that EPRI was formed after the blackout in 1965 and became effective in the early 1970s. NYPA has been a member of EPRI for about three decades. He continued that EPRI is a collaboration of a number of utilities. With this collaboration, NYPA is able to leverage its R&D dollars by participating with a number of different industry leaders in research of common interest. As part of that membership, NYPA is able to focus its research dollars into key focus areas of the industry, share knowledge, and get the aggregate benefit of all of EPRI’s researches. NYPA also requires participation by its staff members on EPRI’s advisory committees or research sectors.

Examples of the benefit to NYPA, from a programmatic standpoint, is the historic static compensator at Clark Energy Center. That investment was based on research NYPA did with EPRI; NYPA was able to capture, without additional transmission investments, and working on some power electronics in its Utica facility, in real life, some value from the transmission constraints in the system. That investment for NYPA was about a \$54 million, and, to date, NYPA has realized over \$124 million of those costs for the benefit of the organization. A more recent example is NYPA’s iSOC, having some of the smart R&D information come in through its iSOC.

In addition, NYPA saved about \$20 million in deferred maintenance and changes in the way it operates; EPRI has been a big collaborator on some of the analytics associated with those savings. He ended by saying that the return NYPA gets from being a member of EPRI far exceeds the investment.

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority’s Expenditure Authorization Procedures, the Trustees hereby authorize the President and Chief Executive Officer, or such officer designated by the President and Chief Executive Officer, to execute a five-year extension of the Authority’s existing membership agreement in the Electric Power Research Institute (“EPRI”) effective January 1, 2020, in the amounts and for the purpose listed below:

<u>Operating Fund</u>	<u>Expenditure Approval</u>
Electric Power Research Institute	\$3.00 million – 2020
	\$3.25 million – 2021
	\$3.50 million – 2022
	\$3.75 million – 2023
	<u>\$4.00 million – 2024</u>
TOTAL	<u>\$17.50 million</u>

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

iii. **Procurement (Services) Contract – Technical, Operational and Management Consulting Services**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Board of Trustees’ concurrence/approval is requested to award five-year personal services contracts for Technical, Operational, and Management Consulting Services for an amount not-to-exceed \$6 million per year to eleven qualified firms as follows:

- (1) Accenture Consulting of New York, NY
- (2) Customer Care Network, Inc. of Marietta, GA
- (3) BuroHappold Engineering of New York, NY
- (4) Deloitte Consulting LLP of New York, NY
- (5) Ernst & Young LLP of New York, NY
- (6) K&L Engineering Consulting, P.C. of White Plains, NY
- (7) Navigant Consulting, Inc. of New York, NY
- (8) PA Consulting Group, Inc. of New York, NY
- (9) Pragmaticus LLC of Long Valley, NJ
- (10) McKinsey & Company of Washington, DC
- (11) PriceWaterhouseCoopers Advisory Services LLC of New York, NY

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority’s Guidelines for Procurement Contracts require the Trustees’ approval for procurement contracts involving services to be rendered for a period in excess of one year. Additionally, in accordance with the Authority’s Expenditure Authorization Procedures, the award of non-personal services contracts exceeding \$6 million requires the Trustees’ approval.

The Authority issued a Request for Proposal (‘RFP’) for Technical, Operational and Management Consulting Services. The scope of services outlined in the RFP encompasses the wide range of functions, which includes, but is not limited to, strategic planning process; digital strategy refresh, project/program development and management support, strategic risk management support, performance reporting and metrics, sustainability and regulatory impact and organizational improvements. Qualified firms are those with a broad range of consulting expertise and experience in the electric utility and energy industries.

In addition, NYPA’s Digital Utility Strategic Plan aims to position NYPA as an integral and valuable part of the future electric system. The Plan will support NYPA’s customers through the following five goals:

- The first end-to-end digital utility in the United States.
- The market leader for both energy efficiency and grid-scale / behind the meter renewable energy services.

- Offering the best deal in electric supply and electricity commodity management for NYPA's supply customers.
- Having the most impactful transmission and large-scale renewable projects either deployed or in active development.
- Striving to be the most innovative and active service provider in the fields of energy storage and electric vehicle infrastructure.

Building, developing and executing a digital strategy will require NYPA to make strategic decisions around technology, software, IT infrastructure, data, processes and organizational design that will allow NYPA to extract the value of digitization to further its strategic imperatives and meet customer needs.

DISCUSSION

In response to the RFP advertised in the *NYS Contract Reporter* on February 19, 2019 (RFQ Q19-6639JW), the Authority received twenty-three proposals on April 17, 2019 from the following firms:

1. Accenture Consulting
2. Archer Energy Solutions, LLC
3. BuroHappold Engineering
4. Customer Care Network, Inc.
5. Dalberg Advisors
6. Daymark Energy Advisors
7. Delane Staffing LLC
8. Deloitte Consulting LLP
9. Ernst & Young LLP
10. FTI Consulting, Inc.
11. Gartner, Inc.
12. Innogy Consulting US LLC
13. K&L Engineering Consulting PC
14. M. J. Beck Consulting LLC
15. McKinsey & Company
16. Navigant Consulting, Inc.
17. PA Consulting Group, Inc.
18. Portfolio Projects
19. Pragmaticus LLC
20. PriceWaterhouseCoopers LLP
21. Spruce Technology Inc.
22. The Visual Brand LLC
23. West Monroe Partners, LLC

Bids were reviewed by an Evaluation Committee, which was comprised of Authority staff representing Strategic Supply Management (J. Wylie), Digital Transformation Office (A. Mohammed), Commercial Operations (S. Salati, S. Louie), Legal (J. Driscoll), Strategy (D. McMahon), Human Resources and Administration (K. Pizzo), Utility Operations (C. Geiger-Wank, S. Rojas) and Enterprise Risk Management (T. Spencer). The proposals were evaluated on the following criteria:

- Responsiveness and understanding of the scope-of-work;
- Composition of the bidder's team (breadth, depth, experience, and expertise);
- The ability of the bidder's team to compensate for the work and meet deadlines, often on an abbreviated schedule;
- Overall quality and clarity of examples of previous experience provided by the bidder.
- Rate structure;

- Past performance with the Authority; and
- Exceptions to the Authority's Terms & Conditions (T&C).

Since the work requires a high level of experience to provide the services as described in the scope-of-work, bidders were evaluated based on their understanding of the work as well as their ability to provide services based on:

- Expertise in electric utility sector management consulting;
- Expertise in development and facilitation of strategic planning process;
- Demonstrated success in strategic planning and implementation;
- Expertise in sustainability, including benchmarking performance across utility operations;
- Succession planning studies and guidance;
- Experience in analyzing organizational charts and identifying optimal organization scenarios;
- Ability to complete industry benchmarking studies that compare organization or project planning at the client organization to its peers and competitors; and
- Ability to summarize, report, and/or present findings and recommendations to key management in various Authority business units.

Since many of the firms can provide similar expertise, the selection process focused on creating a balanced stable of firms that, in aggregate, can provide high quality, best practice consulting in a broad range of engagements and continuation of services on various strategic initiatives. The evaluation team identified the following eleven firms that possess the required skills and expertise to provide the necessary services for NYPA and Canals:

1. Accenture Consulting
2. BuroHappold Engineering
3. Customer Care Network, Inc.
4. Deloitte Consulting LLP
5. Ernst & Young LLP
6. K&L Engineering Consulting PC
7. McKinsey & Company
8. Navigant Consulting, Inc.
9. PA Consulting Group, Inc.
10. Pragmaticus LLC
11. PriceWaterhouseCoopers Advisory Services LLC

The proposed firms have committed to meet M/WBE requirements. All terms, conditions, and blended rates have been fully negotiated, resulting in an estimated savings of approximately \$9 million or 30%, thus enabling the Authority to pursue additional projects within the projected total contract value.

The following firms were not selected due to a higher rate structure (Innogy Consulting US LLC, Dalberg Advisors, FTI Consulting, Gartner Inc., West Monroe, Delane); lack of understanding of the scope-of-work and past performance (The Virtual Brand, Spruce Technology, Archer Energy Solutions LLC, Portfolio Projects, Innogy Consulting, FTI Consulting, Delane Staffing, Daymark Energy Advisors and M. J. Beck Consulting LLC).

FISCAL INFORMATION

Services under these contracts will be provided on an as-needed basis and/or availability, using the hourly rates. Payments associated with this project will be made from the Authority's Capital or Operations Fund, as appropriate.

RECOMMENDATION

The Vice President – Digital Transformation Office and Chief of Staff, the Assistant General Counsel, and the Vice President of Strategic Supply Management recommend that the Trustees approve awards of five-year contracts for Technical, Operational and Management Consulting Services for an amount not-to-exceed \$6 million per year to the following firms: (1) Accenture Consulting of New York, NY; (2) Customer Care Network, Inc. of Marietta, GA; (3) BuroHappold Engineering of New York, NY; (4) Deloitte Consulting LLP of New York, NY; (5) Ernst & Young LLP of New York, NY; (6) K&L Engineering Consulting, P.C. of White Plains, NY; (7) Navigant Consulting, Inc. of New York, NY; (8) PA Consulting Group, Inc. of New York, NY; (9) Pragmaticus LLC of Long Valley, NJ; (10) McKinsey & Company of Washington, DC; and (11) PriceWaterhouseCoopers Advisory Services LLC of New York, NY.

For the reasons stated, I recommend the approval of the above-requested action by the adoption of the resolution below.”

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority’s Expenditure Authorization Procedures, approval is hereby granted to award five-year contracts for an amount not-to-exceed \$6 million per year for a period of five years to Accenture Consulting of New York, NY; Customer Care Network, Inc. of Marietta, GA; BuroHappold Engineering of New York, NY; Deloitte Consulting LLP of New York, NY; Ernst & Young LLP of New York, NY; K&L Engineering Consulting, P.C. of White Plains, NY; Navigant Consulting, Inc. of New York, NY; PA Consulting Group, Inc. of New York, NY; Pragmaticus LLC of Long Valley, NJ; McKinsey & Company of Washington, DC; and PriceWaterhouseCoopers Advisory Services LLC of New York, NY, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Amount</u> <u>\$30 million</u> aggregate
Accenture Consulting	New York, NY	
Customer Care Network	Marietta, GA	
BuroHappold Engineering	New York, NY	
Deloitte Consulting LLP	New York, NY	
Ernst & Young LLP	New York, NY	
K&L Engineering Consulting, P.C.	White Plains, NY	
Navigant Consulting, Inc.	New York, NY	
PA Consulting Group, Inc.	New York, NY	
Pragmaticus LLC	Long Valley, NJ	
McKinsey & Company	Washington, DC	
PriceWaterhouseCoopers Advisory Services LLC	New York, NY	

(Q19-6639JW)

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

d. Real Estate

**i. Agreement with Tenant to Vacate Leased
Office Space – Clarence D. Rappleyea Office
Building – Assured Partners North East, LLC**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to authorize the negotiation and execution of an agreement for the early termination of an existing lease for approximately 21,372 square-feet of office space on the fourteenth floor of the Clarence D. Rappleyea Building ('Rappleyea Building') between the Authority, as Landlord, and Assured Partners North East, LLC ('Assured Partners'), as tenant.

BACKGROUND

The Authority entered into a lease in 2003 with Assured Partner's predecessor, Assured SKCG, Inc. f/k/a SKCG Group, Inc., for approximately 19,000 square-feet. A new lease was entered into on September 1, 2012, at which time the premises were increased to 21,372 square-feet, and further amended on May 25, 2018 to add an additional 3,000 square-feet. The tenant has not yet taken possession of the space identified in the 2018 amendment. Recently, Assured Partners approached the Authority's Legal Department to propose an early termination of the lease in exchange for payment of \$500,000. After negotiation, this number was reduced to \$350,000. Acceptance of this proposal would help alleviate a significant workspace shortage, provide flexibility for relocating staff during the impending WPO garage LEM project and reduce long-term costs related to leasing to third parties.

DISCUSSION

Over the past several years, as internal staffing needs have grown, the Authority has elected not to renew the leases of existing third-party tenants. At present, there are only a few third-party tenants remaining in the Rappleyea building, of which Assured Partners is the largest. It is anticipated that the number of Authority employees based in White Plains will continue to increase and available space in the Rappleyea building is likely to be insufficient to meet this growing need. Reacquiring Assured Partner's space would greatly alleviate this shortage of space.

Assured Partners' current lease was executed in 2012, at a time when the Downtown White Plains leasing market was weak and the corporate policy emphasized securing tenants to fill vacant office space in the Rappleyea building. After accounting for broker's commissions, the costs of building out the space, and the relatively low parking rate paid by the tenant, the financial benefit to the Authority over the remaining term and any renewals is negligible.

Additionally, the impending reconstruction of the parking garage will create significant noise and disruption, particularly among those employees whose workstations face the parking garage. NYPA Facilities Department and Real Estate staff were tasked with identifying potential off-site space to relocate affected employees during construction. The preferred option was a 32,500 square-foot suite with a base annual rental of \$731,250, not including start-up costs, staff relocation costs, on-going support costs, etc. Taking back Assured Partners' space would alleviate the need for acquiring off-site space during the garage project. It would also make the upcoming restack project significantly easier to manage and might reduce or eliminate the need for additional off-site swing space in the future.

As the building garage will be closed during the upcoming LEM project, the Authority is obligated under the terms of the lease to provide off-site parking for the tenant and to cover any added cost over the tenant's contractual obligations. The City of White Plains' Lexington-Grove East garage was identified as the preferred location. Parking at this garage costs \$115 per month per parking space.

Assured Partners currently pays \$50 per month per parking space, so the Authority would be required to cover the \$65 per month shortfall on their 84 parking spaces for the duration of the project. This would cost an additional \$65,520 per year. If Assured Partners vacates, the Authority would save that sum and regain the use of 84 additional parking spaces, which are much needed as a result of increased staffing numbers.

FISCAL INFORMATION

It is expected that waiver of rent and other charges between the date of execution and the date that the tenant vacates the building would cover much of the cost of this Agreement. Any balance would be paid from the Authority's Operating Fund.

RECOMMENDATION

The Vice President – Enterprise Shared Services recommends that the Trustees authorize staff to negotiate and enter into an Agreement with Assured Partners North East, LLC for the early termination of their lease, along the general terms as set forth herein, of office space on the fourteenth floor of the Clarence D. Rappleyea Building.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the President and Chief Executive Officer and the Vice President – Enterprise Shared Services be, and hereby are, authorized to negotiate and execute an agreement for the early termination of an existing lease of office space with Assured Partners North East, LLC, on substantially the terms set forth herein, subject to the approval of the agreement documents by the Executive Vice President and General Counsel, or his designee; and be it further

RESOLVED, That the Vice President – Enterprise Shared Services, or designee, is hereby authorized to execute any and all other agreements, papers or instruments on behalf of the Authority that may be deemed necessary or desirable to carry out the foregoing, subject to the approval by the Executive Vice President and General Counsel; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

e. Canal Corporation

**i. Procurement (Services) Contract –
Newark Military Run Culvert to the
Village of Newark – Contract Extension**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Board of Directors ('Board') is requested to approve the extension of Contract No. 4400002504, Newark Military Run Culvert to the Village of Newark, from July 31, 2019 to December 31, 2019, for continuation of services for the construction of a portion of the culvert under West Union Street (NY Route 31) in the Village of Newark. The extension requires no additional funding.

In accordance with the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures ('EAPs'), the Board's approval is required when the award of contracts and/or purchase order releases exceeds one year in term or the value of such contracts exceeds \$6,000,000.

BACKGROUND

The subject agreement was approved on May 11, 2018, for a twelve-month term from August 1, 2018 to July 31, 2019. The completion of the Canal portion of the project is dependent on the Village's portion of the project due to the two projects being grouped together.

DISCUSSION

The determination to delay the work schedule was made to allow work to be performed during the summer months, after school buses were off the road, extending the project end date to December 31, 2019 at which time the construction of the Canal portion will be performed.

FISCAL INFORMATION

The extension requires no additional funding. All associated project expenditures will be paid from the Canal Corporation's capital fund, as appropriate.

RECOMMENDATION

The Director of Policy & Program Development and the Deputy Director recommends the extension of the Newark Military Run Project for an additional five months to December 31, 2019. No additional funding is required.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures, approval is hereby granted to extend Contract No. 4400002504, Newark Military Run Culvert to Village of Newark, from July 31, 2019 to December 31, 2019 for continuation of services for the construction of a portion of the culvert under West Union Street (NY Route

31) in the Village of Newark, as recommended in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, and all other officers of the Canal Corporation are, and each of them hereby is, authorized on behalf of the Canal Corporation to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

5. DISCUSSION AGENDA:

a. Strategic Initiatives

i. President and Chief Executive Officer's Report

President Quiniones provided highlights of the Authority's performance, to date, (Exhibit "5a i-A") to the Board.

NYPA's Overall Performance – May 2019

President Quiniones said that to date, NYPA is meeting or exceeding its key performance targets and indications are that the Authority is trending towards having a good year. He said Mr. Lee Garza will provide the Board with more details on the Authority's financial performance; Mr. Joseph Kessler on the operational performance and Ms. Sarah Salati on the commercial aspects of the Performance Scorecard.

President Quiniones then reported on two important legislations, with regard to the New York Power Authority, that were passed in the last legislative session:

1. NYPA's Expanded Authority

For the first time, the scope of NYPA's legal Authority has been expanded in the following four areas:

- i. The Authority can develop offshore wind generation projects in U.S. waters, i.e. NYPA now has the legal authority to build transmission lines beyond New York waters, basically, into federal waters.
- ii. Statewide authorization to supply the power needs of NYPA customers, public entities and Community Choice aggregators (CCAs). That is, NYPA can supply electricity to all government buildings, not only New York City and Westchester County, but all government buildings across the state – counties, cities, and villages – thus increasing the Authority's ability to provide low-cost and renewable power to public buildings across the state.

Community Choice Aggregators are communities that band together to buy their own green power; NYPA can now supply power to those customers.

- iii. Finance the development of renewable energy generation facilities for use by NYPA's customers, public entities and CCA's.

NYPA can now provide debt financing for renewables – large-scale renewables and distributed or smaller-scale renewables.

- iv. Design, finance, construct, install, operate and maintain Electric Vehicle ("EV") charging stations for use by the public.

Electric vehicle and mobility is one of the Authority's Moonshots. In the past, the Authority could only build charging stations at public facilities. NYPA now has the authority to build charging stations at both public and private facilities across the state. NYPA placed fast chargers between 50 and 70 miles of the state's highway corridors. Now, NYPA has more options to place those fast charging stations across New York State.

2. Climate and Clean Energy Legislation

The Climate Leadership and Community Protection Act (“CLCPA”) was also passed in the last Legislative session. The governor introduced a sweeping energy and environmental bill as part of his budget, which was negotiated with the legislature, and they created the CLCPA.

This important legislation states that New York State will have:

- i. 70 percent of its electricity supply produced by renewable energy by 2030;
- ii. 100 percent carbon-free electricity, i.e. electricity will be produced from carbon-free fuel by 2040; and
- iii. 100 percent or Net Zero Greenhouse gas emissions economy-wide by 2050.

Other State goal targets include:

- 9 gigawatts or 9,000 megawatts of offshore wind by 2035 off the coast of Long Island and New York City;
- 6 gigawatts or 6,000 megawatts of distributed solar by 2025;
- 3 gigawatts or 3,000 megawatts of energy storage by 2030; and
- A very aggressive energy efficiency goal of reducing energy consumption in the State by 185 trillion BTU by 2025.

These goals are significant because they are nation leading. Under the Governor's leadership, New York State is leading in this endeavor and now has the most aggressive and progressive goals for combatting climate change.

The legislation stipulated the formation of Councils, working groups and committees to operationalize the goals and NYPA is a member of two of those statutory committees and councils. In addition, these goals are aligned with NYPA's strategy, and this will create the environment for NYPA to be able to execute on its new, NYPA 2030 Strategy.

The next step is for NYPA to finalize the 2030 strategy, the first version of which will be available for the Board's review in the fall.

President Quiniones ended by saying that the Authority's assets (transmission system / construction projects) are performing well in terms of their budget and schedule. NYPA will continue to execute its strategy focusing on its day-to-day operations and make sure that it provides safe and reliable power to the State of New York.

b. Financial Operations

i. Chief Financial Officer's Report

Mr. Lee Garza, Senior Vice President of Financial Operations, provided highlights of the Authority's financial performance, to date, to the Board (Exhibit "5b i-A").

May 2019 Year-to-Date Net Income

Net income to May was 45.7 million. This is 22.8 million higher than budgeted. This positive variance was driven by \$21.3 million in lower Generation Margins and more than offset by \$25 million in lower Operating Expenses and \$19.1 million in lower net Interest Expenses.

Year-to-date performance

Generation Margins / Transmission Margins / Non-Utility Margins

The negative Generation Margin variances driven by lower than budgeted energy and capacity prices, which exceeded the effect of the Authority's greater-than-budgeted hydro generation, was also tempered by favorable variances in hedge settlements and fuel monetization and NYPA's fossil fleet. This negative variance in generation is expected to reverse by the year's end.

Operating Expenses

The \$25 million positive Operating Expense variance is driven by the timing of spending for several large projects at the Niagara and St. Lawrence Plants, including the Niagara Gorge Corridor Project, inspection of the conduit intake tubes at Niagara, and concrete surface rehabilitation at St. Lawrence. In addition, there has been some lower site maintenance O&M at the Zeltmann Plant. The Authority also expects these variances to reverse by the year's end.

Interest Expense

The \$19.1 million positive Net Interest Expense variance is driven by three factors, namely, mark-to-market gains on the Authority's substantial investment portfolio due to lower interest rates; postponement of debt issuances that had originally been scheduled to fund capital investments that the Authority can further postpone issuing, so that it would not have those negative expenses associated with having to pay interest; and lower interest rates and lower outstanding borrowings on the Authority's Commercial Paper Program.

Full-Year Forecasted Net Income

For the full year's forecast, the Authority expects Net Income to be \$38.3 million. The positive variance to the budget is driven by \$17.9 million in lower Net Interest Expense, \$6.7 million in higher Non-Utility Margins, \$6.1 million in higher Transmission Margins and \$2.6 million positive variance and nominal positive variance in Margin Generations. This is offset by \$15.9 million negative variance in Operating Expenses.

The positive Net Interest Expense variance is due to the same three factors previously mentioned. The Authority continues to see favorable variances being generated on its investment portfolio due to lower interest rates, lower than budgeted interest expenses, and lower outstanding borrowings on its Commercial Paper. All of those benefits are expected to continue throughout the year and, therefore, are deemed to be sustainable.

Operating Expenses – the \$15.9 million negative variances are primarily driven by an increase in Post-Employment Benefit Expenses as well as increased site O&M expenses. This fully reflects the reversal of

some of the expenses at the first half of the year that had not occurred, in addition to some incremental post-employment benefits that the Authority is now foreseeing.

The Authority foresees positive Non-Utility Margins, and these are driven by higher-than-budgeted customer energy solution revenues and, in a very large part, attributable to an increase in the financial performance of the Authority's Energy Efficiency business.

Transmission Margins – the \$6 million positive variance in Transmission Margins is associated with higher margins from the Authority's Hudson Transmission Project and the implementation of NYPA's annual transmission revenue requirement that goes into effect mid-year, July 1st.

c. Commercial Operations

i. Chief Commercial Officer's Report

Ms. Sarah Salati, Executive Vice President and Chief Commercial Officer, provided highlights of the Commercial Operations' year-to-date activities to the Board (Exhibit "5c i-A").

Wholesale

- Customer Usage performance is on target
- Generation is higher than anticipated by 6 percent year-to-date through May.
- Electricity prices are 21 percent lower than the budget set for Q4.
- Fuel Prices are 22% lower than the target; and
- Merchant Gross Margin is slightly below budget. However, it will remain within the probabilistic range that the Authority set forth in the beginning of the year.

Economic Development

ReCharge New York Power / Capital Commitments

Mr. Keith Hayes will report on the Authority's Economic Development Program and the effectiveness of the program in terms of the retention of jobs and the commitment of Capital across the state. In addition, he will provide an outline on the items for the Board's approval.

Energy Efficiency

Customer Investments

The Authority is ahead of schedule in terms of the budget as it relates to customer investments and the fees that the Authority secure off those investments relative to timing. Expenses are slightly off, due to some one-time nonrecurring charges.

Commercial Operations recently completed a reorganization in the Clean Energy Solutions business and is beginning to see results from that reorganization.

Non-Utility Revenues is within the target.

Operating Expenses is 6% lower than the target.

Offshore Wind

Governor Cuomo established the 2035 target of 9 gigawatts of offshore wind power. In addition, the Governor announced recently the procurement of approximately 1,700 megawatts of offshore wind, the largest renewable procurement by any State.

NYP&A is playing its role in supporting the State in reaching those objectives with its minority partnership with Orsted and Eversource Energy in the construction of one of the two projects that were awarded – the Sunrise Wind Project.

The Sunrise Wind Project is an 880-megawatt power plant connecting into Long Island. The anticipated commercial operation date is in 2024; it is anticipated that construction will start in 2022. Staff will come back to the Board for specific approval with regard to the investments that will be required as the project progresses and the agreements with Bay State Wind, Orsted, and Eversource are completed.

This is a great example of public/private partnerships with the private sector leading. NYPA is capitalizing on its transmission expertise, supporting the overarching renewable goals.

1. Recharge New York Power Allocations

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Trustees are requested to:

1. award allocations of Recharge New York ('RNY') Power available for 'retention' purposes to the businesses listed in Exhibit '5c i-1-A' in the amounts indicated on Exhibit '5c i-1-A';
2. award allocations of RNY Power available for 'expansion' purposes to the businesses listed in Exhibit '5c i-1-B' in the amounts indicated on Exhibit '5c i-1-B'; and
3. award allocations of RNY Power available for eligible small businesses and/or not-for-profit corporations to the entities listed in Exhibit '5c i-1-C' in the amounts indicated on Exhibit '5c i-1-C.'

These actions have been recommended by the Economic Development Power Allocation Board ('EDPAB') at its July 16, 2019 meeting.

BACKGROUND

On April 14, 2011, Governor Andrew M. Cuomo signed into law the RNY Power Program as part of Chapter 60 (Part CC) of the Laws of 2011 ('Chapter 60'). The program makes available 910 megawatts ('MW') of 'RNY Power,' 50% of which will be provided by the Authority's hydropower resources and 50% of which will be procured by the Authority from other sources. RNY Power contracts can be for a term of up to seven years in exchange for job and capital investment commitments.

RNY Power is available to businesses and not-for-profit corporations for job retention and business expansion and attraction purposes. Specifically, Chapter 60 provides that at least 350 MW of RNY Power shall be dedicated to facilities in the service territories served by the New York State Electric and Gas, National Grid and Rochester Gas and Electric utility companies; at least 200 MW of RNY Power shall be dedicated to the purpose of attracting new businesses and encouraging expansion of existing businesses statewide; and up to 100 MW shall be dedicated for eligible not-for-profit corporations and eligible small businesses statewide.

Under the statute, 'eligible applicant' is defined to mean an eligible business, eligible small business, or eligible not-for-profit corporation, however, an eligible applicant shall not include retail businesses as defined by EDPAB, including, without limitation, sports venues, gaming or entertainment-related establishments or places of overnight accommodations. At its meeting on April 24, 2012, EDPAB defined a retail business as a business that is primarily used in making retail sales of goods or services to customers who personally visit such facilities to obtain goods or services, consistent with the rules previously promulgated by EDPAB for implementation of the Authority's Economic Development Power program.

Prior to entering into a contract with an eligible applicant for the sale of RNY Power, and prior to the provision of electric service relating to a RNY Power allocation, the Authority must offer each eligible applicant that has received an award of RNY Power the option to decline to purchase the RNY Market Power component of such award. If the applicant declines to purchase the RNY Market Power component from the Authority, the Authority has no responsibility for supplying the RNY Market Power component of the award.

As part of Governor Andrew M. Cuomo's initiative to foster business activity and streamline economic development, applications for all statewide economic development programs, including the RNY Power Program, have been incorporated into a single on-line Consolidated Funding Application

('CFA') marking a fundamental shift in how State economic development resources are marketed and allocated. Beginning in September 2011, the CFA was available to applicants. The CFA continues to serve as an efficient and effective tool to streamline and expedite the State's efforts to generate sustainable economic growth and employment opportunities. All applications that are considered for an RNY Power allocation are submitted through the CFA process.

Applications for RNY Power are subject to a competitive evaluation process and are evaluated based on the following criteria set forth in the statutes providing for the RNY Power Program (the 'RNY Statutes' also listed in Exhibit '5c i-1-G'):

- '(i) the significance of the cost of electricity to the applicant's overall cost of doing business, and the impact that a recharge New York power allocation will have on the applicant's operating costs;
- (ii) the extent to which a recharge New York power allocation will result in new capital investment in the state by the applicant;
- (iii) the extent to which a recharge New York power allocation is consistent with any regional economic development council strategies and priorities;
- (iv) the type and cost of buildings, equipment and facilities to be constructed, enlarged or installed if the applicant were to receive an allocation;
- (v) the applicant's payroll, salaries, benefits and number of jobs at the facility for which a recharge New York power allocation is requested;
- (vi) the number of jobs that will be created or retained within the state in relation to the requested recharge New York power allocation, and the extent to which the applicant will agree to commit to creating or retaining such jobs as a condition to receiving a recharge New York power allocation;
- (vii) whether the applicant, due to the cost of electricity, is at risk of closing or curtailing facilities or operations in the state, relocating facilities or operations out of the state, or losing a significant number of jobs in the state, in the absence of a recharge New York power allocation;
- (viii) the significance of the applicant's facility that would receive the recharge New York power allocation to the economy of the area in which such facility is located;
- (ix) the extent to which the applicant has invested in energy efficiency measures, will agree to participate in or perform energy audits of its facilities, will agree to participate in energy efficiency programs of the authority, or will commit to implement or otherwise make tangible investments in energy efficiency measures as a condition to receiving a recharge New York power allocation;
- (x) whether the applicant receives a hydroelectric power allocation or benefits supported by the sale of hydroelectric power under another program administered in whole or in part by the authority;
- (xi) the extent to which a recharge New York power allocation will result in an advantage for an applicant in relation to the applicant's competitors within the state; and
- (xii) in addition to the foregoing criteria, in the case of a not-for-profit corporation, whether the applicant provides critical services or substantial benefits to the local community in which the facility for which the allocation is requested is located.'

Based on the evaluation of these criteria, the applications were scored and ranked.

In arriving at recommendations for EDPAB's consideration, staff, among other things, attempted to maximize the economic benefits of low-cost NYPA hydropower, the critical state asset at the core of the RNY Power Program, while attempting to ensure that each recipient receives a meaningful RNY Power allocation.

Business applicants with relatively high scores were recommended for allocations of retention RNY Power of 50% of the requested amount or average historic demand, whichever was lower. These allocations were capped at 10 MW for any recommended allocation. Not-for-profit corporation applicants that scored relatively high were recommended for allocations of 33% of the requested amount or average historic demand, whichever was lower. These allocations were capped at 5 MW. Applicants currently receiving hydropower allocations under other Authority power programs were recommended for allocations of RNY Power of 25% of the requested amount, subject to the caps as stated above.

RNY Power allocations have been awarded by the Trustees on twenty-two prior occasions spanning from April 2012 through March 2019. Of the 200 MW block of RNY Power made available pursuant to Chapter 60 for business 'expansion' purposes, 88.1 MW remain unallocated. Of the 100 MW of RNY Power that is set aside for not-for-profit corporations and small businesses pursuant to Chapter 60, 1.3 MW remain unallocated. Of the remaining RNY Power made available pursuant to Chapter 60, 56.7 MW remain unallocated. These figures reflect Trustee actions on RNY Power applications taken prior to any actions the Trustees take today.

An allocation recommended by EDPAB qualifies the subject applicant to enter into a contract with the Authority for the purchase of the RNY Power assuming that the Authority concurs with EDPAB and makes an allocation award.

EDPAB, at its July 16, 2019 meeting, recommended that each of the applicants identified in Exhibits '5c i-1-A', '5c i-1-B', and '5c i-1-C' be awarded a RNY Power allocation in the amount indicated in the respective Exhibits.

Consistent with provisions of the RNY Statutes, EDPAB also recommended that the contract for the sale of these allocations contain:

- (5) provisions for effective periodic audits of the recipient of an allocation for the purpose of determining contract and program compliance, and for the partial or complete withdrawal of an allocation if the recipient fails to maintain commitments, relating to such things as employment levels, power utilization, capital investments, and/or energy efficiency measures;
- (6) requirements for an agreement by the recipient of an allocation to undertake, at its own expense, an energy audit of its facilities at which the allocation is consumed, modified by the Authority on a showing of good cause by the recipient, and that the recipient provide the Authority with a copy of any such audit or a report describing the results of such audit;
- (7) a requirement for an agreement by the recipient of an allocation to make its facilities available at reasonable times and intervals for energy audits and related assessments that the Authority desires to perform; and
- (8) a recommendation shall require that if the actual metered load at the facility where the allocation is utilized is less than the allocation, such allocation will be reduced accordingly.

The sale of RNY Power allocations that are awarded by the Trustees today would be governed by the revised form of RNY Power contract that was approved by the Trustees on March 26, 2019, and existing Authority Service Tariff RNY-1. The terms and conditions in the revised RNY Power contract form are consistent with the terms and conditions recommended by EDPAB that are described above.

DISCUSSION

1. Retention-Based RNY Power Allocations – Action Item

The Trustees are asked to address applications submitted via the CFA process for RNY Power retention-based allocations. Unless otherwise indicated in Exhibit '5c i-1-A,' these applications seek a RNY Power allocation for job retention purposes only.

Consistent with the evaluation process as described above, EDPAB recommended, at its July 16, 2019 meeting, that RNY Power retention allocations be awarded to the businesses listed in Exhibit '5c i-1-A.' Each business has committed to retain jobs in New York State and to make capital investments at their facilities in exchange for the recommended RNY Power allocations. The RNY Power 'retention' allocations identified in Exhibit '5c i-1-A' are each recommended for a term of seven years unless otherwise indicated.

Staff recommends that the Trustees accept EDPAB's recommendations and award RNY Power allocations to each of the businesses listed on Exhibit '5c i-1-A' in the amounts indicated.

2. Expansion-Based RNY Power Allocations – Action Item

The Trustees are also asked to address applications submitted for RNY Power expansion-based allocations via the CFA process. Allocations for this purpose would be sourced from the 200 MW block of RNY Power dedicated by statute for 'for-profit' businesses that propose to expand existing businesses or create new business in the State. Unless otherwise indicated in Exhibit '5c i-1-B,' these applications seek a RNY Power allocation for expansion of an existing business or a new business/facility. EDPAB recommended, at its July 16, 2019 meeting, that RNY Power expansion-based allocations be made to the businesses listed in Exhibit '5c i-1-B.' Each such allocation would be for a term of seven years unless otherwise indicated.

As with the evaluation process used for the retention recommendations described above, applications for the expansion-based RNY Power were scored based on the statutory criteria, albeit with a focus on information regarding each applicants' specific project to expand or create their new facility or business (e.g., the expansion project's cost, associated job creation, and new electric load due to the expansion).

The respective amounts of the expansion-related allocations listed in Exhibit '5c i-1-B' are largely intended to provide approximately 70% of the individual expansion projects' estimated new electric load. Because these projects have estimated new electric load amounts, and to ensure that an applicant's overestimation of the amount needed would not cause that applicant to receive a higher proportion of RNY Power to new load, the allocations in Exhibit '5c i-1-B' are recommended based on an 'up to' amount basis. Each of these applicants would be required to, among other commitments, add the new electric load as stated in its application, and would be allowed to use up to the amount of their RNY Power allocation in the same proportion of the RNY Power allocation to requested load as stated in Exhibit '5c i-1-B.'

Staff recommends that the Trustees accept EDPAB's recommendations and award RNY Power allocations to each of the businesses listed on Exhibit '5c i-1-B' in the amounts indicated.

3. Small Business and/or Not-for-Profit-Based RNY Power Allocations – Action Item

The Trustees are also asked to address applications submitted via the CFA process for RNY Power for eligible small businesses and/or not-for-profit corporations. Chapter 60 specifies that no more than 100 MW of RNY Power may be made available for eligible small businesses and eligible not-for-profit corporations.

Consistent with the evaluation process described above, EDPAB recommended, at its July 16, 2019 meeting, that RNY Power allocations be awarded to the small businesses and/or not-for-profit applicants listed in Exhibit '5c i-1-C.' These applicants have committed to retain or create jobs in New York State and make capital investments to the extent indicated in Exhibit '5c i-1-C' in exchange for the recommended RNY Power allocations as described in Exhibit '5c i-1-C.' The RNY Power allocations identified in Exhibit '5c i-1-C' are recommended for a term of seven years except as otherwise indicated.

Staff recommends that the Trustees accept EDPAB's recommendations and award RNY Power allocations to each of the not-for-profit entities and/or small businesses listed on Exhibit '5c i-1-C' in the amounts indicated.

In accordance with Chapter 60, if EDPAB's recommendation to award RNY Power allocations to the small businesses and/or not-for-profit applicants listed in Exhibit '5c i-1-C' is accepted, the 100 MW block of power will be close to fully allocated. Accordingly, a waiting list has been established for small businesses and not-for-profit applicants that are potentially eligible to be awarded RNY Power allocations when additional power becomes available.

4. EDPAB – Applicants Not Eligible – Informational Item

At its meeting on July 16, 2019, EDPAB determined that the applicant listed on 5c i-1- 'D' is not eligible to receive an RNY Power allocation for the reason specified on Exhibit '5c i-1-D.' No action by the Trustees is required on this application.

5. EDPAB – Applicants Not Recommended for RNY Power – Informational Item

At its meeting on July 16, 2019, EDPAB determined not to recommend the applicants listed on Exhibit '5c i-1-E' for an RNY Power allocation for the reasons specified on Exhibit '5c i-1-E.' No action by the Trustees is required on these applications.

6. EDPAB –Termination of Application/Review Process– Informational Item

At its meeting on July 16, 2019, EDPAB terminated the application review process for the applicant listed on Exhibit '5c i-1-F' for the reason listed on Exhibit '5c i-1-F.' No action by the Trustees is required on this matter. In the past, some applicants whose applications were terminated in these circumstances have decided to refile and advance a more complete RNY Power application for consideration.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees: (1) award the allocations of RNY Power for retention purposes to the businesses listed in Exhibit '5c i-1-A' as indicated therein; (2) award the allocations of RNY Power for expansion purposes to the businesses listed in Exhibit '5c i-1-B' as indicated therein; and (3) award the allocations of RNY Power for the small business and/or not-for-profit applicants identified in Exhibit '5c i-1-C' for retention and/or expansion purposes as indicated therein.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Mr. Keith Hayes, Senior Vice President of Clean Energy Solutions, provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Trustee Picente, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

WHEREAS, the Economic Development Power Allocation Board (“EDPAB”) has recommended that the Authority’s Trustees award Recharge New York (“RNY”) Power allocations for retention purposes to the applicants listed in Exhibit “5c i-1-A” in the amounts indicated; and

WHEREAS, EDPAB has recommended that the Authority’s Trustees award RNY Power allocations for expansion purposes to the applicants listed in Exhibit “5c i-1-B” in the amounts indicated; and

WHEREAS, EDPAB has recommended that the Authority’s Trustees award RNY Power allocations for retention and expansion purposes to the small businesses and/or not-for-profit applicants listed in Exhibit “5c i-1-C” in the amounts indicated;

NOW THEREFORE BE IT RESOLVED, That, upon considering the foregoing and the information contained in the report of the President and Chief Executive Officer and the accompanying exhibits, the Trustees hereby:

- (1) award allocations of RNY Power for retention purposes to the applicants listed in Exhibit “5c i-1-A” in the amounts indicated;**
- (2) award allocations of RNY Power for expansion purposes to the applicants listed in Exhibit “5c i-1-B” in the amounts indicated; and**
- (3) award allocations of RNY Power for expansion and/or retention purposes to the small businesses and/or not-for-profit applicants listed in Exhibit “5c i-1-C” in the amounts indicated; and be it further**

RESOLVED, That the Chief Commercial Officer – Energy Solutions, or such official’s designee, hereby is, authorized on behalf of the Authority to provide for final terms and conditions that will be applicable to the foregoing allocations and/or projects, including, without limitation, progress milestones and provisions for the expiration of any allocation in the event that such milestones are not met; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

2. Replacement Power Allocation

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve an allocation of 10,000 kilowatts ('kW') of Replacement Power ('RP') to Somerset Operating Company, LLC ('SOC'), to support construction of SOC's proposed Empire State Data Hub ('Data Hub' or 'Project') to be constructed at the site where the applicant currently operates a coal-fired power plant in the Town of Barker, Niagara County. The project is described in further detail below and in Exhibit '5c i-2-A.' The term of the allocation would be ten years. The allocation would support capital investment of at least \$85 million in the proposed Data Hub and the creation of at least 165 new, permanent, full-time jobs for the term of the allocation that will be located at the Data Hub in Barker.

The Trustees are also requested to authorize a public hearing, in accordance with Public Authorities Law ('PAL') §1009, on a proposed form of contract ('Proposed Contract') with SOC that would, along with Authority Service Tariff No. WNY-2 ('ST WNY-2'), apply to the sale of RP to SOC. Copies of the Proposed Contract and ST WNY-2 are attached as Exhibit '5c i-2-B.'

BACKGROUND

Under Public Authorities Law ('PAL') §1005(13), the New York Power Authority ('NYPA' or 'Authority') may contract to allocate 250 megawatts ('MW') of firm hydroelectric power as Expansion Power ('EP') and up to 445 MW of RP to businesses in the State located within 30 miles of the Niagara Power Project, provided that the amount of power allocated to businesses in Chautauqua County on January 1, 1987 shall continue to be allocated in such county.

Each application for an allocation of EP and RP are evaluated under criteria that include but need not be limited to, those set forth in PAL §1005(13)(a), which details general eligibility requirements. Among the factors to be considered when evaluating a request for an allocation of hydropower are the number of jobs created as a result of the allocation; the business' long-term commitment to the region as evidenced by the current and/or planned capital investment in the business' facilities in the region; the ratio of the number of jobs to be created to the amount of power requested; the types of jobs to be created, as measured by wage and benefit levels, security and stability of employment, and the type and cost of buildings, equipment and facilities to be constructed, enlarged or installed.

The Authority works closely with business associations, local distribution companies and economic development entities to gauge support for the projects that would be supported with allocations of Authority hydropower. Discussions routinely occur with National Grid, Empire State Development, Invest Buffalo Niagara, the Niagara County Center for Economic Development, and the Erie County Industrial Development Agency to coordinate other economic development incentives that may help bring economic development to New York State. Staff confers with these entities to help maximize the value of hydropower to improve the economy of Western New York and the State of New York. Each organization has expressed support for today's recommended RP allocation.

At this time, 67,610 kW of unallocated EP and 103,221 kW of unallocated RP is available to be awarded to businesses under the criteria set forth in PAL §1005(13)(a).

DISCUSSION

SOC currently operates a 690-megawatt coal-fired power plant (the 'Somerset Power Plant') in Barker. It has indicated that it will close the Somerset Power Plant by 2020.

It is proposing to repurpose the Somerset Power Plant site by constructing the Empire State Data Hub ('Data Hub') at the site, which is intended to be a state-of-the-art data center focused on artificial intelligence, machine learning and other computationally intensive processes to serve companies in the information and technology sectors. SOC is also planning to construct a 70-megawatt solar farm on the site and possibly other renewable energy-related infrastructure.

SOC submitted an application requesting 100,000 kW of hydropower in connection with the Project.

At this time, as a first phase of the Project, SOC is proposing to construct three server buildings, 30' x 760' each. The steel buildings would house bus ducting, breakers, panels, racks and distribution lines for computing equipment. The estimated construction costs for this phase of the project, including internal equipment and a cooling system, is \$35 million. SOC is also planning to spend \$50 million on computing equipment that will be installed in the new buildings. SOC is looking to start operations in the summer of 2020. SOC would commit to the creation of at least 165 new, permanent, full-time jobs that would be located at the Data Hub (average compensation/benefits estimated at \$61,900).

The job creation ratio for the proposed allocation of 10,000 kW is 17 new jobs per MW. This ratio is below the historic average of 29.9 new jobs per MW based on allocations made during the past nine years. The total project investment of at least \$85 million would result in a capital investment ratio of \$8.5 million per MW. This ratio is below the nine-year historic average of \$23.1 million per MW.

Staff recommends that an allocation of 10,000 kW of RP be awarded to SOC for a term of ten years in support of its proposed project.

CONTRACT INFORMATION

Staff intends to discuss the form of the Proposed Contract with SOC, and anticipates reaching agreement on a contract substantially similar to the form attached as Exhibit '5c i-2-B.' Accordingly, the Trustees are requested to authorize a public hearing, pursuant to PAL §1009, on the form of the Proposed Contract attached as Exhibit '5c i-2-B.'

As required by PAL §1009, when the Authority believes it has reached agreement with its prospective co-party on a contract for the sale of EP or RP, it will transmit the proposed form of the contract to the Governor and other elected officials, and hold a public hearing on the contract. At least 30-days' notice of the hearing must be given by publication once in each week during such period in each of six selected newspapers. Following the public hearing, the form of the contract may be modified, if advisable. Staff will report to the Board of Trustees on the public hearing and the Proposed Contract at a later time and make any additional recommendations regarding the Proposed Contract as are appropriate.

Upon approval of the final proposed contract by the Authority, the Authority must 'report' the proposed contract, along with its recommendations and the public hearing records, to the Governor and other elected officials. Upon approval by the Governor, the Authority is authorized to execute the final contract.

The form of the Proposed Contract is consistent with recently approved contracts for the sale of RP and other Authority hydropower products. The following are some examples of the matters addressed in the Proposed Contract and the applicable tariff ST WNY-2:

- Base rates for demand and energy, an annual adjustment factor, and a minimum monthly charge, which helps the Authority to cover the fixed costs of serving a customer even when the customer does not utilize the allocation in a billing period.

- The provision for direct billing of all production charges (i.e., demand and energy) as well as all New York Independent System Operator, Inc. charges, taxes and any other required assessments.
- The provision of substitute energy in the event of hydropower curtailments caused by adverse water conditions that impact power project operations.
- Basic requirements for customer metering.
- Early outreach to the customer concerning allocation extension initiatives by the Authority.
- Requirements for energy audits at the facility receiving the allocation. The customer would have the option to satisfy the audit requirement through either a traditional physical audit, or a virtual audit using the Authority's New York Energy Manager, which is expected to provide considerable savings for customers who select it.
- Periodic communications to customers about energy-related projects, programs and services offered by the Authority.
- Compliance provisions that allow the Authority to reduce a customer's allocation for a failure to meet supplemental commitments, with an opportunity for the customer to present a proposed plan with actionable milestones to cure deficiencies.
- The collection of a Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge to allow the Authority to recover costs it incurs relating to its purchase of Zero Emission Credits and Renewable Energy Credits attributable to the customer's load.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions, recommends that the Trustees approve an allocation of 10,000 kW of Replacement Power to Somerset Operating Company, LLC as described herein and in Exhibit '5c i-2-A' for a term of ten years.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Mr. Keith Hayes, Senior Vice President of Clean Energy Solutions, provided highlights of staff's recommendation to the Board.

On motion made by Trustee Balboni and seconded by Trustee Kress, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That an allocation of 10,000 kilowatts ("kW") of Replacement Power ("RP") be awarded to Somerset Operating Company, LLC, for a term of 10 years as detailed in the foregoing report of the President and Chief Executive Officer and Exhibit "5c i-2-A," be and hereby is approved, subject to rates previously approved by the Trustees; and be it further

RESOLVED, That the Trustees hereby authorize a public hearing pursuant to Public Authorities Law ("PAL") §1009 on the terms of the proposed form of the direct sale contract for the sale of RP finally negotiated with Somerset

Operating Company, LLC (the "Contract"), the current form of which is attached as Exhibit "5c i-2-B"; and be it further

RESOLVED, That the Corporate Secretary be, and hereby is, authorized to transmit a copy of the proposed Contract to the Governor, the Speaker of the Assembly, the Minority Leader of the Assembly, the Chairman of the Assembly Ways and Means Committee, the Temporary President of the Senate, the Minority Leader of the Senate and the Chairman of the Senate Finance Committee pursuant to PAL §1009; and be it further

RESOLVED, That in connection with the proposed Contract, the Corporate Secretary be, and hereby is, authorized to arrange for the publication of a notice of public hearing in six newspapers throughout the State, in accordance with the provisions of PAL §1009; and be it further

RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

d. Utility Operations

i. Chief Operation Officer's Report

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of Utility Operations' performance to the Board. Exhibit "5d i-A."

Performance Measures – Year-to-Date

Generation Market Readiness

- Generation Market Readiness factor was at 99.50%. This is above the target of 97.40%.

Transmission System Reliability

- Transmission System Reliability factor was 96.40%. This is above the target of 95.91%.

Environmental Incidents

- Year-to-date, there were 9 incidents. The Target is not to exceed 12 incidents.

Safety

DART (Days Away, Restricted or Transferred) is the Authority's safety metrics.

- The year-to-date DART Rate is 0.75. The target is 0.78.

**1. Procurement (Services) Contract –
Communications Backbone Program –
Optical Ground Wire – Transmission Line
Construction Services – Contract Award**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to authorize the award of four on-call construction contracts, in the aggregate amount of \$93 million and for a term of five years, to J.W. Didado Electric, LLC ('JWD'), Henkels & McCoy Inc. ('H&M'), M10, Inc. ('Michels Corporation'), and PAR Electrical Contractors, Inc. ('PAR') for installation services of optical ground wire ('OPGW') for the Communications Backbone Program ('Program'). The Chief Operating Officer approved an interim award for installation of the OPGW on the Niagara-Rochester #2 line in June 2019.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees approval for procurement contracts involving services to be rendered for a period in excess of one year. Additionally, in accordance with the Authority's Expenditure Authorization Procedures, the award of non-personal services contracts exceeding \$6 million requires the Trustees' approval.

The goal of the Program is to establish a robust, secure, and scalable communications network that builds on the Authority's existing infrastructure and is integrated into the long-term asset strategy while leveraging the available infrastructure from independent dark-fiber service providers to reduce the dependency on commercial telecommunications. In support of this goal, approximately 600 miles of OPGW will be installed on the Authority's transmission lines across each region.

The installation of OPGW will establish the primary communication network between the regions. The scope of the installation is to replace the existing shield wire on the following transmission lines: Moses-Willis-Plattsburgh ('MWP'), Niagara – Adirondack Tie Line ('NATL'), Massena – Moses ('MMS'), Massena – Marcy/Utica ('MSU') and Marcy South.

DISCUSSION

On April 2, 2018, Request for Qualification ('RFQ') No. Q18-6416MR was issued to solicit information from qualified construction contractors, enabling the Authority to evaluate the capabilities and capacity of each contractor to support the Project. As a result of the RFQ, five Contractors were deemed Qualified, to which a Request for Proposal for OPGW Construction was issued.

On March 18, 2019, Request for Proposal No. Q19-6663MR was issued soliciting information from the pre-approved qualified companies that have the capability, capacity and experience to install and test OPGW on NYPA's transmission lines.

Four proposals were received on April 12, 2019 from the following companies via ARIBA e-sourcing:

- 1) J.W. Didado Electric, LLC.
- 2) Henkels & McCoy, Inc.
- 3) M10, Inc. (Michels Corporation)
- 4) PAR Electrical Contractors, Inc.

The submitted information was reviewed and evaluated by a multidisciplinary team ('the Evaluation Team') which was comprised of Civil/Structural Engineering, Strategic Supply Management, Project Management, Legal, Risk Management and external consultants.

The evaluation was primarily based on commercial and technical proposal content including Execution Plan, Safety and Schedule. These contracts will be used to mini-bid construction on the individual transmission lines. Pricing comparison will be more scrutinized during the mini-bid process for each line segment after the suppliers have design specification details. Having multiple suppliers provides the Authority the flexibility needed to meet the Project schedule.

The Evaluation Team, per the criteria above, determined all four companies as qualified to install OPGW. Terms and conditions have been successfully negotiated with all four bidders. There are no outstanding exceptions to the Authority's commercial terms.

FISCAL INFORMATION

Payment associated with these projects will be made from the Authority's Capital Fund and the cost will be recovered through the Authority's transmission cost recovery mechanism, NYPA Transmission Adjustment Charge ('NTAC').

RECOMMENDATION

The Senior Vice President – Operations Support Services, the Vice President – Project Management, the Vice President – Strategic Supply Management, and the Project Managers recommend that the Trustees approve the award of four on-call construction contracts to J.W. Didado Electric, LLC., Henkels & McCoy, Inc., M10, Inc. (Michels Corporation), and PAR Electrical Contractors, Inc. for an aggregate amount of \$93 million and for a term of up to five years.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of staff's recommendation to the Board.

On Motion made by Trustee Balboni and seconded by Trustee Kress, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, approval is hereby granted to award four on-call construction contracts for installation services of optical ground wire for the Communications Backbone Program and for installation on the Niagara-Rochester #2 line in the aggregate amount of \$93,000,000 to J.W. Didado Electric, LLC, Henkels & McCoy Inc., M10, Inc. (Michels Corporation) and PAR Electrical Contractors, Inc. for a term of up to five years, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractors</u>	<u>Contract Amount</u>
J.W. Didado Electric, LLC	<u>\$93,000,000</u>
Henkels & McCoy Inc.	
M10, Inc. (Michels Corporation)	
PAR Electrical Contractors, Inc.	
Q19-6663MR	

AND BE IT FURTHER RESOLVED, That the payments associated with these contracts will be made from the Authority's Capital Fund, which may include proceeds of debt issuances; and be it further;

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

2. North Country Energy Storage Project – Capital Expenditure Authorization Request and Design Build Contract Award

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve capital expenditures in the amount of \$23.8 million for the North Country Energy Storage Project ('Project'). The total estimated cost of the Project is \$29.8 million, of which \$6 million was previously approved by the Trustees.

In addition, the Trustees are requested to approve the award of a three-year term contract to O'Connell Electric Company Inc. ('OCE') of Victor, NY, in the amount of \$22.6 million for engineering, construction and commissioning of the Project. An additional \$3 million is requested for managing risks and options for a total authorization amount of \$25.6 million.

In order to meet the planned commercial operation date of June 2020 for the Project, an interim contract was issued to OCE and approved by the Chief Operating Officer.

BACKGROUND

In accordance with the Authority's Capital Planning and Budgeting Procedures and the Authority's Expenditure Authorization Procedures, capital expenditures and the award of contracts in excess of \$6 million require the Trustees' approval.

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustee approval for procurement contracts involving services to be rendered for a period in excess of one year.

This Project will establish a 20-MW battery facility adjacent to the Authority's existing Willis Switchyard in Northern New York. The Authority's purchase of the property for the battery facility is currently in negotiations, with an initial offer price consistent with the appraised value of \$7,000, and is expected to be finalized prior to construction start. The energy storage system will supply the New York wholesale energy and ancillary service markets and will contribute to the adequacy, economy and reliability of the supply of electric power in New York. Through this project, the Authority will demonstrate the operation of a large-scale energy storage system in support of the State's renewable energy and energy storage mandates.

DISCUSSION

Capital Expenditure Authorization – The capital expenditure authorization request for an additional \$23.8 million is comprised of the following:

Construction/Installation	\$20,150,000
Closeout	\$ 2,520,000
Authority Direct and Indirect Expenses	<u>\$ 1,091,400</u>
TOTAL	\$23,761,400

Contract Award – The Authority issued a Request for Proposal, No. Q19-6623JT, via Ariba e-sourcing which was advertised in the New York State *Contract Reporter* on March 8, 2019. On May 2, 2019, six (6) bidders submitted proposals.

The proposals were reviewed by an evaluation committee consisting of Authority staff from Engineering, Strategic Supply Management, Quality, Safety, and Project Management. The engineering data was evaluated by the Authority's Engineering staff and an outside consultant engaged to act as the 'Owner's Engineer' for the project. All proposals were reviewed against pre-established evaluation criteria.

Staff evaluated the pricing submitted by each bidder. The bidders' prices were:

Bidder	Base Bid	Negotiated Price
Black & McDonald	\$20,500,000	NA
Haugland Energy Group LLC	\$26,932,300	NA
Invenergy Storage Development, LLC	\$14,600,000*	NA
O'Connell Electric Company Inc.	\$25,708,840	\$22,592,898.41
Perras Construction Services, Inc.	\$22,305,840	NA
Strata Solar, LLC	\$17,421,482	NA

* Disqualified – did not meet technical specifications

The Authority requires an experienced supplier with proven capability to successfully execute this Project and help meet the battery storage goals of NY State. OCE has partnered with NEC Energy Solutions, Inc. ('NEC') to supply the battery units and TRC Companies, Inc. ('TRC') to provide engineering. NEC has over 10 years of experience in providing proven utility scale energy storage projects. TRC has experience working on Authority projects and has performed engineering for similar-scale battery storage projects. In addition, OCE has significant experience working on the Authority's assets in the North Country.

After clarifications, the committee concluded that OCE is the most qualified, capable and best value bidder that can satisfy the requirements stated in the Scope-of-Work, Specifications, Drawings and other requirements as stated in the bid documents.

After successful negotiations with OCE, the company's proposed price was reduced to \$22,592,898.41, an approximate 12% savings. Therefore, the evaluation committee recommends awarding a contract to OCE for the reasons stated above. The contract award will be for \$22.6 million. An additional \$3 million is requested for managing risks associated with potential import tariffs that may be enacted during the term of this contract, risk associated with modifications during design and construction, and options that may be elected, bringing the total authorized amount to \$25.6 million.

FISCAL INFORMATION

Payment associated with this Project and this contract award will be made from the Authority's Capital Fund, which may include proceeds of debt issuances.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Senior Vice President – Power Supply, the Regional Manager – Northern NY, the Vice President – Strategic Supply Management, the Vice President – Project Management and the Project Manager recommend that the Trustees: (a) approve capital expenditures in the amount of \$23.8 million and (b) the award of a three-year contract to O'Connell Electric Company Inc. in the amount of \$22.6 million for engineering, construction and commissioning of the North Country Energy Storage Project with an additional \$3 million for managing risks and options, for a total authorization amount of \$25.6 million.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of staff’s recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Trustee Balboni, the following resolution, as submitted by the President and Chief Executive Officer, was adopted with Trustee Kress being recused from the vote.

RESOLVED, That pursuant to the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in the amount of \$23,761,400 for continuation of the North Country Energy Storage Project are hereby authorized in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority will use Capital Funds, which may include proceeds of debt issuances, to finance the costs of the North Country Energy Storage Project;

<u>Capital</u>	<u>Expenditure Authorization</u>
North Country Energy Storage Project	<u>\$23,761,400</u>

AND BE IT FURTHER RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority’s Expenditure Authorization Procedures, approval is hereby granted to award a three-year term contract to O’Connell Electric Company Inc. of Victor, NY, in the amount of \$22.6 million for the engineering, construction and commissioning of the North Country Energy Storage Project. An additional \$3 million is approved for managing risks and options for a total authorized amount of \$25.6 million, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Supplier</u>	<u>Authorization Amount</u>
O’Connell Electric Company, Inc.	<u>\$25,600,000</u>
(Q19-6623JT)	

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all

July 30, 2019

things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

**3. Transmission Life Extension & Modernization Program –
Northern NY Region Remote Substations – Plattsburgh, Willis,
Saranac – Capital Expenditure Authorization Request – Phase 2**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are hereby requested to approve capital expenditures in the amount of \$34,286,200 for Phase 2 of the Northern New York Region - Remote Substation Life Extension & Modernization Program ('Project'), which includes replacement of equipment at the Plattsburgh, Willis and Saranac Substations.

This Phase 2 expenditure request will fund upgrades at the Willis substation, Plattsburgh relay and station service upgrades, and address the partial de-scoping of the Saranac Substation. Capital Expenditures for Phase 1, in the amount of \$26.3 million, were previously approved by the Trustees in March 2017, bringing the total estimated Project cost to \$60.6 million.

BACKGROUND

In accordance with the Authority's Capital Planning and Budgeting Procedures, capital expenditures in excess of \$6 million require the Trustees' approval.

The Transmission Life Extension and Modernization is a multiyear program ('TLEM Program') that will upgrade the Authority's existing transmission system to maintain availability, increase reliability, and ensure regulatory compliance. The TLEM Program encompasses transmission assets in the Central, Northern, and Western Regions and has been divided into several projects at an estimated cost of \$726 million.

This Project includes equipment upgrades at the Plattsburgh, Saranac and Willis Substations. While some components have been replaced, the majority of the 115kV circuit breakers at Plattsburgh dates back to the 1950s, while the Willis Substation contains equipment dating back to the 1970s. Based on field assessments, data analysis and the expected service life of similar equipment, circuit breakers, instrument transformers, capacitor voltage transformers, and disconnect switches that have reached the end of their useful life will be replaced. Originally, the Project included upgrading the Saranac Substation, which, with the exception of procurement of circuit breakers for Saranac Substation, was subsequently de-scoped from the Project. A new project was created to address Saranac Substation in order to pilot new digital substation technologies and architecture. The cost of relay and station service upgrades to both Plattsburgh and Willis Substations, which were originally authorized as part of the St. Lawrence Breaker and Relay Replacement Project, are now being transferred to this Project.

DISCUSSION

Phase 1 included the replacement of eleven 115kV circuit breakers with gas-insulated, power circuit breakers, motor operated disconnect switches and instrument transformers at the Plattsburgh Substation. Construction work for this Project is scheduled to commence in September 2019, and is expected to be completed in December of 2025.

This Phase 2 expenditure request includes the following scope:

Willis Substation:

1. Replacement of seven 230kV and four 115kV circuit breakers with gas-insulated, power circuit breakers;
2. Disconnect switches;

3. Instrument transformers; and
4. Relay and station service upgrades (originally authorized as part of the St. Lawrence Breaker and Relay Replacement Project, are now being transferred to this Project).

Plattsburgh Substation:

1. Relay and station service upgrades (originally authorized as part of the St. Lawrence Breaker and Relay Replacement Project, are now being transferred to this Project).

Saranac Substation:

1. Procurement of four 115kV c circuit breakers. (Installation and other associated equipment upgrades will be performed as part of a separate project.)

Capital Expenditures in the amount of \$26.33 million were previously approved in March 2017, for Phase 1 of the Project.

The total cost for Phase 2, estimated at \$34,286,200, is as follows:

Preliminary Engineering/Engineering Design	\$ 3,026,800
Material Procurement	\$10,834,000
Construction/Installation	\$16,726,500
Authority Direct and Indirect Expenses	<u>\$ 3,698,900</u>
TOTAL	\$34,286,200

FISCAL INFORMATION

Payment associated with this project will be made from the Authority's Capital Fund.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Senior Vice President – Power Supply, the Vice President – Project Management, and the Project Manager recommend that the Trustees approve capital expenditures in the amount of \$34,286,200 for Phase 2 of the Northern New York Region – Remote Substation Life Extension & Modernization Program.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Trustee Picente, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Authority's Capital Planning and Budgeting Procedures, capital expenditures in the amount of \$34,286,200 are hereby authorized in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer;

<u>Capital</u>	<u>Expenditure Authorization</u>
Phase 2 - Northern NY Region - Remote Substation Life Extension & Modernization Program	<u>\$34,286,200</u>

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

6. Board Committee Reports:

a. Finance Committee Report

Acting Chair Koelmel reported that two items were presented to the Finance Committee on July 16, which be presented today for the full Board's approval.

The first is a \$45 million contract award recommendation to Siemens Energy for the Long-Term Service and Extended Parts Agreement for the R.M. Flynn Power Plant. This investment will allow for major maintenance work needed on the combined cycle combustion and steam turbine.

The second is the Niagara Power Project – Robert Moses Life Extension and Modernization and Controls Upgrade Program. This is a \$1.1 billion investment in the Robert Moses Power Plant located at the Niagara Facility, over a 15-year term. Staff has requested the release of the first major capital-funding portion in the amount of \$213 million and has recommended the award of two contracts in support of this program. Specifically, a 14-year, \$134 million contract to Burns and McDonnell Consultants to replace the Integrated Controls Systems; and a 14-year, \$69 million to The Stage Group for the Penstock Platform work.

Acting Chair Koelmel ended by saying that the Finance Committee concurs with the recommendations and recommends the concurrence of the full Board.

i. **Procurement (Services) Contract – R.M. Flynn Power Plant – Long-Term Service and Extended Parts Agreement**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees' concurrence/approval is requested to award a competitively bid, non-personal services, Operating Plant Service and Extended Parts Agreement contract to Siemens Energy Inc. of Orlando, Florida, in the amount of \$45 million, for the R.M. Flynn Power Plant for a 20-year term or 100,000 Equivalent Operating Hours (EOH). The Siemens Energy Inc. contract will provide for all parts, labor, and upgrades in order to maintain the combustion turbine for the term of the agreement and labor and field for the first Steam Turbine minor and first Steam Turbine Major Inspections under this Agreement.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees approval for procurement contracts involving services to be rendered for a period in excess of one year. In addition, the Authority's Expenditure Authorization Procedures for non-personal services contracts in excess of \$6,000,000 requires the Trustees' approval.

The Authority's R.M. Flynn Combined Cycle Power Plant was commissioned in April 1994 and the Authority currently has a maintenance service contract with Siemens Energy Inc. for the combustion and steam turbines. It is anticipated that by the fall of 2019, the majority of the combustion turbine's major components will reach the end of their useful life. In an effort to maximize the opportunity to optimize this facility site, management determined that it was prudent to rebid the maintenance service agreement.

DISCUSSION

Based upon projected run profiles, the recommended scope-of-work will include, but not be limited to, anticipated maintenance expenditures for the covered units through 2036, with a termination date of 20 years after the effective date, July 31, 2019. At the contract start, Siemens Energy Inc. will provide all parts and services, (collectively 'Work') necessary to upgrade the gas turbine, which will extend the existing 32,000 FFH maintenance intervals to 50,000 EOH, as well as increasing the combustion turbine output by 4.8MW and improve plant heat rate (efficiency) by 1.06%. It is anticipated that Siemens Energy Inc. will perform the last maintenance on these covered units at 100,000 EOH (year 2036). As of year 2036, if the unit has not achieved the second major inspection ('MI'), NYPA has the option to either:

- extend the contract until the 100,000 EOH maintenance milestone is reached;
- have Siemens perform the last maintenance event early; or
- end the term on the sunset date without performing the last maintenance event.

This contract will provide the Authority's R.M. Flynn Combined Cycle Plant the parts and resources to maintain the covered unit for a period of 100,000 EOH. This contract also transfers the risk of maintenance for the covered unit from the Authority to Siemens Energy Inc.

FISCAL INFORMATION

All costs incurred under this contract for the base scope-of-work will be expended through the O&M budget; any extra work incurred under this contract will be expended through the O&M and/or Capital budgets.

RECOMMENDATION

The Senior Vice President – Power Generation, the Vice President – Procurement, the Regional Manager – Southeastern New York and the Director – Operations, RM Flynn Power Plant, recommend that the Trustees authorize the award of a 20-year (100,000 EOH) contract in the amount of \$45 million to Siemens Energy Inc. for the R M. Flynn Power Plant's Long-Term Service and Extended Parts Agreement to become effective on or about July 31, 2019.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of staff's recommendation to the Board.

On motion made by Chairman Koelmel and seconded by Trustee Balboni, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, that pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, the Board hereby approves the award of a contract to Siemens Energy Inc. in the amount of \$45,000,000 for the R.M. Flynn Power Plant's Long-Term Service and Extended Parts Agreement ("LTSEPA") as recommended in the foregoing report of the President and Chief Executive Office;

<u>Contractor</u>	<u>Contract Amount</u>
Siemens Energy Inc. Orlando, FL	<u>\$45,000,000</u>

Q18-6450DK

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel

ii. **Niagara Power Project – Robert Moses Power Project Life Extension and Modernization Program and Integrated Controls Upgrade and Penstock Platform Approvals – Capital Expenditure Authorization Request and Contract Awards**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve a Life Extension and Modernization Program (LEM Program) for the estimated cost of \$1.1 billion to modernize the Robert Moses Power Plant ('RMPP'). The modernization will replace aging equipment, enhance plant performance in the New York Independent System Operator market and maintain a reliable and competitive power production facility.

The Trustees are also requested to authorize capital expenditures for \$213 million to initiate engineering, procurement, construction and delivery of long-lead-time components.

The Trustees are further requested to approve the award of a 14-year design-build contract to Burns & McDonnell Consultants P.C ('BMC') of Kansas City, Missouri, in the amount of \$134 million (including \$18.8 million in design options and \$25.8 million in escalation) to replace the unit and plant control systems for all 13 hydro-generating units, update the main control room and add a back-up control room. At this time, BMC will only be authorized to proceed up to the first three units as well as all main and backup control room work.

The Trustees are still further requested to approve the award of a 14-year contract to The State Group ('TSG') of Buffalo, NY for \$69 million for the Penstock Platform Project. At this time, TSG will only be authorized to proceed with fabrication of the platform and mobilization for up to the first three units.

BACKGROUND

In accordance with the Authority's Capital Planning and Budgeting Procedures and the Authority's Expenditure Authorization Procedures, capital expenditures and the award of contracts in excess of \$6 million require the Trustees' approval.

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees approval for procurement contracts involving services to be rendered for a period in excess of one year.

The RMPP has had only minor control system upgrades since its initial construction in the 1960's. The upgrade project implemented in the 1990's did not replace the relay-based controls systems and mechanical governors, which were still state-of-the-art equipment at the time, and mechanical fatigue of the turbine-generator and other systems was not considered likely at that age, therefore, no changes were made. The LEM Program will overhaul the 13 generating units and their associated auxiliary power equipment to bring the plant into the modern digital operating era, adding the ability for backup controls for the plant and switchyards and replacing equipment nearing the end of its life.

Authority staff conducted an analysis of the RMPP assets, including performance testing using sensors, and have put together a program which includes, but is not limited to, replacing the head covers, shafts, wicket gates, and governors; refurbishing the stators, guide bearings, iso-phase bus, and other ancillary systems. This will ensure reliable plant operation and asset management and provide for another 60 years of service and is less costly than reacting to a major failure due to fatigue.

The LEM Program is comprised of four main projects: Controls Upgrade, Mechanical/ Electrical Overhauls (M/E LEM), Penstock Platform, and the 630-ton Gantry Crane Upgrade. Each of these

projects will have its own Capital Expenditure Authorization request ('CEAR'). The RMNPP LEM Program estimated at \$1.1 billion is the sum of each of these individual CEAR.

The Controls Upgrade will start prior to the M/E LEM, with design of the system scheduled for 2019-2020 and the backup and main control room work and first unit control upgrade commencing by the third quarter of 2020. This first unit control upgrade is expected to require nine (9) months to complete followed by a full year of monitoring to ensure the most efficient operation and resolve anticipated operational adjustments. Subsequent unit control upgrades will require seven (7) months to complete.

The program schedule calls for award of the turbine and motor generator overhaul contracts by 2021 to support the first M/E LEM unit starting in 2023 at which time the LPGP LEM Program is expected to be completed. Long-lead items such as the wicket gates and shafts will be ordered in early 2020 via direct material contracts and the head covers will be released for fabrication under the turbine generator contract in late 2021. It is estimated that the LEM Program will be completed by 2034.

The current funding request will be for the work associated with the Controls Upgrade first three units, backup and main control room upgrades, the Penstock Platform fabrication and installation for the first three units, the 630-Ton Crane Upgrades and release of the first long-lead items such as wicket gates and turbine shafts. Funding for the next three units, as well as future contract awards and anticipated escalation costs for material and labor, will be requested in future stages of the Program.

DISCUSSION

Overall Program Authorization

The Niagara Power Project generally ranks second in annual energy production among hydroelectric plants in the U.S. averaging 14,000 GWHRS/year and, considering its location and the services it provides to New York and the NYISO market, is a vital asset for the State of New York. RMNPP has an unusually high capacity factor, so forced outages are more likely to result in inability to meet market and customer commitments. A significant failure at RMNPP could have severe consequences to the Authority's customers, the market and the Authority itself.

The total Program Cost is estimated at \$ 1,100,000,000.

Preliminary Engineering/Engineering Design	\$38,000,000
Material Procurement & Construction/Installation	\$498,000,000
Authority Direct and Indirect Expenses	\$98,000,000
Contingency and Escalation	\$466,000,000
TOTAL	\$1,100,000,000

Engineering, Procurement, Construction, Direct and Indirect Costs

The Trustees are requested to approve expenditures for engineering, procurement, construction and Authority direct and indirect costs to continue the orderly planning, design, long-lead material procurement and implementation of the work as follows:

	Total Estimated (\$000)	Previously Authorized (\$000)	Current Request (\$000)	Balance to be Authorized (\$000)
Preliminary Engineering/Licensing	\$ 6,493	\$ 6,726	\$ 0	\$ (233)
Engineering and Design	\$ 22,187	\$ 750	\$ 529	\$ 20,908
Procurement/Constructions	\$ 942,176	\$ 0	\$189,388	\$752,788
Authority Direct/Indirect	\$ 129,144	\$ 3,524	\$ 23,083	\$102,536
Total Authorization Requested	\$1,100,000	\$11,000	\$213,000	\$876,000

The current funding request includes approximately 30% of the anticipated engineering costs including evaluation of the unit iso-phase and intermediate bus and initial procurement of wicket gates and spare generator and turbine shafts. Construction funds provide for the work on the first three unit controls as well as the work required for the main and backup control rooms.

Integrated Controls

A Request for Qualifications ('RFQ'), No. Q18-6452JT, was issued on May 22, 2018 through the Authority's Ariba system and was advertised in the New York State *Contract Reporter* to solicit information from interested vendors to enable the Authority to evaluate the capabilities and capacity of each vendor with respect to the Control System and establish a list of the most qualified suppliers. Requests for Proposal ('RFP') for the specific Scopes-of-Work for the RMNPP Controls LEM initiative was issued to the most qualified suppliers.

On June 21, 2018, nine suppliers submitted their qualifications in response to the RFQ. The submitted information was reviewed and evaluated by a multi-disciplined team comprised of Engineering, Strategic Supply Management ('SSM'), Plant Operations, Project Management ('PMD'), and Environmental Health Safety. As part of the evaluation, phone interviews were held with each of the responding Suppliers to review their submissions. The most qualified four respondents were selected for the RFP stage.

An RFP was issued on November 20, 2018 describing the scope of design, testing, fabrication, installation and renovation associated with the controls systems to the firms selected in the RFQ process. Proposals were received as listed below on April 15, 2019:

<u>Description</u>	<u>Location</u>	<u>Unevaluated Bid Amount</u>
ABB Inc.	Cleveland, Ohio	\$ 120,400,000.00
Burns & McDonnell Consultants, P.C.	Kansas City, Missouri	\$ 89,380,170.90
Voith Hydro	York, Pennsylvania	\$ 86,233,611.00

All proposals were reviewed thoroughly by the Evaluation Committee, which was composed of representatives from SSM, Engineering, Plant Operations, Project Delivery Engineering, and PMD and were determined to be technically compliant. The proposals were reviewed and evaluated based on the evaluative criteria established in the RFP: best value, integrated control system and control room designs, proposal completeness, ability to meet the project schedule, experience in performing similar work, experience working with the Authority, and safety record.

BMC was determined to be the best value based on its extensive knowledge of projects of this scope, size, and complexity. In addition, BMC's proposed approach to the project is the most practical using industry leading control systems that aligns with the Authority's goals for a single integrated digital control system. BMC will meet the M/WBE goal requirements. Accordingly, the Evaluation Committee recommends an award to BMC for \$134,000,000 including design options and escalation.

Penstock Platform

An RFP was issued on September 7, 2018 and on November 29, 2018 for the Penstock Platform project; two proposals were received. In an effort to expand the pool of potential bidders, the bid scope

was revised and the RFP was re-bid on February 21, 2019. On April 05, 2019, three proposals were received as listed below:

<u>Description</u>	<u>Location</u>	<u>Unevaluated Bid Amount</u>
International Chimney	Buffalo, NY	\$114,220,295
The State Group	Buffalo, NY	\$57,819,769
Hohl Industrial	Tonawanda, NY	\$41,576,285

The proposals were reviewed thoroughly by the Evaluation Committee, which was composed of representatives from SSM, Engineering, Plant Operations, Project Delivery Engineering, Environmental Health and Safety and PMD. The proposals were reviewed and evaluated based on the evaluative criteria established in the RFP: best value, proposal completeness, ability to meet the project schedule, experience in performing similar work, and safety record.

TSG was determined to be the best value based on its extensive knowledge of the scope-of-work and capability of completing this project in accordance with the required schedule. TSG is an ISO 9001 certified company with a local Buffalo office that will allow for efficient travel to and from the Power Plant to perform project quality assurance, quality control, and oversight. Fabrication will be taking place within driving distance from the power plant. TSG will meet the M/WBE goal requirements. Accordingly, the Evaluation Committee recommends an award to TSG for \$69,000,000 for selected options and escalation.

FISCAL INFORMATION

Payment associated with this project will be made from the Authority's Capital Fund. Funding for \$11 million has been authorized, to date, to proceed with preliminary engineering, specification development and bidding for the control work.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Senior Vice President – Technology & Innovation, the Senior Vice President – Power Supply, the Senior Vice President & Chief Information Officer, the Vice President – Project Management, the Vice President – Engineering, the Regional Manager and the Project Manager recommend that the Trustees approve the Life Extension and Modernization Program for the Robert Moses Power Plant for an estimated \$1.1 billion and authorize capital expenditures in the amount of \$213 million. Approvals of a 14-year contract in the amount of \$134 million to Burns & McDonnell Consultants, P.C, Kansas City, MO for the Integrated Controls and a 14-year contract in the amount of \$69 million to The State Group, Buffalo, NY for the Penstock Platform Project are also recommended.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Mr. Joseph Kessler, Executive Vice President and Chief Operations Officer, provided highlights of staff's recommendation to the Board.

On motion made by Chairman Koelmel and seconded by Vice Chair Nicandri, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That pursuant to the Authority's Capital Planning and Budgeting Procedures, the Life Extension and Modernization Program for the Robert Moses Power Plant at an estimated cost of \$1.1 billion and capital expenditures in the amount of \$213 million are hereby authorized in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer;

<u>Program</u>	<u>Expenditure Authorization</u>
Robert Moses Power Plant Life Extension and Modernization Program	<u>\$213 million</u>

AND BE IT FURTHER RESOLVED, That pursuant to the Guidelines for Procurement contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, approval is hereby granted to award a 14-year contract to Burns & McDonnell Consultants in the amount of \$134,000,000 to support work associated with the Robert Moses Life Extension and Modernization Program for the Controls Upgrade as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Contract Approval</u>
Burns & McDonnell Consultants P.C Kansas City, MO	<u>\$134 million</u>

RFP # Q18-6452JT

AND BE IT FURTHER RESOLVED, That pursuant to the Guidelines for Procurement contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, approval is hereby granted to award a 14-year contract to The State Group in the amount of \$69,000,000 to support work associated with the Robert Moses Life Extension & Modernization for the Penstock Platform Project, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Contract Approval</u>
The State Group Buffalo, NY	<u>\$69 million</u>

RFP # Q18-6527JT-R

AND BE IT FURTHER RESOLVED, That the Authority, in accordance with Treasury Regulation Section 1.150-2, hereby declares its official intent to finance as follows: The Authority intends to reimburse to the maximum extent permitted by law with the proceeds of tax-exempt obligations to be issued by the Authority, all

expenditures made, and which may be made, in accordance with the Robert Moses Power Plant Life Extension and Modernization Program described in the foregoing report of the President and Chief Executive Officer, with the maximum principal amount of obligations to be issued for such project expected to be \$1.1 billion; and be it further

RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

b. Audit Committee Report

Chairman Nicandri reported that the Audit Committee met on July 9. The Committee adopted a Consent agenda, which included the March 26, 2019 minutes, Audit Committee Charters and the Internal Audit Committee Charter. He said that there were no changes proposed to these Charters; however, the Board's approval is requested in order to be in compliance with the Institute of Internal Auditors Standards. The Committee also received an Internal Audit update from Ms. Angela Gonzalez.

He continued that Mr. Lee Garza provided an overview of a recently concluded Request for Proposal process associated with the procurement of external audit services. He said that in June, management conducted a competitive public process to secure external audit services given that the five-year contract under which NYPA's current auditor, KPMG, is set to expire in September. Multiple responses to the RFP were received, and after a thorough evaluation of the proposals, including interviews with the respondents, management identified KPMG as having submitted the strongest proposal based upon several factors such as sector experience, experience with companies similar to NYPA, management experience, audit approach and value-for-cost.

The Committee therefore recommends that the full Board authorize a five-year procurement contract with KPMG for external audit services valued at \$3 million.

The Committee also recommends the adoption of the NYPA/Canal Audit Committee Charters and NYPA's Internal Audit Charter.

i. **Procurement (Services) Contract – Independent Accounting Services – Contract Award**

The Chair of the Audit Committee submitted the following report:

SUMMARY

The Board of Trustees are requested to approve an award for a contract in an amount not to exceed \$3.0 million to KPMG LLP ('KPMG') to provide independent accounting services, including the annual audits of the Authority's financial records for the years 2019 through 2023 and other services, as may be required, through September 15, 2024.

BACKGROUND

Section 2879 of the Public Authorities Law and the Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year. The Public Authority Accountability Act of 2005 provides that the Audit Committee shall recommend to the Board of Trustees the hiring of a certified independent accounting firm. At their meeting on July 29, 2014, the Trustees approved the award of a contract to KPMG, for auditing and other services, for five years (2014 through 2018). That contract will expire on September 15, 2019.

DISCUSSION

In accordance with the Authority's Procurement Guidelines, a request for competitive bids was posted on the Authority's website and published in the New York State Contract Reporter on May 20, 2019 for independent accounting services. The audit services are to include preparation of the following for the years 2019 through 2023: (1) an opinion on the Authority's financial statements, (2) an opinion on the Authority's compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York, (3) a review of the Authority's internal controls over financial reporting, compliance and other matters based on an audit of financial statements performed in accordance with government auditing standards, and (4) an audit of the Authority's financial records relating to grants received under Federal Programs in accordance with Title 2 U.S. Code of Federal Regulations Part 200 (2 CFR 200), Uniform Administrative Requirements, Cost Principles, and Audit Requirement for Federal Awards ("The Uniform Guidance"). In addition, the independent accountant may be requested to perform other audit services (for example, reviews of debt offering statements) and non-audit services (for example, reviews of internal process and procedural matters). In response to this request, the Authority received a bid from KPMG, its current independent accountant.

During the term of its current contract, KPMG has developed an in-depth understanding of the Authority's operations and finances and has committed to assigning senior personnel with extensive utility experience to the Authority's audit team. The proposed engagement partner has a deep understanding of the Authority's local, regulatory and operating environment, having served as lead partner for several large regional utility clients. In addition, KPMG plans to assign technical resources who have demonstrated their ability to address emerging complex technical issues. The firm has a large national auditing practice with significant experience in both the utility and government sectors.

Based on KPMG's proposal, historical experience and projected services, staff estimates total expenditures over the five-year contract will approximate \$3.0 million compared to \$2.5 million in the prior contract. The proposal includes \$2.0 million for annual audit services, \$400,000 for other audit services and \$600,000 for non-audit services.

FISCAL INFORMATION

Payments over the term of the contract will be made from the Operating Fund.

RECOMMENDATION

Based on KPMG's qualifications to perform the services, reasonable price and hourly rates, and satisfaction of the bid requirements, the Audit Committee recommends that the Trustees approve the award of a five-year contract to KPMG LLP to perform the annual audits of the Authority's financial records for the years 2019 through 2023 and perform other services, as may be required, through September 15, 2024 in an amount not to exceed \$3.0 million.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Ms. Angela Gonzalez provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Chairman Koelmel, the following resolution, as submitted by the Chair of the Audit Committee, was unanimously adopted.

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority and provisions of the Public Authority Accountability Act of 2005, the award and funding of a multi-year procurement contract to KPMG LLP is hereby approved for the period of time indicated, as recommended in the foregoing report from the Chairman of the Audit Committee in the amount and for the purpose listed below;

<u>O&M</u>	<u>Projected Closing Date</u>	<u>Contract Approval</u>
Independent Accounting Services		
KPMG LLP New York, NY	9/16/19	Not to exceed \$ 3.0 million

Five-year contract to perform the annual audits of the Authority's financial records for the years 2019 through 2023;

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

ii. **Approval of the New York Power Authority and Canal Corporation Audit Committee Charters**

The Chair of the Audit Committee submitted the following report:

SUMMARY

The Authority's Trustees and the Canal Corporation's Board of Directors are requested to adopt the Authority's and the Canal Corporation's Audit Committee Charters as set forth in Exhibits '6b ii-A' and '6b ii-B,' and recommended by the Audit Committee at its July 9th meeting.

BACKGROUND

The Authority's Audit Committee Charter was last amended on December 12, 2017 to reflect best practices and to conform to the Canal Corporation's Audit Committee Charter, which was adopted on January 31, 2017. There have been no additional changes to the Audit Committee Charters, and the Boards' approval are requested for compliance with the Institute of Internal Auditors Standards.

FISCAL INFORMATION

None.

RECOMMENDATION

The Audit Committee recommends that the Authority's Trustees and the Canal Corporation's Board of Directors adopt the Authority's and the Canal Corporation's Audit Committee Charters as presented and set forth in Exhibits '6b ii-A' and '6b ii-B.'

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Ms. Angela Gonzalez provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Chairman Koelmel, the following resolution, as submitted by the Chair of the Audit Committee, was unanimously adopted.

RESOLVED, That the attached Authority and Canal Corporation Audit Committee Charters be adopted in the form proposed in Exhibits "6b ii-A" and "6b ii-B."

iii. **Approval of the New York Power Authority Internal Audit Committee Charter (Corporate Policy 5-1)**

The Chair of the Audit Committee submitted the following report:

SUMMARY

The Authority's Trustees are requested to adopt the Authority's Internal Audit Charter as set forth in Exhibit '6b iii-A' of this item, and recommended by the Audit Committee at its July 9th meeting.

BACKGROUND

The Authority's Internal Audit Charter was last amended on October 5, 2018 to reflect reporting line changes and updates to audit processes. There have been no additional changes to the Internal Audit Charter, and approval is requested by the Audit Committee for compliance with the Institute of Internal Auditors Standards.

FISCAL INFORMATION

None.

RECOMMENDATION

The Audit Committee recommends the adoption of the Authority's Internal Audit Committee Charter as presented and set forth in Exhibit '6b iii-A.'

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Ms. Angela Gonzalez provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Chairman Koelmel, the following resolution, as submitted by the Chair of the Audit Committee, was unanimously adopted.

RESOLVED, That the attached Authority Internal Audit Committee Charter be adopted in the form proposed in Exhibit "6b iii-A."

C. Cyber and Physical Security Committee Report

Chair Michael Balboni said that the Cyber and Physical Security Committee met today and the staff reported on various methods and opportunities that the security team has used to teach the staff about security awareness and their role in security, specifically focusing on one individual who did an outstanding job in preventing a phishing attack. Staff also provided the Committee examples of how security awareness plays an important role in protecting NYPA.

The committee also discussed how NYPA is partnering with Israeli cyber firms providing unique technology capabilities as cyber security is a major issue for utilities throughout the world. This was included in a recent announcement made by Governor Cuomo.

d. Governance Committee Report

Chairperson Anne Kress reported that the Governance Committee considered the appointment of Adam Barsky as Executive Vice President and Chief Financial Officer of the Authority and Canal Corporation.

Mr. Barsky most recently served as Chief of Staff and Special Counselor to the Executive Director at the Port Authority. In addition, from 2006 to 2017, Mr. Barsky served as Executive Vice President, Treasurer and Chief Risk Officer for the Israel Discount Bank of NY.

Mr. Barsky has served in a number of governmental capacities throughout his career and has extensive experience in working at the state and local levels.

The Governance Committee voted to recommend his appointment to the full Board effective immediately and that motion is now before the Board for adoption.

i. **Appointment of New York Power Authority
and Canal Corporation Executive Vice
President and Chief Financial Officer**

The Chair of the Governance Committee submitted the following report:

"SUMMARY

The Authority's Trustees and the Canal Corporation's Board of Directors are requested to consider the appointment of Adam Barsky as Executive Vice President and Chief Financial Officer of the Authority and Canal Corporation, at an annual salary of \$275,000, effective immediately, to hold such office until his successor is chosen and qualified or until his earlier removal, resignation or death.

BACKGROUND & DISCUSSION

The appointment of officers is governed by the Bylaws, Article IV, Section 2, which provides that the Trustees/Board of Directors shall appoint officers by formal resolution upon the recommendation of the Governance Committee.

RECOMMENDATION

It is recommended by the Governance Committee that the Authority's Trustees and the Canal Corporation's Board of Directors appoint Adam Barsky as Executive Vice President and Chief Financial Officer, at an annual salary of \$275,000, effective immediately, to hold such office until his successor is chosen and qualified or until his earlier removal, resignation or death.

For the reasons stated, the Governance Committee recommends the approval of the above-requested action by adoption of the resolution below."

On motion made by Trustee Kress and seconded by Chairman Koelmel, the following resolution, as submitted by the Chair of the Governance Committee, was unanimously adopted.

RESOLVED, That pursuant to Article IV, Section 2 of the Authority and Canal Corporation's Bylaws, Adam Barsky is hereby appointed as Executive Vice President and Chief Financial Officer, at an annual salary of \$275,000, effective immediately, to hold such office until his successor is chosen and qualified or until his earlier removal, resignation or death.

7. Board Resolution – Ed Rider

Mr. Joseph Kessler made a presentation of the Resolution below to Mr. Edward Rider (“Ed”), in absentia, who was retiring from the Power Authority. He said that Ed was an incredible Engineer and a great leader in Northern New York. He did a lot to help the safety program at the STL Plant in Massena when he became Regional Manager and has been an incredible mentor to many Engineers and other staff members. He would accept any assignments given to him. He has relocated a number of times for the Power Authority gaining diverse experiences/knowledge, which he was not averse to sharing with other staff members. To that end, he has won many mentorship awards in recognition of this trait.

Vice Chairman Nicandri added that he worked with Ed in Massena and wanted to highlight what a dedicated employee he has been for the Power Authority. He said, as Mr. Kessler mentioned, Ed is willing to go any place and do anything as an employee of the Authority. He continued that Ed will be carrying a lot of knowledge and institutional information with him “out the door” but is sure that Ed would be glad to impart it to any staff member that asks.

On motion made by Trustee Balboni and seconded by Trustee Picente, the following resolution was unanimously adopted.

Whereas, Ed Rider has been an inspirational example of professionalism, dedication and leadership in his nearly four decades of distinguished service to the New York Power Authority and the State of New York; and

Whereas, Mr. Rider has held various crucial NYPA engineering and operations positions, starting out in 1982 as an electrical engineer and rising steadily through the ranks to become the Power Authority’s Northern New York Regional Manager. This is the highest ranking position at the St. Lawrence-Franklin D. Roosevelt Power Project, NYPA’s first power plant; and

Whereas, Mr. Rider has been consistently recognized for his leadership in bringing forth the highest performance standards from the St. Lawrence project’s 200-plus-member workforce in ensuring low-cost power generation for Alcoa’s Massena operation and for the creation and retention of jobs at other North Country businesses; and

Whereas, Mr. Rider’s profound personal commitment to maintaining a safe work environment, combined with his deep respect for the men and women who served under him and the safety culture they built together, led to two of the longest safety records in the plant’s history for a total of 3-1/2 years without an accident or injury causing a worker to lose a day of work; and

Whereas, Mr. Rider’s exceptional engineering expertise, management know-how, and commitment to excellence ensured that the St. Lawrence project has been a mainstay for reliable, low-cost electricity and a prominent part of the Power Authority’s clean energy profile, which continues to expand in support of Governor Andrew Cuomo’s ambitious goals for the state to achieve a carbon-neutral electric system by 2040; and

Whereas, Mr. Rider's duties also extended to the environmental stewardship of more than 30 miles of the St. Lawrence River Valley, including two control dams upstream and thousands of acres of public parkland along the river for recreational enjoyment and wildlife preservation, where he presided over the creation of numerous new habitat improvement projects and the restoration of several new park facilities and the Eugene L. Nicandri Nature Center; and

Whereas, Mr. Rider, a rare leader who prefers to lead by example and build consensus, exemplifies integrity in all facets of his life and embodies the spirit of giving back to the community, along with being a trusted advisor and inspiring mentor to many young engineers; and

Whereas, During the many periods of unusually high river flows that corresponded with Mr. Rider's tenure at the Moses-Saunders Power Dam, he developed a keen appreciation for NYPA's role in balancing the needs of water, safety and power and built a solid reputation as NYPA's liaison to the International Lake Ontario-St. Lawrence River Board and made sure the St. Lawrence project was available to pass through the required amounts of water when called upon to balance water flows; and

Whereas, Following the devastating damage of Hurricanes Irma and Maria in Puerto Rico and the U.S. Virgin Islands—and the restoration of power—Rider selflessly represented the Power Authority on special assignment leading a NYPA Caribbean team to help design more storm resilient and “greener” electric systems;

Now Therefore Be It Resolved, that the Trustees of the Power Authority of the State of New York convey their deepest gratitude, respect and appreciation to Ed Rider for his service to NYPA and the people of the state and wish him, his wife Jennifer, of 30 years, their children and grandchildren a happy, healthy and rewarding future.

May 2019

a. Debra White – Retirement

President Quiniones said that he wanted to make a special recognition of Ms. Debra White (“Debra”) who was also retiring from the Authority after 39 years of service. He said that Debra started in June 1980 and rose through the ranks of the Authority’s Procurement and Strategic Supply management group.

He continued that Debra started managing the Authority’s M/WBE program or Supplier Diversity Program since 1999 up to her retirement. Debra played a big role in that program. In fact, this year, under Debra’s leadership, the Authority’s Supplier Diversity Program passed the \$1 billion mark in M/WBE spending. Most importantly, Debra did not only concentrate on just the spending and having a robust M/WBE program, but he has always seen her work with those companies to increase their capacity and look for new M/WBE companies that can participate in the Authority’s program, which is truly admirable. President Quiniones ended by saying that he and other staff members are very grateful for Debra’s service to NYPA and to the people of this State.

8. **Next Meeting**

The Regular joint meeting of the New York Power Authority's Trustees and the Canal Corporation's Board of Directors will be held on September 25, 2019 **at the Clarence D. Rappleyea Building, White Plains, New York**, unless otherwise designated by the Chairman with the concurrence of the Trustees.

Closing

Upon motion made by member Michael Balboni and seconded by member Anthony Picente, the meeting was adjourned at approximately 11:30 a.m.

Karen Delince

Karen Delince
Corporate Secretary

July 30, 2019

EXHIBITS

For

July 30, 2019

Regular Joint Meeting

Minutes

POWER AUTHORITY OF THE STATE OF NEW YORK

30 South Pearl Street
10th Floor
Albany, New York 12207-3425

AGREEMENT FOR THE SALE
OF FIRM HYDROELECTRIC POWER AND ENERGY FROM
THE ST. LAWRENCE-FDR POWER PROJECT
TO ALCOA USA CORP.

Service Tariff No. ST AL – 1 - Electric Service Tariff for Alcoa USA Corp. Firm Hydroelectric
Power Service

POWER AUTHORITY OF THE STATE OF NEW YORK

30 South Pearl Street, 10th Floor
Albany, New York 12207-3425

**AGREEMENT FOR THE SALE
OF FIRM HYDROELECTRIC POWER AND ENERGY FROM
THE ST. LAWRENCE-FDR POWER PROJECT
TO ALCOA USA CORP.**

Alcoa USA Corp. ("Alcoa" or "Customer") hereby enters into this Agreement with the Power Authority of the State of New York ("Authority" or "NYPA," and collectively with Customer, the "Parties") for the sale of firm hydroelectric power and energy for its facilities at Park Avenue East ("West Plant"), Massena, New York 13662 as follows:

WHEREAS, the Authority and Alcoa Inc. (now Arconic Inc.), formerly the parent company of Customer, in or around June 2016, entered into a contract entitled "Agreement for the Sale of Firm Hydroelectric Power and Energy from the St. Lawrence-FDR Power Project to Alcoa Inc." (the "2016 Agreement"), which agreement was novated by Alcoa Inc. to Customer on August 1, 2016 and is scheduled to terminate on March 31, 2019;

WHEREAS, the Parties seek to enter into a new agreement effective April 1, 2019, to provide to Customer from the Authority's St. Lawrence-FDR Project 240,000 kW of Firm Hydroelectric Power and Energy to be used by Customer at its West Plant facility;

WHEREAS, such Allocation shall be sold by the Authority to Customer under this Agreement for the Sale of Firm Hydroelectric Power and Energy ("Agreement"); and

WHEREAS, such Allocation is subject to the tariffs of the New York Independent System Operator, Inc. ("NYISO").

NOW THEREFORE, the Parties hereto agree as follows:

I. Definitions

"2016 Agreement" has the meaning ascribed to it in the first "Whereas" clause.

"Agreement" means this Agreement, which attaches and incorporates Service Tariff No. ST AL-1.

"Allocation" refers to the allocation of Preservation Power ("PP") awarded to the Customer as defined in Article II and as specified in Schedule D.

“Authority or NYPA” is the Power Authority of the State of New York, which also does business as New York Power Authority.

“Contract Demand” will be the amount set forth in Article II or such other amount as may be determined in accordance with the provisions of this Agreement.

“Electric Service” is Firm Hydroelectric Power and Energy sold to Customer in accordance with this Agreement, the Service Tariff and the Rules.

“Firm Hydroelectric Power and Energy” is power and associated energy from the Project as provided in Service Tariff No. ST AL-1, and allocated by Authority for business use as Preservation Power pursuant to Section 1005(13) of the New York Public Authorities Law ("PAL").

“FERC” means the Federal Energy Regulatory Commission (or any successor organization).

“FERC License” means the license issued by FERC to Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act.

“Force Majeure” has the meaning set forth in Section XIV.

“Hydro Projects” is a collective reference to the Project (defined below) and Authority's Niagara Project, FERC Project No. 2216.

“NYISO” means the New York Independent System Operator or any successor organization responsible for the transmission and the reliable supply of electricity in the State of New York.

“Project” means Authority's St. Lawrence-FDR Project, FERC Project No. 2000.

“Rules” are the applicable provisions of Authority's Rules and Regulations for Power Service (Part 454 of Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York) as they are modified from time to time.

“Schedule A” refers to the Schedule A entitled “Employment and Other Commitments” which, along with its attachments/appendices, is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Service Tariff No. AL-1” which is attached to and made part of this Agreement.

“Schedule C” refers to the Schedule C entitled “Monthly CES Charge” which is attached to and made part of this Agreement.

“Schedule D” refers to the Schedule D entitled "Preservation Power Allocation(s)", which describes the PP Allocations made to the Customer and which is attached to and made part of this Agreement.

“Service Tariff” means the Authority’s Service Tariff No. AL-1, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

“TSC” is the “NYPA Transmission Service Charge”, authorized under the NYISO Open Access Transmission Tariff and applicable to deliveries of Electric Service to Customer.

Other capitalized terms herein that are not otherwise defined in this Agreement or in its attachments and schedules shall have the meaning set forth in the Service Tariff or the Rules.

II. Electric Service to be Provided

A. Allocation and Contract Demand.

The Authority will allocate to Alcoa two hundred forty thousand (240,000) kilowatts (“kW”) of Firm Hydroelectric Power and Energy from the Project (the “Allocation”), branded in statute as PP for the period from April 1, 2019 through March 31, 2026 for use at the Alcoa West Plant, Park Avenue East, Massena, New York 13662. The Contract Demand is the amount of PP the Authority will sell to Alcoa and shall equal the Allocation amount. The Project Hydropower that will comprise the Allocation is part of the hydropower that has been sold under the 2016 Agreement which has a scheduled termination date of March 31, 2019. The Authority’s service tariff designated as Service Tariff ST AL-1 (“Service Tariff” or “ST AL-1”) shall apply to the sale of the Allocation.

- B. Delivery Points.** At 115,000 Volts at the points of interconnection of Customer's transmission lines to the Barnhart Island Switchyard of the Authority at the West Plant, Massena, New York, or at such other points and voltages as agreed between Customer and the Authority.
- C. Reduction of Contract Demand.** The foregoing Contract Demand may be reduced by Authority if the amount of Firm Hydroelectric Power and Energy available for sale from the Project is reduced as required to comply with any unstayed ruling, order or decision of any regulatory or judicial body of competent jurisdiction. Any such reduction in the Contract Demand made by the Authority under this subparagraph shall be in proportion to the overall reduction in the aggregate contract demands of hydroelectric customers sold by the Authority from the Project.
- D.** Authority and Customer shall cooperate in any relocation or installation of transformers or other related facilities servicing West Plant that either Party reasonably deems necessary or desirable. The costs of any such relocation or installation shall be

the responsibility of Customer, except in cases where Authority seeks the relocation or installation; provided however, that Authority will, if requested by Customer, consider in good faith whether its other customers receive any substantial benefit from such relocation or installation. If NYPA determines that such substantial benefits exist, it shall negotiate in good faith with Customer regarding an alternative funding arrangement. In any event, NYPA shall not be obligated to agree upon an alternative funding arrangement.

III. Employment and Other Commitments

The Customer shall be subject to the employment and other commitments set forth in Schedule A. As more particularly set forth in Schedule A, the Authority's obligation to provide Electric Service under this Agreement may be reduced or terminated altogether in the event of Customer's non-compliance with the Employment and Other Commitments described in Schedule A. The Customer's Employment and Other Commitments are in addition to all other commitments and obligations provided in this Agreement.

IV. Rules, Regulations and Service Tariff

The Rules and the Service Tariff are hereby incorporated into this Agreement with the same force and effect as if herein set forth at length. In the event of any inconsistencies, conflicts or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff, the provisions of this Agreement shall govern. Except as may be provided under Section V.D., below, Authority shall provide at least thirty (30) days prior written notice to Customer of any proposed change in the Rules or Service Tariff, but in no event shall Authority provide less notice than that provided to similarly affected customers within New York State.

V. Power and Energy Rates, Other Charges and Bond Covenant

- A. Base Rates: Firm Hydroelectric Power and Energy associated with the Allocation shall be sold to Customer hereunder at rates for base commodity and TSC determined in accordance with ST AL-1 attached hereto.
- B. Customer agrees to compensate Authority for all transmission costs incurred as set forth in ST AL-1. Such charges or costs shall be in addition to the charges recovered through the base rates in ST AL-1 for base commodity and TSC. Customer understands that delivery of the Allocation will be made over transmission facilities under the control of the NYISO, including those owned by Customer or its affiliates. Unless Customer provides Authority sixty (60) days written notice otherwise, Authority will act as the Load Serving Entity ("LSE") with respect to the NYISO or arrange for another entity to do so on its behalf. Customer agrees and understands that it shall be responsible to Authority for all costs incurred by Authority with respect to the Allocation for the services established in the

NYISO's applicable tariffs, as set forth in ST AL-1, whether or not such charges are transmission-related. Such charges or costs shall be in addition to the charges recovered through the base rates in ST AL-1 for base commodity and TSC.

- C. To the extent Authority incurs any taxes, assessments or other charges imposed by third parties associated with or attributable to the Allocation, other than any charges associated with the CES Charge as such charge is addressed specifically in Section V.E below, Customer agrees to compensate Authority for all such costs incurred as set forth in ST AL-1. Such charges or costs shall be in addition to the charges recovered through the base rates in ST AL-1 for base commodity and TSC.
- D. Notwithstanding any provision of this Agreement to the contrary, the power and energy charges shall be subject to increase by Authority at any time upon 30 days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy charges pursuant to this provision. Any rate increase to Customer under this subsection shall be on a non-discriminatory basis as compared to other Authority customers after giving consideration to the factors set forth in the first sentence of this subsection. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.
- E. In addition to all other fees, assessments and other charges provided for in the Agreement, ST AL-1, and the Rules, the Customer shall be responsible for payment of the Monthly CES Charge established in Schedule C.

VI. Hydropower Curtailments and Substitute Energy

- A. If hydraulic or hydrological conditions affecting the Hydro Projects require Authority to curtail the amount of Firm Hydroelectric Power and Energy provided to Customer under this Agreement to an amount below such normal level, reductions shall be applied to all the firm power customers served from the Hydro Projects, including Customer, in proportion to their relative allocations of Firm Hydroelectric Power and Energy from the Hydro Projects.

Reductions as a percentage of the otherwise required Power and Energy deliveries will be the same for all firm Authority hydropower customers served from the Hydro Projects.

- B. Authority will provide Substitute Energy to the Customer to replace the hydroelectricity that would otherwise have been supplied.

1. Billing for Substitute Energy. For each kilowatt-hour of Substitute Energy supplied by the Authority, in lieu of paying the base rates set forth in Section V.A. above, the Customer shall pay the Authority directly for: (a) the market cost of the Substitute Energy; and (b) all costs, including but not limited to any NYISO Charges and Taxes, the Authority incurs in connection with the provision of Substitute Energy. Billing and payment for Substitute Energy shall be governed by the Billing and Payments provision of Section 454.6 of the Rules and shall apply directly to the Substitute Energy service supplied to the Customer.

2. Substitute Energy Provision Effect on Contract. All other provisions of the Agreement shall continue in effect with Substitute Energy being delivered in the same manner as would have otherwise been the case.

VII. Billing

Billing shall be performed in accordance with ST AL-1.

VIII. Term, Termination of Service and Early Termination

Electric Service under the Agreement shall commence effective April 1, 2019 ("Effective Date") and continue through and including March 31, 2026 (the "Expiration Date"), provided, however, that Electric Service may be cancelled, reduced, modified, or terminated prior to the Expiration Date as follows:

1. The Authority may cancel or terminate Electric Service under this Agreement pursuant to Part 454 of the Rules upon notice specified in such provision.
2. The Authority may modify Electric Service under this Agreement in a manner that is consistent with any reduction to the Allocation made for any reason authorized by this Agreement, Service Tariff, or the Rules.
3. The Authority may cancel Electric Service, or modify the quantities of power and energy associated with the Allocation and adjust Electric Service accordingly, under this Agreement in order to comply with any unstayed ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency).

4. Customer may, for any reason, terminate this Agreement or reduce or terminate Electric Service under this Agreement at any time on written notice given to Authority no less than ninety days (90) in advance, without prejudice to Customer's rights to terminate this Agreement or reduce or terminate Electric Service hereunder due to Force Majeure or breach of this Agreement by Authority.

IX. Notification

Correspondence involving the administration of this Agreement shall be addressed as follows:

To: Authority

Vice President – Economic Development
Power Authority of the State Of New York
123 Main Street
White Plains, NY 10601

To: Customer

Alcoa USA Corp.
Attention: Vice President -- Energy
201 Isabella Street
Pittsburgh, PA 15212
With a copy to:

Alcoa USA Corp.
Attention: General Counsel
201 Isabella St.
Pittsburgh, PA 15212

X. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License for the St. Lawrence-FDR Project.

XI. Successors and Assigns, No Resale of Allocation, No Third Party Beneficiaries

This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto. Subject to acceptance of all provisions of this Agreement by any successor or assignee, any assignment of this Agreement by Customer shall only be to another entity that will utilize the Allocation for the same purposes and same location as such Allocation is utilized by Customer. If Customer is unable to or does not use any portion of its Allocation for any period of time, then any such unused Firm Hydroelectric Power and Energy (and all rights attendant thereto) shall

be subject to Service Tariff provisions, including Minimum Monthly Capacity Charge, and shall revert to Authority for its exclusive use until utilized by Customer and Customer shall have no right to sell, transfer, assign, monetize or otherwise use such unutilized power and energy. This Agreement shall not be construed to give any rights to any person who is not a Party to this Agreement.

XII. Supplementary Provision

Section 454.2(c) of the Rules is inapplicable to this Agreement.

XIII. Previous Agreements and Communications

This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale, transmission and delivery of the Allocation and supersedes all prior agreements and all previous communications between the Parties hereto, either oral or written, with reference to said Allocation. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.

XIV. Force Majeure

A. Events of Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement (the "Claiming Party"), the Claiming Party shall be excused from the performance of its obligations with respect to this Agreement (other than the obligation to make payments then due or becoming due with respect to performance prior to the Force Majeure). The non-Claiming Party shall not be required to perform or resume performance of its obligations to the Claiming Party corresponding to the obligations of the Claiming Party excused by Force Majeure. Failure to perform in whole or in part because of the occurrence of an event of Force Majeure shall not constitute a default hereunder or subject a Party to liability for any resulting loss or damage. The Parties agree to use their respective reasonable efforts to cure any event of Force Majeure to the extent that it is reasonably possible to do so, it being understood that no Party shall be required to make any concession or grant any demand or request in order to bring to an end any strike, lockout or other industrial disturbance where such course is deemed inadvisable in its sole discretion. Upon the occurrence of an event of Force Majeure, the Claiming Party shall promptly notify the non-Claiming Party of such events and shall specify in reasonable detail the facts constituting such events of Force Majeure.

B. "Force Majeure" Definition. "Force Majeure" means labor strikes, lockouts or other labor troubles, shortage of labor, transportation, raw materials, energy sources, or failure of usual means of supply; fire; flood; war, declared or undeclared; insurrection; riots, acts of God or the public enemy; accidents to or breakdown or mechanical failure of machinery or equipment caused by an event of Force Majeure; "uncontrollable forces" as defined in Section 454.3(c) of the Rules; or any other cause whatsoever whether or not of any nature of character mentioned above which is beyond the reasonable control of the affected Party and which affects the performance by the affected Party of the whole or part

of its obligations under this Agreement. For the avoidance of doubt, Force Majeure shall not include (i) increased costs of performance or decline in revenues, including price disruption or deterioration in Customer's sale markets; (ii) Customer's inability economically to use the Allocation; (iii) defaults or non-performance by contractors or suppliers unless caused by Force Majeure; or (iv) unavailability of financing. Neither Party may raise a claim of Force Majeure based in whole or in part on curtailment by NYISO unless such curtailment is due to Force Majeure.

C. In the event Customer is required to interrupt, suspend or limit production at the West Plant as a result of Force Majeure, the Authority may suspend or reduce scheduled Electric Service, as appropriate.

XV. Communication Coordination

The Parties agree to use reasonable efforts to coordinate the timing and content of any public communications regarding this Agreement and the transactions contemplated hereby, provided that each Party shall be free to make any communication required by any applicable law, governmental regulations, stock exchange rules, subpoena or other written demand made in accordance with applicable law or as required in connection with any legal proceedings.

XVI. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof.

Notwithstanding the preceding paragraph, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

XVII. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be an original, with the same effect as if the signatures thereto were upon the same instrument.

XVIII. Effectiveness of Agreement

This Agreement shall become effective upon execution by both Parties.

AGREED:

ALCOA USA CORP.

BY: _____

Title: _____

Date: _____

(Seal)

Attest by: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

BY: _____

Title: _____

Date: _____

(Seal)

Attest by: _____

SCHEDULE A

EMPLOYMENT AND OTHER COMMITMENTS

SECTION I. CUSTOMER COMMITMENTS

1. West Plant Operations: During the Term, Customer will continue smelter operations at the West Plant.
2. Employment Commitments:
 - a. The Customer shall create and maintain the employment level set forth in the Appendix to this Schedule A (the "Base Employment Level"). Such Base Employment Level shall be the total number of full-time positions held by: (a) individuals who are employed by the Customer or its affiliates at Customer's West Plant identified in the Appendix to this Schedule, and (b) individuals who are contractors or who are employed by contractors of the Customer and assigned to the West Plant (collectively, "Base Level Employees"). The number of Base Level Employees shall not include individuals employed on a part-time basis (less than 35 hours per week); provided, however, that two individuals each working 20 hours per week or more at the West Plant shall be counted as one Base Level Employee.
 - b. The Base Employment Level shall not be created or maintained by transfers of employees from previously held positions with the Customer or its affiliates within the State of New York, except that the Base Employment Level may be filled by employees of the Customer laid off from other Customer facilities for *bona fide* economic or management reasons.
 - c. The Authority will consider a request to change the Base Employment Level based on a claim of increased productivity, increased efficiency or adoption of new technologies or for other appropriate reasons as determined by the Authority. Any such change shall be within Authority's discretion.
3. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule A.
4. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Contract Demand (as such term is described in the Service Tariff). If only part of the Allocation is being utilized pursuant to a takedown schedule or other written agreement between the Customer and the Authority, then the Customer shall utilize such entire part of the Allocation.

SECTION II. RECORDKEEPING AND REPORTING

1. Employment

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Base Level Employees who are employed at or assigned to the Customer's West Plant. Such report shall separately identify the individuals who are employed by the Customer, and the individuals who are contractors or who are employed by contractors of the Customer, and shall be certified to be correct by an officer of the Customer, plant manager or such other person authorized by the Customer to prepare and file such report and shall be provided to the Authority on or before the last day of February following the end of the most recent calendar year. The Authority shall have the right to examine and audit on reasonable advance written notice all non-confidential written and electronic records and data concerning employment levels including, but not limited to, personnel records and summaries held by the Customer and its affiliates relating to employment in New York State.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in the Appendix to this Schedule A.

3. Power Utilization

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority on or before the last day of February following the end of the most recent calendar year, of the maximum demand utilized each month in the West Plant receiving the power covered by the Agreement.

SECTION III. COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in the Appendix to this Schedule A for the subject calendar year, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

2. Capital Investment Commitment

The Authority may reduce the Contract Demand as provided in the Appendix to this Schedule A if the Customer does not comply with the Capital Investment Commitment.

3. Power Utilization Level

If the average of the Customer's six (6) highest Peak Demands (as such term is described in the Service Tariff) in any calendar year for PP is less than 90% of the Customer's Contract Demand in such calendar year, for reasons other than Force Majeure, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Peak Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, the Service Tariff and the Rules, the Authority may suspend Electric Service to the Customer if the Customer fails to comply with its recordkeeping and reporting requirements contained in Section II of this Schedule A and fails to cure such non-compliance within thirty (30) days following written notice of such non-compliance received from the Authority.

5. Notice of Intent to Reduce Contract Demand

In the event that the Authority determines that the Contract Demand will be wholly or partially reduced pursuant to Sections III.1, III.2, or III.3 of this Schedule A, the Authority shall provide the Customer with at least thirty (30) days prior written notice of the proposed reduction, specifying the amount and reason for the reduction. Before implementing any reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance, facility upgrade periods, and the business cycle, and any other relevant factors offered by the Customer. If, at the end of the thirty (30) day notice period, the Authority determines that a reduction is warranted, it shall provide the Customer with notice of such determination and provide the Customer with sixty (60) days to present a proposed plan with actionable milestones to cure the deficiency. The Authority shall respond to the Customer concerning the acceptability of any proposed plan that is provided in accordance with this Section III.5 within thirty (30) days of the Authority's receipt of such proposed plan. It shall be within the Authority's discretion whether or not to accept the Customer's proposed plan, require a different plan, or implement the reduction of the Contract Demand after the Authority's response to the Customer's proposed plan. If the Authority elects to implement the reduction of the Contract Demand, it will suspend such reduction and restore Customer's Contract Demand within a reasonable time upon Customer's successful cure of the deficiency.

APPENDIX TO SCHEDULE A

BASE EMPLOYMENT LEVEL

During the course of each calendar year during the term of this Agreement (a “Reporting Year”), the Customer shall employ at least 450 full-time employees (“Base Employment Level”) at the Customer’s West Plant, subject to the 90% compliance threshold as further detailed in Schedule A, Section III. The Base Employment Level shall be maintained for the term of the Allocation through the term of the Agreement.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the West Plant (“Rolling Average”) shall total not less than \$2 million (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the West Plant during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the West Plant during the two prior Reporting Years. The first Reporting Year for the Annual Capital Investment Commitment shall be calendar year 2021, and such initial report shall consider the Rolling Average for the period 2019-2021.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

SCHEDULE B
SERVICE TARIFF NO. AL-1



POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

Electric Service Tariff for Alcoa USA Corp.
Firm Hydroelectric Power Service

Service Tariff No. AL – 1

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Schedule of Rates for Firm Hydroelectric Power Service

I. Applicability

This Service Tariff is applicable to the sale of firm hydroelectric power service produced by the Authority's St. Lawrence-FDR Project to Alcoa USA Corp. ("Alcoa" or "Customer") and as further defined in the Agreement.

II. Frequently Used Abbreviations and Terms

- kW kilowatt(s)
- kWh kilowatt-hour(s)
- MWh megawatt-hour(s)
- NYISO New York Independent System Operator, Inc. or any successor organization
- OATT NYISO Open Access Transmission Tariff
- PAL New York Public Authorities Law
- UCAP Unforced Capacity

Agreement: An executed agreement between the Authority and the Customer setting forth the terms and conditions applicable to the allocation and sale of firm hydroelectric power to the Customer, including an agreement entitled "Agreement for the Sale of Firm Hydroelectric Power and Energy from the St. Lawrence-FDR Power Project to Alcoa USA Corp."

Aluminum Price: Aluminum price derived as a reference point for assigning applicable base rates and is calculated as the sum of the London Metal Exchange and Midwest Aluminum Premium reference prices as further defined herein.

Authority: The Power Authority of the State of New York, a corporate municipal instrumentality and a political subdivision of the State of New York created pursuant to Chapter 772 of the New York Laws of 1931 and existing and operating under Title 1 of Article 5 of the PAL, also known as the "New York Power Authority" and "NYPA."

Billing Energy: This term has the meaning provided for in Section III.G.1 of this Service Tariff.

Billing Period: Any period of approximately thirty (30) days, generally ending with the last day of each calendar month but subject to the billing cycle requirements.

Capacity Tag: Capacity (kW) as expressed by the NYISO as the Unforced Capacity ("UCAP") obligation for a capability period. The UCAP obligation is inclusive of any adjustments for reserves needed to meet the installed reserve margin as required by the NYISO.

Contract Demand: This term has the meaning provided for in the Agreement.

Electric Service: The power and energy provided to the Customer in accordance with the Agreement, this Service Tariff and the Rules.

Firm Power and Energy: This term has the meaning provided for in Section IV.B. of this Service Tariff.

Hydro Projects: Collective reference to the Project and Authority's Niagara Project, FERC Project No. 2216.

London Metal Exchange or LME: Center for industrial metals trading used as reference to derive Aluminum Prices within this Service Tariff. Specifically, the LME component used in calculating the Aluminum Price for a particular month (M) shall be the average LME Cash Buyer's Price for the month prior (M-1).

Load Serving Entity or LSE: This term has the meaning provided for in the Agreement.

Load Factor Share: Methodology used to determine firm hydroelectric Billing Energy share of the total Native System Load as further defined in Section III.G.1 of this Service Tariff.

Midwest Aluminum Premium or MWP: Midwest U.S. Premium price published by Platt's Metals Week, converted to dollars per metric tonne (\$/metric tonne), in addition to LME aluminum price, used to derive Aluminum Prices within this Service Tariff. Specifically, the MWP component used in calculating the Aluminum Price for a particular month (M) shall be the average MWP for the month prior (M-1).

Minimum Monthly Capacity Charge: This term has the meaning provided for in Section III.D.1 of this Service Tariff.

Native System: Customer's electric system at Park Avenue East ("West Plant"), Massena, New York 13662.

Native System Load: Total consumption within the boundaries of the Customer's electric system, as determined by the Authority's revenue-grade metering equipment. This includes incoming bilateral energy, market purchases taken from the transmission grid, and internal generation. The coincident sum of all incoming power and internal generation minus the outgoing power being sent back to the transmission grid will be considered the Native System Load and will be the value used to calculate the monthly Native System Load Factor.

Native System Load Factor: Percent value calculated every Billing Period as follows: (Native System Load) ÷ [(Peak Demand) * (# of Hours in the Billing Period)].

NYISO Tariffs: The tariffs of the NYISO, including the NYISO OATT, as such tariffs are amended and in effect from time to time.

Peak Demand: The highest coincident sixty (60) minute integrated demand of the Native System Load measured during the Billing Period and expressed in kW.

Project: The Authority's St. Lawrence-FDR Power Project.

Rural/Domestic Rate: Rates charges by the Authority for the sale of hydroelectricity for the benefit of rural and domestic customers receiving service in accordance with the Niagara Redevelopment Act, 16 U.S.C. § 836(b)(1) and PAL §1005(5).

Rules: The Authority's rules and regulations set forth in Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York as may be modified from time to time by the Authority.

Service Tariff: This service tariff, denominated as “Electric Service Tariff for Alcoa USA Corp. Firm Hydroelectric Power Service, Service Tariff No. AL - 1,” as amended from time to time by the Authority.

Substitute Energy: Energy the Authority procures and sells to the Customer to replace Firm Power and Energy that would otherwise have been sold to the Customer but for a curtailment made in accordance with the Agreement and this Service Tariff.

Taxes: This term has the meaning provided for in Section III.D.2 of this Service Tariff.

Transmission Service Charge or TSC: The NYPA Transmission Service Charge as provided for and defined in the NYISO OATT.

Additional terms are defined in the text of this Service Tariff.

Unless otherwise indicated, all other capitalized terms and abbreviations used but not defined in this Service Tariff shall have the meaning as set forth in the Agreement. In the event that publication of any index price utilized in this Tariff, including the LME Cash Buyer’s Price or Platt’s Midwest Aluminum Premium, is discontinued or the methodology for determination thereof is substantially revised, the Parties will meet and discuss in good faith the amendment of the Tariff by substitution of an alternative index or other alternative means of determination of pricing most closely approximating their original intent.

III. Base Rates and Related Matters

A. Base Rates

1. Subject to the other provisions of this Service Tariff, the base rates to be charged to the Customer by the Authority shall be tied directly to Aluminum Prices as follows:

Aluminum Price (\$/metric ton)	Base Rate (\$/MWh)
Below 1,500	12.25
1,500 - 1,799	12.25
1,800 - 1,899	14.00
1,900 - 1,999	15.75
2,000 - 2,099	17.50
2,100 - 2,199	19.25
2,200 - 2,299	21.00
2,300 - 2,399	22.75
2,400 - 2,499	24.50
2,500 - 2,599	26.25
2,600 - 2,699	28.00
2,700 - 2,799	29.75
2,800 - 2,899	31.50
2,900 - 2,999	33.25
3,000 - 3,099	35.00
3,100 - 3,199	36.75
3,200 - 3,299	38.50
3,300 - 3,399	40.25
3,400 and above	42.00

The base rates, as set forth above, include a monthly base rate for commodity, and a base Transmission Service Charge valued at \$1.75/MWh at a ninety-eight (98) percent load factor, both of which are subject to monthly billing adjustments for full cost recovery at the Customer Native System Load Factor, as per Sections III.E. and III.C. of this Service Tariff.

B. NYISO Transmission and Related Charges (“NYISO Charges”)

The Customer shall compensate the Authority for the following NYISO Charges assessed on the Authority for services provided by the NYISO pursuant to the NYISO Tariffs associated with providing Electric Service to the Customer:

1. Charges for OATT Rate Schedules 1 through 9 and any new ancillary services and/or rate schedules as may be provided in accordance with the NYISO Tariffs;
2. Transmission Usage Charges (“TUC”) which are Marginal Losses and Congestion costs as provided for in the NYISO Tariffs;
3. The New York Power Authority “Transmission Adjustment Charge” or “NTAC” as provided for in the NYISO Tariffs;
4. NYISO wide uplift as provided for in the NYISO Tariffs;
5. Any and all other charges, assessments, or other amounts associated with delivery of Firm Power and Energy sold to the Customer by the Authority, or otherwise associated

with the Authority's responsibilities as a Load Serving Entity for the Customer, that the NYISO assesses on the Authority under the provisions of the NYISO Tariffs; and

6. Any charges assessed on the Authority with respect to the provision of Electric Service to the Customer for facilities needed to maintain reliability and incurred in connection with the NYISO's Comprehensive System Planning Process (or similar reliability-related obligations incurred by the Authority with respect to Electric Service to the Customer), applicable tariffs, or required to be paid by the Authority in accordance with law, regardless of whether such charges are assessed by the NYISO or another third party.

The NYISO Charges, if any, incurred by the Authority on behalf of the Customer, are in addition to the Authority's base rates that are charged to the Customer in accordance with other provisions of this Service Tariff.

The method of billing NYISO Charges to the Customer will be based on the Authority's discretion.

C. Transmission Charges and Monthly TSC Reconciliation

The Customer shall compensate the Authority for all transmission costs incurred by the Authority with respect to the Allocation, including such costs that are charged pursuant to the NYISO Tariffs. Any difference between TSC costs recovered through the base rates as set forth in Section III.A.1 of this Service Tariff and actual TSC costs shall be reconciled on a monthly basis by the Authority. The difference of any under collection or over collection of the TSC costs shall be passed through to the Customer on the bill.

D. Other Charges

The base rates do not reflect any of the charges discussed in this Section III.D. (collectively, "Other Charges"). The Customer shall be responsible for payment of such Other Charges as a separate charge from base rates to the extent they apply to the Customer.

1. Minimum Monthly Capacity Charge

If in any given month the Customer's monthly Peak Demand (kW) is less than the Capacity Tag, the Customer shall be subject to a Minimum Monthly Capacity Charge equal to the difference between the Customer's monthly Peak Demand (kW) and the Capacity Tag as expressed by the NYISO for the applicable month, times the applicable NYISO locational capacity spot auction market rate.

Such Minimum Monthly Capacity Charge shall be in addition to all other charges provided for in this Service Tariff, including but not limited to, charges included in the base rates and NYISO Charges as provided for in this Service Tariff.

2. Taxes

The Authority will charge and collect from the Customer all local, state and federal taxes, assessments or other charges mandated by local, state or federal agencies or authorities that are levied on the Authority or that the Authority is required to collect from the Customer ("Taxes") if and to the extent such Taxes are not recovered by the Authority pursuant to another provision of this Service Tariff.

3. Curtailments and Substitute Energy

Firm Power and Energy is subject to curtailment as provided for in the Agreement and Section IV.C. of this Service Tariff. The Authority shall provide Substitute Energy to the

Customer, and the Customer shall pay the Authority for Substitute Energy, in accordance with the Agreement and Section IV.C. of this Service Tariff.

E. Niagara and St. Lawrence-FDR Hydroelectric Rates

The base rates, as set forth in Section III.A. of this Service Tariff, include both commodity and TSC related charges. At all times the commodity component of the base rate (base rate less the TSC rate) shall be no lower than the overall Rural/Domestic Rate (Rural/Domestic Rates computed at the Customer Native System Load Factor). For each Billing Period, if the commodity component of the base rate is lower than the overall Rural/Domestic Rate, the difference between the commodity component of the base rate and the overall Rural/Domestic Rate will be added to the base rate. Concurrently, for each Billing Period, if the commodity component of the base rate is equal to or greater than the overall Rural/Domestic Rate, the base rates, as set forth in Section III.A. of this Service Tariff, will be the month's applicable billing rates, without adjustment.

F. New Charges

The Customer shall be responsible for payment of any and all new third-party charges incurred by the Authority and attributable to its provision of Electric Service to the Customer, including but not limited to, charges and costs incurred for supplying Firm Power and Energy, any new NYISO Charges as may be defined and applied in any NYISO Tariffs, NYISO-related agreements and NYISO procedures from time to time (collectively, "New Charges"). The Authority, in its sole discretion, may include any such New Charges in the base rates or bill the Customer separately for such New Charges.

G. Billing and Billing Methodology

Unless otherwise specified in the Agreement, the following provisions will apply:

1. Billing Energy

The kilowatt-hours (kWh) charged by the Authority to the Customer will be based on the Load Factor Share of the total number of kilowatt-hours recorded on the Authority's revenue grade meters for the Billing Period as follows.

- If the Peak Demand is higher than the Contract Demand in a given month, the Billing Energy shall be equal to the product of the Contract Demand multiplied by the Native System Load Factor and number of hours in the Billing Period.
- If the Peak Demand is less than the Contract Demand, the Billing Energy shall be equal to the total number of kilowatt-hours recorded on the Authority's revenue grade meters for the Billing Period.

2. Scheduling and Settlements of Load

Each hour the Authority will schedule the Customer's load for the full Contract Demand. Any resulting overscheduled load, as reported as Balancing Energy Sell transactions by the NYISO, shall not be reflected on the Customer's bill as there is no entitlement to said transaction. The Customer is encouraged to voluntarily provide an hourly load schedule each month to the Authority. The Customer is required to provide any planned or unplanned outage information to the Authority in a timely manner as follows; the Customer shall provide a minimum of three (3) business days' notice to the Authority when planned load reductions greater than five (5%) percent of the Contract Demand are to occur in excess of a one hour interval. The customer is required to provide any

unplanned outage information in excess of a one hour interval to the Authority within no less than three (3) business days of the occurrence.

3. Market Purchases

If in any given hour during a Billing Period the Customer load requirements exceed the Customer's Contract Demand (reported as Balancing Energy Purchase transactions), these purchases shall be reflected on the Customer's bill including, but not limited to, TSC charges for the Market Purchase share.

4. Estimated Billing

If the Authority, in its reasonable discretion, determines that it lacks reliable data on the Customer's actual energy usage for a Billing Period during which the Customer receives electric service from the Authority, the Authority shall have the right to render a bill to the Customer for such Billing Period based on estimated usage ("Estimated Bill").

For the purpose of calculating an Estimated Bill, the Billing Energy used in the base charge calculation shall be equal to the Contract Demand (kW) amount as defined in the Agreement at ninety-eight (98) percent load factor for that Billing Period.

If data indicating the Customer's actual usage for any Billing Period in which an Estimated Bill was rendered subsequently becomes available to the Authority, the Authority will make necessary adjustments to the corresponding Estimated Bill in accordance with Section III.H.1 of this Service Tariff and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The Authority's discretion to render Estimated Bills is not intended to limit the Authority's rights under the Agreement or otherwise regarding metering arrangements.

H. Adjustments to Charges

1. Billing Adjustments

In addition to any other adjustments provided for in this Service Tariff, in any Billing Period, the Authority may make appropriate adjustments to billings and charges to address such matters as billing and payment errors, the receipt of actual, additional, or corrected data concerning Customer energy usage.

2. Power Factor

For service provided under this and any other Service Tariff or agreement Customer shall maintain not less than ninety-seven and one-half percent (97.5%) power factor at the point of delivery. The Customer's Peak Demand under this Service Tariff will be increased one-half percent (1/2%) for each one-half percent (1/2%) by which the average power factor at which energy is supplied during such Billing Period is less than ninety-seven and one-half percent (97.5%). Average power factor will be computed to the nearest one-half percent (1/2%) according to the following formula:

$$\text{Average Power Factor} = \frac{kWh}{\sqrt{kWh^2 + kvar h^2}}$$

The data used in the above formula shall be obtained from meters which are ratcheted to prevent reverse registration.

3. Adjustment for Transformer Losses

If delivery is made at a transmission voltage but metered on the low-voltage side of Customer's substation, the meter readings will be increased by two percent (2%) to compensate for transformer losses; provided, however, that this percentage may be reduced to reflect improvements in loss rates should new transformers be put in use at Customer's plants.

I. Adjustment of Rates

To the extent consistent with the Agreement between the Authority and the Customer, the base rates contained in this Service Tariff may be revised from time to time as set forth in Section III.E. of this Service Tariff or in order to meet all requirements specified in its bond and note resolutions and covenants with holders of its financial obligations. Should the Authority need to adjust the base rates, the Authority will provide thirty (30) days written notice to the Customer.

IV. General Provisions

A. Character of Service

Alternating current; 60 hertz, three-phase.

B. Firm Power Service

Firm Power and Energy under this Service Tariff are hydropower and associated energy intended to be available at all times except for limitations provided in the Agreement, the Rules and in this Service Tariff.

C. Availability of Energy

1. Subject to Section IV.C.2 of this Service Tariff, the Authority shall provide to the Customer in any Billing Period Firm Power and Energy.
2. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of the Authority's Firm Power and Energy customers served from the Hydro Projects, curtailments in the amount of Firm Power and Energy to which the Customer is entitled under the Agreement will be applied on a pro rata basis to all Firm Power and Energy customers served by the Hydro Projects. Reductions as a percentage of the otherwise required Firm Power and Energy sales will be the same for all Firm Power and Energy customers served by the Hydro Projects.
3. The Authority will provide Substitute Energy to the Customer to replace the Firm Power and Energy that would otherwise have been supplied under this Agreement but for the curtailment. For each kilowatt-hour of Substitute Energy supplied by the Authority, in lieu of paying the base rates set forth in Section III.A. above, the Customer shall pay the Authority directly for: (a) the market cost of the Substitute Energy; and (b) all costs, including but not limited to any NYISO Charges and Taxes, the Authority incurs in connection with the provision of Substitute Energy.
4. The Authority will give the Customer advance notice of forecasted shortfalls in Firm Power and Energy which will advise the Customer of the forecasted shortfall of Firm Power and Energy, the period to which the forecast applies (usually a Billing Period), and the Customer's anticipated share of the forecasted shortfall. After the Billing Period to which the notice applies, the Authority will determine after the fact the actual shortfall and make any appropriate adjustments to charges and billings to the Customer in accordance with the rates provided for in this Service Tariff.
5. The Authority is under no obligation to supply and will not supply to the Customer in later Billing Periods any curtailed Firm Power and Energy.

D. Delivery

For the purpose of this Service Tariff, power shall be deemed to be offered when the Authority is able to supply power and NYISO transmits it to its designated points of interconnection with the Customer's transmission agent(s). If, despite such offer, there is a failure of delivery by the Customer or the transmission agents(s), such failure shall not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules.

E. Electrical Fluctuations

The power and energy taken hereunder shall not be used in such a manner as to cause unusual fluctuations or disturbances on Authority's system. Customer shall provide, at its expense,

suitable apparatus which will reasonably limit such fluctuations. In the event that unreasonable fluctuations or disturbances, including without limitation harmonic currents resulting in actionable interference with communications systems or in harmonic resonance of now existing facilities, are caused by Customer's facilities, Authority shall immediately notify Customer of the circumstances and Authority shall then have the right to discontinue the delivery of power and energy under this contract upon thirty (30) days prior written notice until conditions causing such fluctuations or disturbances are corrected by Customer. Despite such discontinuance of service Customer shall be obligated to pay the amounts due for Electrical Service under this Service Tariff.

F. Rendition and Payment of Bills

1. The Authority will render bills to the Customer for Electric Service on or before the tenth (10th) business day of the month for charges due for the previous Billing Period. Bills will reflect the amounts due and owing, and are subject to adjustment as provided for in this Agreement, Service Tariff No. AL-1 and the Rules. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority shall render bills to the Customer electronically.
2. Payment of bills by the Customer shall be due and payable by the Customer by the first day of the following month of the date the Authority renders the bill. Payment of bills by the Customer shall be paid through the means as directed on the bill.
3. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due, an interest charge of two percent (2%) of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent (1.5%) of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
4. Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of a bill rendered by Authority, the Customer shall pay such bill in the time provided for by this Agreement, and adjustments, if necessary, will be made thereafter.
5. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money, or provide an irrevocable standby letter of credit, which may be presented for draw at a location in New York State, issued for benefit of the Authority by a bank having a Standard and Poor's long-term issuer rating of "A" or better, or an equivalent rating by Moody's, or Fitch's, and acceptable to the Authority in its reasonable discretion, in either case in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit or standby letter of credit will be deemed security for the payment of unpaid bills. The failure or refusal of the Customer to provide the deposit or standby letter of credit within thirty (30) days of a request made by the Authority consistent with this paragraph will be grounds for the Authority in its sole discretion to suspend Electric Service to the Customer or terminate this Agreement.

G. Conflicts

In the event of any inconsistencies, conflicts, or differences between the provisions of this Service Tariff and the Rules, the provisions of the Service Tariff will govern. In the event of any

inconsistencies, conflicts or differences between the Service Tariff and any provisions of the Agreement, the provisions of the Agreement will govern.

SCHEDULE C

MONTHLY CES CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in the Service Tariff, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule C.

“Annual REC Percentage Target” has the meaning provided in Section II.2.A of this Schedule C.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order or as subsequently adopted in statute.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Government Action” has the meaning provided in Section II.9 of this Schedule C.

“Load Serving Entity” has the meaning provided in the CES Order.

“Monthly CES Charge” means the monthly charge to the Customer established in this Schedule C.

“Monthly REC Cost Component” has the meaning provided in Section II.3 of this Schedule C.

“Monthly ZEC Cost Component” has the meaning provided in Section II.3 of this Schedule C.

“NYSERDA” means the New York State Energy Research and Development Authority.

“PP Program ZEC Costs” has the meaning provided in Section II.5.B of this Schedule C.

“Public Service Commission” means the New York State Public Service Commission.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSERDA in accordance with NYSERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the Public

Service Commission authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion in the CES.

C. “REC Investment Obligation” has the meaning provided in Section II.2.A of this Schedule

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order or as subsequently adopted in statute.

“State Energy Plan” or “SEP” means the 2015 New York State Energy Plan as amended from time to time.

“Total Monthly PP Load” has the meaning provided in Section II.4.B of this Schedule C.

“Total Monthly REC Costs” has the meaning provided in Section II.4.B of this Schedule C.

“ZEC Program Year” has the meaning provided in Section II.2.B of this Schedule C.

“ZEC Purchase Obligation” has the meaning provided in Section II.2.B of this Schedule C.

II. MONTHLY CES CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff, or the Rules, the Customer shall be subject to a Monthly CES Charge calculated as provided for in this Schedule C. The Monthly CES Charge is in addition to all other charges, fees and assessments provided in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly CES Charge.
2. The Monthly CES Charge is to support compliance programs that the Authority is implementing for the purpose of complying with the following State energy/environmental policies:
 - A. The CES and Tier 1 of the Renewable Energy Standard, and implementing the PP power program in a manner that is consistent with the SEP. Pursuant to these State policies, the Authority will invest in new renewable generation resources to serve its PP customers (“REC Investment Obligation”). Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total PP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
 - B. The CES and Tier 3 of the Renewable Energy Standard, and implementing the PP power program in a manner that is consistent with the New York State Energy Plan. Pursuant to these State policies, the Authority will purchase Zero Emission Credits from NYSERDA in amounts calculated on the basis of the amount of electric load that the Authority serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk

nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).

3. As more specifically provided herein, the Monthly CES Charge will be calculated on the basis of the following two cost components: (1) a monthly REC cost component that is intended to identify costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s PP load served under the Agreement (“Monthly REC Cost Component”); and (2) a monthly ZEC cost component that is intended to identify costs that the Authority incurs for ZECs that it purchases in quantities that are attributable to the Customer’s PP load served under the Agreement (“Monthly ZEC Cost Component”).
4. The Monthly REC Cost Component will be determined as follows:
 - a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total PP load that it will serve during such calendar year.
 - b. The Authority will, for each month of each calendar year, calculate the total costs (“Total Monthly REC Costs”) that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total PP kilowatt-hour load for the month (“Total Monthly PP Load”). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly PP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly PP Load that the Authority served for the month.
 - c. Each month, the Authority will allocate to the Customer’s load served under the Agreement, as the Monthly REC Cost Component, a share of the Total Monthly REC Costs attributable to the Total Monthly PP Load. The Monthly REC Cost Component will be based on the proportion of the Customer’s total kilowatt-hours load served by the Authority for such month to the Total Monthly PP Load served by the Authority for such month provided, however, that:
 - a. the Monthly REC Cost Component to the Customer shall not include any costs associated with the Authority’s inability to collect REC charges from other Authority customers; and
 - b. the effective per-MWh rate of the Monthly REC Cost Component shall not exceed the per-MWh rate of a Monthly REC Cost Component based upon NYSERDA’s then-applicable published REC price.
5. The Monthly ZEC Cost Component will be determined as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the

forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as provided in the CES Order. The ZEC Purchase Obligation may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. Each month, the Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the PP load that it serves (the "PP Program ZEC Costs"). Such allocation will be based on the forecasted kilowatt-hours load of the PP program to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the PP power program based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the PP Program ZEC Costs to the Customer's load based on the proportion of the Customer's actual kilowatt-hours load for the PP purchased by the Customer to total kilowatt-hours load served by the Authority under the PP power program (i.e., PP Program level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be allocated to the Customer based on the proportion of the Customer's annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the PP power program by the Authority (PP Program level load).
- 6. Each month the Monthly REC Cost Component and the Monthly ZEC Cost Component will be combined to produce a monthly CES cost component (the "Monthly CES Cost Component").
 - 7. The Customer shall be subject to a Monthly CES Charge which shall be tied to the Aluminum Price (as defined in ST AL-1) as indicated in the following table, and calculated by multiplying the Monthly CES Cost Component by the applicable percentage listed in the table ("Applicable Percentage").

Aluminum Price (\$/metric ton)	Base Rate (\$/MWh)	Applicable Percentage¹
Below 1,500	12.25	-
1,500 - 1,799	12.25	-
1,800 - 1,899	14.00	-
1,900 - 1,999	15.75	-
2,000 - 2,099	17.50	-
2,100 - 2,199	19.25	-
2,200 - 2,299	21.00	-
2,300 - 2,399	22.75	22%
2,400 - 2,499	24.50	39%
2,500 - 2,599	26.25	56%
2,600 - 2,699	28.00	72%
2,700 - 2,799	29.75	89%
2,800 - 2,899	31.50	100%
2,900 - 2,999	33.25	100%
3,000 - 3,099	35.00	100%
3,100 - 3,199	36.75	100%
3,200 - 3,299	38.50	100%
3,300 - 3,399	40.25	100%
3,400 and above	42.00	100%

8. Notwithstanding the foregoing, the Authority may, in its discretion, modify the methodology used for calculating the Monthly REC Cost Component and Monthly ZEC Cost Component upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, statutory enactments, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the Monthly REC Cost Component and Monthly ZEC Cost Component. Notwithstanding the foregoing, nothing in this section shall be interpreted as permitting the Authority to modify, eliminate, or otherwise frustrate Customer from receiving the full, specified discount off of the Monthly CES Charge tied to the Aluminum Price, as provided for in the preceding section.
9. Nothing in this Schedule C shall limit or otherwise affect the Authority's right to charge or collect from the Customer any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.
10. If the ZEC Purchase Obligation or the REC Investment Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, "Government Action"), the Authority shall modify or terminate the REC Cost Component, ZEC Cost Component and/or Monthly CES Cost Component, and assess any additional

¹ For the sake of clarity, the Parties acknowledge and agree that in any month that the Aluminum Price is less than \$2,300 per metric ton, no Monthly CES Charge will apply to the Customer for such month.

charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

III. ALTERNATIVE COMPLIANCE PROGRAM

1. Nothing in this Schedule C shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly CES Charge provided in this Schedule C (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.

SCHEDULE D
PRESERVATION POWER ALLOCATION(S)

Customer: Alcoa USA Corp.	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Type of Allocation				
Preservation Power	240,000	West Plant, as defined in the Agreement	March 26, 2019	March 31, 2026

POWER AUTHORITY

OF THE

STATE OF NEW YORK

30 South Pearl Street
10th Floor
Albany, New York 12207-3425

AGREEMENT FOR THE SALE OF
PRESERVATION POWER AND ENERGY

SERVICE TARIFF NO. 20-A

ARCONIC INC.

The POWER AUTHORITY OF THE STATE OF NEW YORK (“Authority”), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law (“PAL”), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for Sale of Preservation Power and Energy (“Agreement”) with Arconic Inc. (“Customer”) having offices at 1814 State Highway 131, Massena, NY 13662. The Authority and the Customer are from time to time referred to in this Agreement as “Party” or collectively as “Parties” and agree as follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the St. Lawrence-FDR Power Project known as Preservation Power (or “PP”), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Customer, formerly known as Alcoa Inc. and changed its name in connection with a corporate reorganization, has requested an allocation of PP to support operations that it will undertake as an independent company at facilities defined in this Agreement as the “Facility;”

WHEREAS, the Customer has offered to make specific commitments relating to, among other things, the creation and/or retention of jobs, capital investments, power usage and energy efficiency measures at the Facility;

WHEREAS, the Authority’s Board of Trustees approved an allocation of PP to the Customer;

WHEREAS, because the Facility is located within the Authority’s transmission district, the Authority will also supply the Customer with incremental energy and capacity through market supply to serve the Customer’s load in excess of the Contract Demand as provided in this Agreement and the Service Tariff;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the Allocation and incremental energy and capacity for a term as provided in this Agreement;

WHEREAS, electric service hereunder shall be subject to the rates and other terms and conditions contained in the Service Tariff as further provided in this Agreement; and

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement.

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

ARTICLE I

DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined in schedules or appendices to this Agreement shall have the meanings set forth in such schedules or appendices. All other capitalized terms and abbreviations used in this Agreement but not defined in this Section or other provisions of this Agreement or its schedules or appendices shall have the same meaning as set forth in the Service Tariff.

“Adverse Water Condition” means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers who are served by the Project.

“Agreement” means this Agreement, and unless otherwise indicated herein, includes all schedules, appendices and addenda thereto, as the same may be amended from time to time.

“Allocation” refers to the allocation(s) of PP awarded to the Customer as specified in Schedule A.

“Alternative REC Compliance Program” has the meaning provided in Schedule E.

“Annual Capital Investment Commitment” has the meaning set forth in Schedule B.

“Annual CI Expenditures” has the meaning set forth in Schedule B.

“Base Employment Level” has the meaning set forth in Schedule B.

“Contract Demand” is as defined in applicable Service Tariff.

“Effective Date” means the date that this Agreement is fully executed by the Parties.

“Electric Service” is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, the Service Tariff and the Rules.

“Energy Services” has the meaning set forth in Article V of this Agreement.

“Expansion Project” has the meaning set forth in Section IV.3.a of this Agreement.

“Expansion Project Capital Investment Commitment” has the meaning set forth in Schedule B.

“Facility” means the Customer’s facilities as described in Schedule A to this Agreement.

“Firm Power” is as defined in the Service Tariff.

“Firm Energy” is as defined in the Service Tariff.

“FERC” means the Federal Energy Regulatory Commission (or any successor organization).

“FERC License” means the first new license issued by FERC to the Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act, which became effective September 1, 2007 after expiration of the Project’s original license which became effective in 1957.

“Hydropower Curtailment” means a temporary reduction in Firm Energy to which the Customer is entitled to receive under this Agreement made by the Authority in response to an Adverse Water Condition.

“International Joint Commission” or “IJC” refers to the entity with responsibility to prevent and resolve disputes between the United States of America and Canada under the *1909 Boundary Waters Treaty* and pursues the common good of both countries as an independent and objective advisor to the two governments. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects.

“Load Reduction” has the meaning set forth in Section IX.6 of this Agreement.

“Load Serving Entity” (or “LSE”) means an entity designated by a retail electricity customer (including the Customer) to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.

“Market Supply” is as defined in the Service Tariff.

“Metering Arrangement” has the meaning set forth in Section II.8 of this Agreement.

“NYEM” means the New York Energy Manager, an energy management center owned and operated by the Authority.

“NYEM Agreement” means a written agreement between the Authority and the Customer providing for the Facility’s enrollment and Customer’s participation in NYEM.

“NYEM Participation” has the meaning specified in Schedule B of this Agreement.

“NYISO” means the New York Independent System Operator or any successor organization.

“NYISO Charges” has the meaning set forth in Section VII.3 of this Agreement.

“NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

“Physical Energy Audit” or “Audit” means a physical evaluation of the Facility in a manner approved by the Authority that includes at a minimum the following elements: (a) an assessment of the Facility’s energy use, cost and efficiency which produces an energy utilization index for the Facility (such as an Energy Use Intensity or Energy Performance Indicator); (b) a comparison of the Facility’s index to indices for similar buildings/facilities; (c) an analysis of low-cost/no-cost measures for improving energy efficiency; (d) a listing of potential capital improvements for improving energy consumption; and (e) an initial assessment of potential costs and savings from such measures and improvements.

“Preservation Power” (or “PP”) consists of 490 megawatts (“MW”) of firm hydroelectric power and associated energy produced by the Authority’s St. Lawrence-FDR Power Project.

“Project” means the Authority’s St. Lawrence-FDR Power Project, FERC Project No. 2000.

“Reporting Year” means the yearly interval that the Authority uses for reporting, compliance and other purposes as specified in this Agreement. The Reporting Year for this Agreement is from January 1 through December 31, subject to change by the Authority without notice.

“Rolling Average” has the meaning set forth in Schedule B.

“Rules” are the applicable provisions of Authority’s rules and regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as may be modified from time to time by the Authority.

“Service Information” has the meaning set forth in Section II.12 of this Agreement.

“Service Tariff” means the Authority’s Service Tariff No. 20-A, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

“Schedule A” refers to the Schedule A entitled “Preservation Power Allocations” which is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Supplemental Preservation Power Commitments” which is attached to and made part of this Agreement, including any appendices attached thereto.

“Schedule C” refers to the Schedule C entitled “Takedown Schedule” which is attached to and made part of this Agreement.

“Schedule D” refers to the Schedule D entitled “Zero Emission Credit Charge” which is attached to and made part of this Agreement.

“Schedule E” refers to the Schedule E entitled “Monthly Renewable Energy Credit Charge” which is attached to and made part of this Agreement.

“Substitute Energy” means energy that is provided to the Customer by or through the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Hydropower Curtailment.

“Takedown” means the portion of the Allocation that Customer requests to be scheduled for a specific period as provided for in Schedule C, if applicable.

“Taxes” is as defined in the Service Tariff.

“Unforced Capacity” (or “UCAP”) means the electric capacity required to be provided by LSEs to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

ARTICLE II

ELECTRIC SERVICE

1. The Authority will make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, the Service Tariff and the Rules. The Customer is not entitled to receive Electric Service under this Agreement for any PP allocation unless such PP allocation is identified in Schedule A.
2. The Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation specified in Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
3. The Authority shall provide UCAP in amounts necessary to meet the Customer’s NYISO UCAP requirements for the Customer’s Native System Load, inclusive of NYISO UCAP requirements associated with the Allocation, in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for all such UCAP in accordance with the Service Tariff.
4. The Contract Demand for the Customer’s Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as PP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all PP customers receiving Electric Service under the Service Tariff, as applicable, based on the terms of such ruling, order, or decision.
5. The Contract Demand may not exceed the Allocation.

6. The Parties recognize and agree that the current metering arrangements for the Customer's Facility are acceptable as of the Effective Date. The Customer and the Authority agree to work together to modify the existing metering arrangements to result in the Customer's Facility being metered using Authority revenue-grade metering in a manner that is reasonably satisfactory to the Authority or another metering arrangement reasonably satisfactory to the Authority (collectively, "Metering Arrangement"). After commencement of Electric Service under the agreed upon Metering Arrangement, the Customer shall notify the Authority in writing within thirty (30) days of any alteration to the Facility's Metering Arrangement, and provide any information reasonably requested by the Authority (including Facility access) to enable the Authority to determine whether the Metering Arrangement remains satisfactory. If an altered Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination it is unsatisfactory, the Authority may modify, withhold, or suspend Electric Service on at least ten (10) days' prior written notice to the Customer. If the Metering Arrangement or altered Metering Arrangement is made to conform, in the Authority's reasonable determination, following the provided periods to cure, then the Authority shall continue Electric Service, without modification, within ten (10) days of the Authority determining the Metering Arrangement conforms. The Authority may, in its discretion, waive any of the requirements provided for in this Section in whole or in part where in the Authority's judgment, another mechanism satisfactory to the Authority can be implemented to enable the Authority to receive pertinent, timely and accurate information relating to the Customer's energy consumption and demand and render bills to the Customer for all fees, assessments and charges that become due in accordance with this Agreement, the Service Tariff, and the Rules.
7. The Customer agrees to provide relevant information to the Authority that the Authority determines is necessary to provide for the sale and delivery of the Allocation to the Customer at the Facility, the proper and efficient implementation of the PP program, billing related to Electric Service, and/or the performance of obligations under any contracts or other arrangements between the Parties relating to such matters (collectively, "Service Information"). In addition, the Customer agrees to complete such administrative forms and consents that the Authority determines are necessary to provide the Service Information, provided that the Customer and Authority enter into a written agreement that protects confidential or proprietary information of the Customer from unwarranted disclosure. The Customer's failure to provide Service Information on a timely basis shall be grounds for the Authority in its discretion to modify, withhold, or suspend Electric Service to the Customer.
8. The Customer shall be responsible for (a) obtaining all consents and agreements from any person that are necessary for the Customer to occupy, operate and receive Electric Service at the Facility, and (b) complying with any requirements of any such person that are necessary for the provision of Electric Service to the Facility in the manner provided for in this Agreement. The Authority agrees to meet and confer with the Customer regarding such consents, agreements and requirements, and whether there are steps that the Authority in its discretion can take to assist the Customer with such matters. All such agreements, consents and requirements shall be subject to the Authority's review and approval prior to the commencement of Electric Service, and no such agreements, consents or requirements shall be subject to any conditions or subsequently changed in a manner that materially impacts the Authority's rights and obligations under this Agreement.

9. If in any given hour during a Billing Period the Customer's load requirements exceed the Customer's Contract Demand, the Authority will provide sufficient incremental power and energy through Market Supply to meet such load, based on a load factor sharing methodology and settlement principles as provided in the Service Tariff, and the Customer shall pay the Authority for any and all costs associated with such provision of incremental power and energy as provided in the Service Tariff. The Market Supply shall be reflected in the Customer's bill including, but not limited to, Incremental Demand Charges, Incremental Energy Charges, Incremental UCAP and TSCs associated with such Market Supply necessary to satisfy the Customer's load above its Contract Demand.

ARTICLE III

RATES, TERMS AND CONDITIONS

1. Electric Service shall be sold to the Customer in accordance with the rates, terms and conditions provided for in this Agreement, the Service Tariff and the Rules.
2. The Service Tariff and the Rules may be amended from time to time by the Authority and, if revised, the revised provisions thereof will apply under this Agreement with the same force and effect as if set forth herein as of the Effective Date of such amendments for the customers under the Service Tariff. The Authority shall provide at least thirty (30) days prior written notice to the Customer of any proposed change in the Service Tariff or the Rules. No amendment to the Service Tariff or the Rules shall affect the determination of rates for PP to the Customer during the term of the Agreement except insofar as otherwise authorized by this Agreement. This provision shall not limit the Authority's discretion to determine rates applicable to allocations of power and energy awarded to the Customer beyond or in addition to the Allocation.
3. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates for Electric Service for all Authority customers that are served under the Service Tariff shall be subject to increase by Authority at any time upon thirty (30) days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations and so long as proportionate increases are also passed on to other customers under the Service Tariff. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.

4. In addition to all other fees, assessments and charges provided for in the Agreement, the Service Tariff and the Rules, the Customer shall be responsible for payment of the Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge provided for in Schedule D and Schedule E, respectively, of this Agreement.

ARTICLE IV

SUPPLEMENTAL COMMITMENTS

1. Supplemental Commitments. Schedule B sets forth the Customer's "Supplemental Preservation Power Commitments" ("Supplemental Commitments"). The Authority's obligation to provide Electric Service under this Agreement is expressly conditioned upon the Customer's timely compliance with the Supplemental Commitments described in Schedule B as further provided in this Agreement. The Customer's Supplemental Commitments are in addition to all other commitments and obligations provided in this Agreement.
2. Special Provisions Relating to a New or Expanded Facility.

- a. Proposed New or Expanded Facility; Failure to Complete.

If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, "Expansion Project"), and the Customer fails to complete the Expansion Project by the date specified in Schedule B, the Authority may, in its discretion, (a) cancel the Allocation, or (b) if it believes that the Expansion Project will be completed in a reasonable time, agree with the Customer to extend the time for completion of the Expansion Project.

- b. Proposed New or Expanded Facility; Partial Performance.

If the Expansion Project results in a completed Facility that is only partially operational, or is materially different than the Expansion Project agreed to in Schedule B (as measured by such factors as size, capital investment expenditures, capital improvements, employment levels, estimated energy demand and/or other criteria determined by the Authority to be relevant), the Authority may, in its discretion, on its own initiative or at the Customer's request, make a permanent reduction to the Allocation and Contract Demand to an amount that the Authority determines to fairly correspond to the completed Facility.

- c. Notice of Completion; Commencement of Electric Service.

- (i) The Customer shall give the Authority not less than ninety (90) days' advance written notice of the anticipated date of completion of an Expansion Project. The Authority will inspect the Expansion Project for the purpose of verifying the status of the Expansion Project and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time subject

to the other provisions of this Agreement based on applicable operating procedures of the Authority, Customer's local electric utility and NYISO.

- (ii) In the event of an Expansion Project being completed in multiple phases, at the Customer's request the Authority may, in its discretion, allow commencement of part of the Allocation upon completion of any such phase, provided the Authority will similarly inspect the Expansion Project for the purpose of verifying the status of the completed phase of the Expansion Project. Upon such verification by the Authority of any such completed phase, the Authority, in its discretion, will determine an amount of kW that fairly corresponds to the completed phase of the Expansion Project, taking into account relevant criteria such as any capital expenditures, increased employment levels, and/or increased electrical demand associated with the completed phase of the Expansion Project.

d. Other Rights and Remedies Unaffected.

Nothing in this Article is intended to limit the Authority's rights and remedies provided for in the other provisions of this Agreement, including without limitation the provisions in Schedule B of this Agreement.

ARTICLE V

ENERGY-RELATED PROJECTS, PROGRAMS AND SERVICES

The Authority shall periodically communicate with the Customer for the purpose of informing the Customer about energy-related projects, programs and services ("Energy Services") offered by the Authority that in the Authority's view could provide value to the Customer and/or support the State's Clean Energy Standard. The Customer shall review and respond to all such offers in good faith, provided, however, that, except as otherwise provided for in this Agreement, participation in any such Energy Services shall be at the Customer's option, and subject to such terms and conditions agreed to by the Parties in one or more definitive agreements.

ARTICLE VI

SERVICE TARIFF; CONFLICTS

1. A copy of the Service Tariff is attached to this Agreement as Exhibit 1 and shall apply under this Agreement with the same force and effect as if fully set forth herein. The Customer consents to the application of the Service Tariff.
2. In the event of any inconsistencies, conflicts, or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff or the Rules, the provisions of this Agreement shall govern.

ARTICLE VII

TRANSMISSION AND DELIVERY

1. In addition to paying the Authority for transmission and delivery services as provided in this Agreement, the Service Tariff and the Rules, the Customer shall be responsible for:

- a. complying with the requirements of any utility or other person that are necessary to enable the Customer to receive delivery of the Allocation and Market Supply;
 - b. complying with the requirements of any utility or other person that are necessary for the installation of any Metering Arrangement and related infrastructure; and
 - c. paying any utility or other person for delivery and transmission service associated with the Allocation and Market Supply, and installation of any Metering Arrangement and related infrastructure that such utility or other person requires, and if the Authority incurs any charges associated with such matters, reimbursing the Authority for all such charges.
2. The Customer understands and acknowledges that delivery of the Allocation and Market Supply will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation and Market Supply for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in the Service Tariff or any successor service tariff, regardless of whether such NYISO Charges are transmission-related.

ARTICLE VIII

BILLING AND BILLING METHODOLOGY

1. The billing methodology for the Allocation and Market Supply shall be determined on a "load factor sharing" basis in accordance with the Service Tariff. An alternative basis for billing may be used provided the Parties agree in writing and the local electric utility provides its consent if such consent is deemed necessary. Except as otherwise provided in this Agreement, all other provisions with respect to billing are set forth in the Service Tariff and the Rules.
2. The rights and remedies provided to the Authority in this Article are in addition to any and all other rights and remedies available to Authority at law or in equity.

ARTICLE IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. In the event of an Adverse Water Condition, the Authority will have the right in its discretion to implement Hydropower Curtailments. The Authority will implement Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
2. In the event of a Hydropower Curtailment, the Authority will provide Substitute Energy to the Customer, and the Customer shall pay for such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, Substitute Energy shall be sourced from day-ahead and real-time wholesale electric markets administered by the NYISO.
3. For each kilowatt-hour of Substitute Energy provided by the Authority during a Hydropower Curtailment, the Customer shall pay the Authority directly during the billing month: (1) the

difference between the market cost of the Substitute Energy and the charge for firm energy as provided for in this Agreement; and (2) any NYISO charges and taxes the Authority incurs in connection with the provision of such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Hydropower Curtailments shall be governed by the provisions of the Service Tariff relating to the rendition and payment of bills for Electric Service.

4. The Authority shall be under no obligation to deliver, and will not deliver, any such curtailed energy to the Customer in later billing periods.
5. The Authority may require the Customer to enter into a separate agreement relating to the provision and sale of Substitute Energy. The provisions of this Agreement will remain in effect notwithstanding the existence of any such separate agreement.

ARTICLE X

EFFECTIVENESS, TERM AND TERMINATION

1. This Agreement shall become effective and legally binding on the Parties on the Effective Date.
2. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (a) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (b) termination by the Authority pursuant to this Agreement, the Service Tariff, or the Rules; or (c) expiration of the Allocation by its own term as specified in Schedule A.
3. Once commenced, the provision of incremental energy and power supply shall continue until the earliest of: (a) termination of Electric Service in accordance with Section X.2 of this Agreement; (b) termination by the Customer of incremental energy and power supply service upon ninety (90) days prior written notice to the Authority; or (c) termination by the Authority of incremental energy and power supply service pursuant to this Agreement, the Service Tariff, or the Rules. Termination in whole or in part of incremental energy and power in accordance with this provision shall not affect the provision of Electric Service for the Allocation.
4. The Customer may exercise a partial reduction of the Allocation upon at least sixty(60) days' prior written notice to the Authority. The Authority will effectuate the partial reduction as soon as practicable after receipt of such notice taking account of the Authority's internal procedures and requirements of the Customer's local electric utility.
5. The Authority may cancel service under this Agreement or modify the quantities of Firm Power and Firm Energy associated with the Allocation: (1) if such cancellation or modification is required to comply with any final ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, the Service Tariff, or the Rules.

ARTICLE XI

EXTENSIONS OF ALLOCATION; AWARD OF ADDITIONAL ALLOCATIONS

1. The Customer may apply to the Authority for an extension of the term of the Allocation identified in Schedule A:
 - a. during the thirty-six (36) month period immediately preceding the scheduled expiration of the Allocation;
 - b. pursuant to any other process that the Authority establishes; or
 - c. with the Authority's written consent.
2. Upon proper application by the Customer, the Authority may in accordance with applicable law and Authority procedures award additional allocations of PP at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (a) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (b) produce a modified Appendix to Schedule B, as the Authority determines to be appropriate. The Authority will furnish the Customer with any such modified Schedule A, supplemental schedule, and/or a modified Appendix to Schedule B, within a reasonable time after commencement of Electric Service for any such additional allocation.
3. In addition to any requirements imposed by law, the Customer hereby agrees to furnish such documentation and other information as the Authority reasonably requests to enable the Authority to evaluate any requests for extension of the Allocation or additional allocations and consider the terms and conditions that should be applicable of any extension or additional allocations.

ARTICLE XII

NOTICES

1. Notices, consents, authorizations, approvals, instructions, waivers or other communications provided in this Agreement shall be in writing and transmitted to the Parties as follows:

To: The Authority

New York Power Authority
123 Main Street
White Plains, New York 10601

Email:

Facsimile: _____

Attention: Manager – Business Power Allocations and Compliance

To: The Customer

Arconic Inc.
201 Isabella Street
Pittsburgh, PA 15212
Attn: NAM Energy Manager

2. The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XII.1.
3. Except where otherwise herein specifically provided, any notice, communication or request required or authorized by this Agreement by either Party to the other shall be deemed properly given: (a) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (b) if sent by a nationally recognized overnight delivery service, two (2) calendar days after being deposited for delivery to the appropriate address set forth above; (c) if delivered by hand, with written confirmation of receipt; (d) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (e) on the date of transmission if sent by electronic communication to the appropriate address as set forth above, with confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

ARTICLE XIII

SUCCESSORS AND ASSIGNS: RESALE OF HYDROPOWER

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto, provided that no assignment by either Party or any successor or assignee of such Party of its rights and obligations hereunder shall be made or become effective without the prior written consent of the other Party, which consent shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing sentence, the Authority may require such approvals, and such consents and other agreements from the Customer and other parties, that the Authority determines are reasonably necessary in order to effectuate any such assignment.
2. The Customer may not transfer any portion of the Allocation to any other person, or a location different than the Facility, unless: (a) the Authority in its discretion authorizes the transfer; (b) all other requirements applicable to a transfer, including board approvals, are satisfied; and (c) the transfer is effectuated in a form and subject to such terms and conditions approved by the Authority. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service or terminate the Allocation and/or this Agreement.
3. Except as permitted in Section XIII.2 above, the Customer may not sell any portion of the Allocation to any other person, allow any other person to use any portion of the Allocation, or allow any other person to interconnect to the Facility. Any purported sale shall be invalid, and any violation of this provision shall constitute grounds for the Authority in its discretion to suspend Electric Service, or terminate the Allocation and/or this Agreement.
4. The Customer shall not itself or allow any other person to distribute or inject electricity from a non-Authority source into the Facility or over any wires, metering, or utility infrastructure owned or operated by the Authority without the Authority's written consent, provided that the Customer shall be permitted to install and use an energy storage system located at the Facility.

ARTICLE XIV
MISCELLANEOUS

1. Choice of Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a) and rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

The Parties: (a) consent to the exclusive jurisdiction and venue of any state court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement; (b) agree to accept service of process; and (c) will not raise any argument of inconvenient forum.

3. Previous Agreements; Modifications; and Interpretation

- a. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation and the subject matter of the Agreement, and supersedes all previous communications and agreements between the Parties, oral or written, with reference to the sale of the Allocation.
- b. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.
- c. No provision shall be construed against a Party on the basis that such Party drafted such provision.

4. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

5. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof. Notwithstanding the preceding sentence, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which

such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

ARTICLE XV
EXECUTION

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

[SIGNATURES FOLLOW ON NEXT PAGE]

AGREED:

Arconic Inc.

By: _____

Title: _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____
John R. Koelmel, Chairman

Date: _____

SCHEDULE A
PRESERVATION POWER ALLOCATIONS

Customer: Arconic Inc.	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Type of Allocation				
Preservation Power	5,000	1814 State Highway 131 Massena, NY 13662	December 11, 2018	December 31, 2028

SCHEDULE B
SUPPLEMENTAL PRESERVATION POWER COMMITMENTS

ARTICLE I
SPECIFIC SUPPLEMENTAL COMMITMENTS

1. Employment Commitments

- a. The Customer shall create and maintain the employment level set forth in the Appendix to this Schedule B (the “Base Employment Level”). Such Base Employment Level shall be the total number of full-time positions held by: (a) individuals who are employed by the Customer at Customer’s Facility identified in the Appendix to this Schedule, and (b) individuals who are contractors or who are employed by contractors of the Customer and assigned to the Facility identified in such Appendix (collectively, “Base Level Employees”). The number of Base Level Employees shall not include individuals employed on a part-time basis (less than 35 hours per week); provided, however, that two individuals each working 20 hours per week or more at such Facility shall be counted as one Base Level Employee.
- b. The Base Employment Level shall not be created or maintained by transfers of employees from previously held positions with the Customer or its affiliates within the State of New York, except that the Base Employment Level may be filled by employees of the Customer laid off from other Customer facilities for *bona fide* economic or management reasons.
- c. The Authority may consider a request to change the Base Employment Level based on a claim of increased productivity, increased efficiency or adoption of new technologies or for other appropriate reasons as determined by the Authority. Any such change shall be within Authority’s discretion.

2. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule B.

3. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Billing Demand (as such term is described in the Service Tariff), provided, however, that if only part of the Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such partial amount of the Allocation.

4. Energy Efficiency and Conservation Program

- a. The Customer shall implement an energy efficiency and conservation program at the Facility through either (a) enrollment of the Facility and participation in NYEM in accordance with a NYEM Agreement, or (b) one or more Physical Energy Audits of the Facility, or (c) a combination of such measures, in accordance with the provisions of this Article.
- b. The Authority shall transmit to the Customer a NYEM Agreement and an election form. The Customer shall elect to either (a) enroll the Facility and participate in NYEM for a three-year term ("NYEM Participation") in accordance with the NYEM Agreement, or (b) perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit within three (3) years of the Effective Date of this Agreement, at its own expense.
- c. The Authority shall, on or before the expiration of the three-year term of the NYEM Agreement, transmit to the Customer a NYEM Agreement specifying the terms and conditions that would apply to NYEM participation for a second term, and an election form. The Customer shall elect either (a) NYEM Participation for a second term, or (b) to perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit during the calendar year that begins six years after of the Effective Date of this Agreement, at its own expense.
- d. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited energy audit of the Facility, where it determines that the Physical Energy Audit is unnecessary based on the age of the Facility, energy efficiency and conservation improvements made at the Facility, the length of the Allocation, or other considerations the Authority determines to be relevant.

ARTICLE II
RECORDKEEPING, REPORTING AND FACILITY ACCESS

1. Employment

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Base Level Employees who are employed at or assigned to the Customer's Facility identified in the Appendix to this Schedule, as reported to the United States Department of Labor (or as reported in such other record as agreed upon by the Authority and the Customer). Such report shall separately identify the individuals who are employed by the Customer, and the individuals who are contractors or who are employed by contractors of the Customer, and shall be certified to be correct by an officer of the Customer, plant manager or such other person authorized by the Customer to prepare and file such report and shall be provided to the Authority on or before the last day of February following the end of the most recent calendar year. The Authority shall have the right to examine and audit on reasonable advance written notice all non-confidential written and electronic records and data concerning employment levels including, but not limited to, personnel records and summaries held by the Customer and its affiliates relating to employment in New York State, subject to all privacy or other limitations required by law.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in the Appendix to this Schedule B.

3. Power Usage

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority on or before the last day of February following the end of the most recent calendar year, of the maximum demand utilized each month in the Facility receiving the power covered by the Agreement.

4. Energy Efficiency and Conservation Program

Upon the Authority's request, the Customer shall provide the Authority with (a) a copy of the results of any Physical Energy Audit performed at the Facility (or, at the Authority's option, a report describing the results), performed pursuant to this Article; and (b) a description of any energy efficiency or conservation measures that the Customer has implemented at the Facility in response to any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access

Notwithstanding any other provision of the Agreement, the Customer shall provide the Authority with such access to the Facility, and such documentation, as the Authority deems reasonably necessary to determine the Customer's compliance with the Customer's Supplemental Commitments specified in this Schedule B.

ARTICLE III

COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in the Appendix to this Schedule B for the subject calendar year, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

2. Capital Investment Commitment

The Authority may reduce the Contract Demand as provided in the Appendix to this Schedule B if the Customer does not comply with the Capital Investment Commitment.

3. Power Utilization Level

If the average of the Customer's six (6) highest Billing Demands (as such term is described in the Service Tariff) for Preservation Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to in accordance with the procedures provide in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, the Service Tariff and the Rules, the Authority may suspend Electric Service to the Customer if the Customer does not comply with any of the requirements in Section I.4 or Article II of this Schedule B in all material respects within thirty (30) days after the Authority delivers written notice to the Customer. If Electric Service is suspended by

the Authority under this provision, then the Authority shall immediately resume Electric Service to the Customer upon cure by the Customer.

5. Notice of Intent to Reduce Contract Demand

In the event that the Authority determines that the Contract Demand will be wholly or partially reduced pursuant to Sections III.1, III.2, or III.3 of this Schedule B, the Authority shall provide the Customer with at least thirty (30) days prior written notice of the proposed reduction, specifying the amount and reason for the reduction. Before implementing any reduction, the Authority will consider the Customer's scheduled or unscheduled maintenance, Facility upgrade periods, and the business cycle, and any other relevant factors offered by the Customer as determined by the Authority. If, at the end of the thirty (30) day notice period, the Authority determines that a reduction is warranted, it shall provide the Customer with notice of such determination and provide the Customer with sixty (60) days to present a proposed plan with actionable milestones to cure the deficiency. The Authority shall respond to the Customer concerning the acceptability of any proposed plan that is provided in accordance with this Section III.5 within thirty (30) days of the Authority's receipt of such proposed plan. It shall be within the Authority's discretion whether or not to accept the Customer's proposed plan, require a different plan, or implement the reduction of the Contract Demand after the Authority's response to the Customer's proposed plan.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

During the course of each Reporting Year, the Customer shall employ at least 145 full-time employees (“Base Employment Level”) at the Customer’s Facility, subject to the 90% compliance threshold as further detailed in Article III of Schedule B. The Base Employment Level shall be maintained for the term of the Allocation through the Allocation Expiration Date specified in Schedule A in accordance with Article I of Schedule B.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the Facility (“Rolling Average”) shall total not less than \$500,000 (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the Facility during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the Facility during the two prior Reporting Years.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average as determined by the Authority is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.
2. **Expansion Project–Capital Investment Commitment** (if applicable, as specified below)
 - a. The Customer shall make a minimum capital investment of \$0 to construct, furnish and/or expand the Facility (“Expansion Project Capital Investment Commitment”). The Expansion Project Capital Investment Commitment is expected to consist of the following approximate expenditures on the items indicated:

Line Item 1 -	\$N/A
Line Item 2 -	\$N/A
Line Item 3 -	\$N/A

Total Expansion Project Capital Investment Commitment:

- b. The Expansion Project Capital Investment Commitment shall be made, and the Facility shall be completed and fully operational, no later than N/A (*i.e.*, within three (3) years of the date of the Authority's award of the Allocation). Upon request of the Customer, such date may be extended in the discretion of the Authority.

SCHEDULE C
TAKEDOWN SCHEDULE

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SCHEDULE D
ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Schedule D.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard,” issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“PP Program ZEC Costs” has the meaning provided in Section II.4.b of this Schedule D.

“Government Action” has the meaning provided in Section II.8 of this Schedule D.

“Load Serving Entity” or “LSE” has the meaning provided in the CES Order.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Customer established in this Schedule D.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Schedule D.

“ZEC Program Year” has the meaning provided in Section II.2 of this Schedule D.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff or the Rules, the Customer shall be subject to a ZEC Charge as provided in this Schedule D. The ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as a load serving entity, including the load that the Authority serves under the PP power program.
4. The ZEC Charge, which is intended to recover from the Customer costs that the Authority incurs for purchasing ZECs in quantities that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as

provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the PP load that it serves (the “PP Program ZEC Costs”). Such allocation will be based on the forecasted kilowatt-hours load of the PP program to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the PP power program based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the PP Program ZEC Costs to the Customer as the ZEC Charge based on the proportion of the Customer’s actual kilowatt-hours load for the PP purchased by the Customer to total kilowatt-hours load served by the Authority under the PP power program (i.e., PP Program level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Customer based on the proportion of the Customer’s annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the PP power program by the Authority (PP Program level load). The ZEC Charge assessed to the Customer shall not include any costs resulting from the Authority’s inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the ZEC Charge pursuant to another Authority-established procedure.
6. The Authority may, in its discretion, modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected PP customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.
7. Nothing in this Schedule shall limit or otherwise affect the Authority’s right to charge or collect from the Customer any rate, charge, fee, assessment, or tax

provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

8. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, “Government Action”), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

SCHEDULE E
MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in the Service Tariff No, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule E.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Schedule E.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity” has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Schedule E.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSEDA in accordance with NYSEDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

“Total Monthly PP Load” has the meaning provided in Section II.3.b of this Schedule E

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Schedule E.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff, or the Rules, the Customer shall be subject to a Monthly REC Charge as provided in this Schedule E. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly REC Charge.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its PP customers. Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total PP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
3. The Monthly REC Charge, which is intended to recover from the Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:

- a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total PP load that it will serve during such calendar year.
- b. The Authority will, for each month of each calendar year, calculate the total costs ("Total Monthly REC Costs") that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total PP kilowatt-hour load for the month ("Total Monthly PP Load"). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly PP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly PP Load that the Authority served for the month.
- c. Each month, the Authority will assess to the Customer, as a Monthly REC Charge, which will represent the Customer's share of the Total Monthly REC Costs assessed to the Total Monthly PP Load. The Monthly REC Charge will be assessed as the proportion of the Customer's total kilowatt-hours load served by the Authority for such month to the Total Monthly PP Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority's inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA's published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly REC Charge pursuant to another Authority-established procedure.
5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Customer's Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority's bills for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Schedule E.

6. Notwithstanding the provisions of Section II.3 of this Schedule E, if Electric Service for the Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for Customer's load for the year, and bill the Customer for the costs associated with such separate REC Compliance Measures.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Schedule E (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.

EXHIBIT 1

NEW YORK POWER AUTHORITY SERVICE TARIFF

See attached



POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

Schedule of Rates for Sale of Firm Power Service to
Preservation Power Customers
(Authority Delivery Service)

Service Tariff No. 20-A

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Preservation Power made directly to a qualified business Customer for firm power service that is delivered by the Authority.

II. Abbreviations and Terms

- kW kilowatt(s)
- kW-mo. kilowatt-month
- kWh kilowatt-hour(s)
- MWh megawatt-hour(s)
- NYISO New York Independent System Operator, Inc. or any successor organization
- PAL New York Public Authorities Law
- OATT Open Access Transmission Tariff issued by the NYISO

Agreement: An executed written agreement between the Authority and the Customer for the sale of Preservation Power to the Customer.

Annual Adjustment Factor or **AAF**: This term shall have the meaning set forth in Section V herein.

Authority: The Power Authority of the State of New York, a corporate municipal instrumentality and a political subdivision of the State of New York created pursuant to Chapter 772 of the New York Laws of 1931 and existing and operating under Title 1 of Article 5 of the PAL, also known as the “New York Power Authority.”

Capacity Tag: An amount of capacity (kW) expressed by the NYISO as the UCAP obligation of a Customer’s load for a capability period. The UCAP obligation is inclusive of any adjustments necessary to meet the NYISO requirement.

Customer: A business entity that (1) has received an Allocation of Preservation Power, (2) purchases such Preservation Power directly from the Authority, and (3) receives delivery of the Preservation Power from the Authority.

Electric Service: The power and energy provided to the Customer in accordance with the Agreement, this Service Tariff and the Rules.

Firm Power: Hydropower capacity (kW) that is intended to be always available from the Project subject to the curtailment provisions set forth in the Agreement between the Authority and the Customer and this Service Tariff. Firm Power shall not include peaking power.

Firm Energy: Energy (kWh) associated with Firm Power.

Incremental Demand Charge: A charge applicable when the Customer's maximum hourly metered load value recorded in a given Billing Period exceeds the Contract Demand.

Incremental Energy: The amount of energy (kWh) that would be necessary to supply the Customer's load in excess of the Firm Energy calculated using the LFS methodology. The Authority will calculate the value of Incremental Energy using the NYISO Day-Ahead Market and/or the Real-Time Market LBMP prices at the applicable NYISO Zone in which the Customer receives deliveries. All costs associated with the provision of Incremental Energy will be passed through to Customer.

Incremental UCAP: Capacity (kW) that is necessary to meet the Customer's UCAP requirement in excess of the Contract Demand. The Authority will supply Customer's NYISO-required Incremental UCAP, if any, and use the Portfolio Weighted Average Price to assess Incremental UCAP charges. All Incremental UCAP charges will be passed through to the Customer. Incremental UCAP charges only apply when a Customer's Capacity Tag inclusive of the NYISO installed reserve margin is in excess of the Contract Demand.

Load Factor Sharing or LFS: A type of billing methodology applicable to a Customer's Allocation which determines how a Customer's total Native System Load is apportioned between the power and energy supplied by the Allocation and the Customer's other source of electricity supply, if any, including Market Supply. LFS is used to determine the amount of Firm Energy supplied and billed on the basis of the Customer's actual total Native System Load per the monthly billing cycle as follows:

1. When the Maximum Metered Demand is less than ($<$) the Contract Demand, then the Customer's entire load will be supplied by Firm Energy.
2. When the Maximum Metered Demand is greater than ($>$) the Contract Demand, then the Customer's portion of Firm Energy supply will be determined as follows:
 - a. **For Hourly Billing**: $\sum (\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the in-hour demand of Customer's total Native System Load for all hours})$.
 - b. **For Monthly Billing**: $(\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the total consumed energy by the Customer within the bill cycle})$.

Load Serving Entity or LSE: This term shall have the meaning set forth in the Agreement.

Locational Based Marginal Pricing or LBMP: This term shall have the meaning set forth in the NYISO Tariffs, as such definition may be modified from time to time.

Maximum Metered Demand: The highest 15 or 30-minute integrated demand, as determined by the Authority, during each Billing Period recorded on the meter that is used by the Customer in accordance with this Service Tariff and the Agreement.

Native System Load: The total consumption of the Customer's electric system, as determined by the Authority's revenue-grade metering equipment, without the offset of Customer's behind the meter generation. It is represented as the sum of all incoming power, plus internal generation behind the system meter, minus power exports to the bulk electric system.

Portfolio Weighted Average Price: The rate that is applied to Incremental UCAP determined by NYPA using an average weighting of NYPA's costs in procuring UCAP as a result of all applicable NYISO capacity auctions and forward purchases.

Preservation Power or **PP:** Firm Power and Firm Energy made available under this Service Tariff by the Authority from the Project for sale to the Customer for business purposes pursuant to PAL § 1005(5) and (13), and that is delivered by the Authority.

Project: The Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.

Rate Year or **RY:** The period from July 1 through June 30. For example, RY 2018 refers to July 1, 2018 through June 30, 2019.

Rules: The Authority's rules and regulations set forth in 21 NYCRR § 450 *et seq.*, as they may be amended from time to time.

Service Tariff: This Service Tariff No. 20A.

Transmission Service Charge or **TSC:** The Authority's Transmission Service Charge as provided for and defined in the NYISO OATT.

All other capitalized terms and abbreviations used in this Service Tariff but not defined in this Section or other provisions of this Service Tariff shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Preservation Power (PP) Base Rates

The rates to be charged to the Customer by the Authority shall be as follows:

Rate Year	Billing Period	Demand (\$/kW)	Energy (\$/MWh)
2018	July 2018 – June 2019	7.90	13.50

B. PP Rates No Lower than Rural/Domestic Rate

At all times the applicable PP base rates for demand and energy determined in accordance with Sections III.A and V of this Service Tariff shall be no lower than the rates charged by the Authority for the sale of hydroelectricity for the benefit of rural and domestic customers receiving service in accordance with the Niagara Redevelopment Act, 16 U.S.C. § 836(b)(1) (the "Rural/Domestic Rate"). This provision shall be implemented as follows: if the base rates, as determined in accordance with Sections III.A and V of this Service Tariff, are lower than the Rural/Domestic Rate on an average \$/MWh basis, each set of rates measured at 80% load factor which is generally regarded as representative for PP Customers, then the base rates determined under Sections III.A and V of this Service Tariff will be revised to make them equal to the Rural/Domestic Rate on an average \$/MWh basis. However, the base rates as so revised will have no effect until such time as these base rates are lower than the Rural/Domestic Rate.

C. Minimum Monthly Charge

The Minimum Monthly Charge shall equal the product of the demand rate specified in Section III.A and the Contract Demand (as defined herein). Such Minimum Monthly Charge shall be in addition to any NYISO Charges or Taxes (each as defined herein) incurred by the Authority with respect to the Customer's Allocation, and any other charges provided in this Service Tariff, the Agreement or the Rules.

D. Transmission Charges

The base rates set forth in this Section III exclude any applicable costs for transmission and delivery services provided by the Authority. The Customer shall compensate the Authority for all transmission and delivery costs incurred by the Authority with respect to the Allocation and Market Supply, including such costs that are charged pursuant to the NYISO Tariffs.

E. Incremental Electricity Supply

If in any given hour during a Billing Period the Customer's load requirements exceed the Customer's Contract Demand, the Authority will provide the required incremental power and energy ("Market Supply") and the Customer shall pay Authority for any and all costs associated

with such provision of Market Supply. The Market Supply shall be reflected in the Customer's bill including, but not limited to, Incremental Demand Charges, Incremental Energy Charges, Incremental UCAP, TSC charges, and any administrative fees associated with such Market Supply necessary to satisfy the Customer's load above its Contract Demand.

F. Metering

The Authority shall furnish and Customer shall pay for any and all metering and related equipment, including revenue-grade metering and installation costs, that is necessary to measure the Customer's Native System Load as determined by the Authority.

G. Estimated Billing

If the Authority, in its discretion, determines that it lacks reliable data on the Customer's actual demand and/or energy usage for a Billing Period during which the Customer receives Electric Service from the Authority, the Authority shall have the right to render a bill to the Customer for such Billing Period based on estimated demand and estimated usage ("Estimated Bill").

For the purpose of calculating a Billing Demand charge for an Estimated Bill, the demand charge will be calculated using an estimated demand amount (kW) based on an average of the Customer's Billing Demand (kW) values plus Incremental Demand quantities (kW), if any, for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated demand amount (kW) for the Estimated Bill will equal the Customer's takedown (kW) amount.

For the purpose of calculating a Billing Energy charge for an Estimated Bill, the energy charge will be calculated using an estimated energy amount (kWh) based on the average of the Customer's Billing Energy (kWh) values plus Incremental Energy quantities (kWh), if any, for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated energy amount (kWh) will be equal to the takedown (kW) amount at 70 percent load factor for that Billing Period.

If an alternative billing methodology is applicable to the Customer, the demand charge and energy charge for rendering an Estimated Bill shall be calculated in a manner appropriate to such alternative billing methodology as determined by the Authority.

If data indicating the Customer's actual demand and usage for any Billing Period in which an Estimated Bill was rendered is subsequently provided to the Authority, the Authority will make necessary adjustments to the corresponding Estimated Bill and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The Minimum Monthly Charge provisions of Section III.D shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended and shall not be construed to limit the Authority's rights under the Agreement.

H. Adjustments to Charges

In addition to any other adjustments provided for in this Service Tariff, in any Billing Period, the Authority may make appropriate adjustments to billings and charges to address such matters as billing and payment errors, and the receipt of actual, additional, or corrected data concerning Customer energy or demand usage.

I. Billing Period

The Billing Period is any period of approximately thirty (30) days, generally ending with the last day of each calendar month.

J. Billing Demand

Billing Demand shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

K. Billing Energy

Billing Energy shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

L. Contract Demand

The Contract Demand will be the amount of Preservation Power, not to exceed the Allocation, provided by the Authority to the Customer in accordance with the Agreement.

IV. General Provisions

A. Character of Service

Alternating current; sixty cycles, three-phase.

B. Availability of Energy

1. Subject to Section IV.B.2, the Authority shall provide to the Customer in any Billing Period Firm Energy associated with Firm Power. The offer of Firm Energy for delivery shall fulfill the Authority's obligations for purposes of this provision whether or not the Firm Energy is taken by the Customer.
2. In the event of an Adverse Water Condition, the rights and obligations of the Customer and Authority, including but not limited to such matters as Substitute Energy and responsibility for payment of costs associated therewith, will be governed by the Agreement.

C. Delivery

For the purpose of this Service Tariff, Firm Power and Firm Energy shall be deemed to be offered when the Authority is able to supply Firm Power and Firm Energy to the Authority's designated NYISO load bus. If, despite such offer, there is a failure of delivery caused by the Customer, NYISO or the Authority, such failure shall not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules or any successor provision addressing adjustments.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the base rates contained in this Service Tariff may be revised from time to time on not less than thirty (30) days written notice to the Customer.

E. Billing Methodology

Unless otherwise specified in the Agreement, the following provisions shall apply:

1. The billing methodology used to determine the amount of Firm Power and Firm Energy to be billed to the Customer related to its Allocation shall be Load Factor Sharing (“LFS”) in a manner consistent with the Agreement. An alternative billing methodology may be used provided the Customer and the Authority agree in writing.
2. Billing Energy - The LFS methodology will be applied against the Customer’s Native System Load during the Billing Period to determine the amount of Firm Energy (kWh) attributable to the Allocation (Billing Energy) to be billed to the Customer and charged at the applicable PP Rate. Incremental Energy will be quantified as the difference between the Firm Energy amount and the Native System Load and charged at a rate equivalent to the market LBMP in which such Incremental Energy was procured. All energy quantities will be adjusted for losses.
3. Billing Demand – The LFS methodology will be applied against the Customer’s Maximum Metered Load during the Billing Period to determine the amount of Firm Power (kW) attributable to the Allocation (Billing Demand) to be billed to the Customer and charged at the applicable PP Rate. If the Maximum Metered Load exceeds the Contract Demand, an Incremental Demand amount will be quantified as the difference between the Maximum Metered Load amount and the Contract Demand and charged applying a rate using the Portfolio Weighted Average Price method. All demand quantities will be adjusted for losses.
4. Billing for Market Supply - The Customer shall pay the Authority for any and all costs associated with the Authority’s provision of Market Supply to satisfy the Customer’s load that exceed the Customer’s Contract Demand during the Billing Period including but not limited to Incremental Demand Charges, Incremental Energy Charges, and Incremental UCAP.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power, Firm Energy, and Market Supply during any Billing Period the higher of either (i) the sum of (a), (b) and (c) below, or (ii) the Minimum Monthly Charge (as defined herein):

- a. The demand rate per kilowatt for Firm Power specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Demand (as defined in Section IV.E, above) for the Billing Period; and
- b. The energy rate per MWh for Firm Energy specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Energy (as defined in Section IV.E, above) for the Billing Period; and
- c. Any and all charges associated with the provision of Market Supply as provided for in this Service Tariff and the Agreement; and

- d. A charge representing reimbursement to the Authority for all applicable Taxes incurred by the Authority as a result of providing Preservation Power allocated to the Customer.

2. Transmission Charge

The Customer shall compensate the Authority for all transmission costs incurred by the Authority with respect to the Allocation, including such costs that are charged pursuant to the OATT.

3. NYISO Transmission and Related Charges

The Customer shall compensate the Authority for the following NYISO transmission and related charges (collectively, "NYISO Charges") assessed on the Authority for services provided by the NYISO pursuant to its OATT or other tariffs (as the provisions of those tariffs may be amended and in effect from time to time) associated with providing Electric Service to the Customer:

- A. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the OATT from time to time;
- B. Marginal losses;
- C. The New York Power Authority Transmission Adjustment Charge ("NTAC");
- D. Congestion costs inclusive of any rents collected or owed due to any associated grandfathered transmission congestion contracts as provided in Attachment K of the OATT;
- E. Any and all other charges, assessments, or other amounts associated with deliveries to Customers or otherwise associated with the Authority's responsibilities as a Load Serving Entity for the Customers that are assessed on the Authority by the NYISO under the provisions of its OATT or under other applicable tariffs; and
- F. Any charges assessed on the Authority with respect to the provision of Electric Service to Customers for facilities needed to maintain reliability and incurred in connection with the NYISO's Comprehensive System Planning Process (or similar reliability-related obligations incurred by the Authority with respect to Electric Service to the Customer), applicable tariffs, or required to be paid by the Authority in accordance with law, regardless of whether such charges are assessed by the NYISO or another party.

The NYISO Charges, if any, incurred by the Authority on behalf of the Customer, are in addition to the Authority production charges that are charged to the Customer in accordance with other provisions of this Service Tariff.

The method of billing NYISO charges to the Customer will be based on Authority's discretion.

4. Taxes Defined

Taxes shall be any adjustment as the Authority deems necessary to recover from the Customer any taxes, assessments or any other charges mandated by federal, state or local agencies or authorities that are levied on the Authority or that the Authority is required to collect from the Customer if and to the extent such taxes, assessments or charges are not recovered by the Authority pursuant to another provision of this Service Tariff.

5. Substitute Energy

The Customer shall pay for Substitute Energy, if applicable, as specified in the Agreement.

6. Other Charges

The Customer shall pay the Authority for all other charges provided for in the Agreement.

7. Payment Information

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by the Authority. The Authority may in its discretion change the foregoing account and routing information upon notice to the Customer.

8. Billing Disputes

In the event that there is a dispute on any items of a bill rendered by the Authority, the Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

G. Rendition and Payment of Bills

1. The Authority will render bills to the Customer for Electric Service on or before the twentieth (20th) calendar day of the month for charges due for the previous Billing Period. Such bills shall include charges for Electric Service, NYISO Charges associated with the Allocation (subject to adjustment consistent with any later NYISO re-billings to the Authority), and all other applicable charges, and are subject to adjustment as provided for in the Agreement, the Service Tariff and the Rules.
2. The Authority will charge and collect from the Customer all Taxes (including local, state and federal taxes) the Authority determines are applicable, unless the Customer furnishes the Authority with proof satisfactory to the Authority that (i) the Customer is exempt from the payment of any such Taxes, and/or (ii) the Authority is not obligated to collect such Taxes from the Customer. If the Authority is not collecting Taxes from the Customer based on the circumstances described in (i) or (ii) above, the Customer shall immediately inform the Authority of any change in circumstances relating to its tax status that would require the Authority to charge and collect such Taxes from the Customer.
3. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority will render bills to the Customer electronically.
4. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
5. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
6. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its discretion to suspend Electric Service to the Customer or terminate the Agreement.

Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of any bill rendered by Authority, the Customer shall pay such bill in full within the time provided for by this Agreement, and adjustments, if appropriate, will be made thereafter.

H. Adjustment of Charges – Distribution Losses

The Authority will make appropriate adjustments to compensate for distribution losses of the Authority.

I. Conflicts

In the event of any inconsistencies, conflicts, or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of the Agreement and this Service Tariff or the Rules, the provisions of the Agreement shall govern.

V. Annual Adjustment Factor

A. Adjustment of Rates

1. The AAF will be based upon a weighted average of three indices described below. For each new Rate Year, the index value for the latest available calendar year ("Index Value for the Measuring Year") will be compared to the index value for the calendar year immediately preceding the latest available calendar year (the Index Value for the Measuring Year -1"). The change for each index will then be multiplied by the indicated weights. As described in detail below, these products are then summed, producing the AAF. The AAF will be multiplied by the base rate for the current Rate Year to produce the base rates for the new Rate Year, subject to a maximum adjustment of $\pm 5.0\%$ (" $\pm 5\%$ Collar"). Amounts outside the $\pm 5\%$ Collar shall be referred to as the "Excess."

Index 1, "BLS Industrial Power Price" (35% weight): The average of the monthly Producer Price Index for Industrial Electric Power, commodity code number 0543, not seasonally adjusted, as reported by the U.S. Department of Labor, Bureau of Labor Statistics ("BLS") electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 1, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

Index 2, "EIA Average Industrial Power Price" (40% weight): The average weighted annual price (as measured in cents/kWh) for electric sales to the industrial sector in the ten states of CT, MA, ME, NH, NJ, NY, OH, PA, RI and VT ("Selected States") as reported by Coal and Electric Data and Renewables Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration ("EIA"); U.S. Department of Energy Form EIA-861 Final Data File. For Index 2, the Index Value for the Measuring Year will be the index for the calendar year two years preceding July 1 of the new Rate Year.

Index 3, "BLS Industrial Commodities Price Less Fuel" (25% weight): The monthly average of the Producer Price Index for Industrial Commodities less fuel, commodity code number 03T15M05, not seasonally adjusted, as reported by the U.S. Department of Labor, BLS electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 3, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

2. Annual Adjustment Factor Computation Guide

- Step 1: For each of the three Indices, divide the Index Value for Measuring Year by the Index Value for the Measuring Year-1.
- Step 2: Multiply the ratios determined in Step 1 by percentage weights for each Index. Sum the results to determine the weighted average. This is the AAF.
- Step 3: Commencing RY 2014, modifications to the AAF will be subject to $\pm 5\%$ Collar, as described below.
- a) When the AAF falls outside the $\pm 5\%$ Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the $\pm 5\%$ Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the $\pm 5\%$ Collar.

- b) Excesses will continue to accrue without limit and carry over such that they will be added to/subtracted from the AAF in any year where the AAF is within the $\pm 5\%$ Collar.

Step 4: Multiply the current Rate Year base rate by the AAF calculated in Step 2 to determine the new Rate Year base rate.

The foregoing calculation shall be performed by the Authority consistent with the sample presented in Section V.B below.

3. The Authority shall provide the Customer with notice of any adjustment to the current base rate per the above and with all data and calculations necessary to compute such adjustment by June 15th of each year to be effective on July 1 of such year, commencing in 2014. The values of the latest officially published (electronically or otherwise) versions of the indices and data provided by the BLS and EIA as of June 1 shall be used notwithstanding any subsequent revisions to the indices.
4. If during the term of the Agreement any of the three above indices ceases to be available or ceases to be reflective of the relevant factors or of changes which the indices were intended to reflect, the Customer and the Authority may mutually select a substitute Index. The Customer and the Authority agree to mutually select substitute indices within 90 days, once one of them is notified by the other that the indices are no longer available or no longer reflect the relevant factors or changes which the indices were intended to reflect. Should the 90-day period cover a planned July 1 rate change, the current base rates will remain in effect until substitute indices are selected and the adjusted rates based on the substitute indices will be retroactive to the previous July 1. If the Customer and Authority are unable to reach agreement on substitute indices within the 90-day period, the Customer and the Authority agree to substitute the mathematic average of the PPI—Intermediate Materials, Supplies and Components (BLS Series ID WPUSOP2000) and the PPI-- Finished Goods (BLS Series ID WPUSOP3000) indices for one or more indices that have ceased to be available or reflective of their intended purpose and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2014 implementation):

STEP 1

Determine the Index Value for the Measuring Year (MY) and Measuring Year - 1 (MY-1) for Each Index

- Index 1 - Producer Price Index, Industrial Power

	Measuring Year (2016)	Measuring Year - 1 (2015)
January	205.3	167.8
February	204.3	167.6
March	204.5	168.2
April	202.4	168.6
May	206.3	171.6
June	220.4	180.1
July	226.2	182.7
August	227.3	179.2
September	228.1	181.8
October	214.9	170.2
November	211.3	168.8
December	211.7	166.6
Average	213.6	223.7
Ratio of MY/MY-1		0.95

• Index 2 – EIA Industrial Rate

<u>State</u>	<u>Revenues</u> ((\$000s))	<u>Sales</u> (MWh)	<u>Avg. Rate</u> (cents/kWh)
<u>Measuring Year (2015)</u>			
CT	444,588	3,432,002	
MA	1,068,927	7,892,165	
ME	290,360	3,208,045	
NH	252,331	1,981,028	
NJ	778,985	7,320,398	
NY	1,140,573	18,079,200	
OH	3,548,736	50,556,675	
PA	3,411,815	47,404,272	
RI	109,866	798,532	
VT	146,022	1,421,601	
TOTAL	11,192,203	142,093,918	7.88
<u>Measuring Year -1 (2014)</u>			
CT	453,958	3,514,798	
MA	1,014,262	7,960,941	
ME	300,412	3,357,486	
NH	234,900	1,969,064	
NJ	855,757	7,516,616	
NY	1,184,255	18,002,976	
OH	3,440,919	50,829,251	
PA	3,580,990	48,317,693	
RI	114,111	887,150	
VT	145,111	1,417,994	
TOTAL	11,324,673	143,773,969	7.88
Ratio of MY/MY-1			1.00

- Index 3 – Producer Price Index, Industrial Commodities Less Fuel

	Measuring Year (2016)	Measuring Year -1 (2015)
January	191.9	196.0
February	191.8	195.4
March	192.1	195.0
April	192.8	194.8
May	193.4	194.9
June	193.7	195.2
July	193.7	194.9
August	194.0	193.9
September	193.9	193.1
October	194.3	192.9
November	194.9	192.3
December	195.6	191.9
Average	193.5	194.2
Ratio of MY/MY-1		1.00

STEP 2

Determine AAF by Summing the Weighted Indices

<u>Index</u>	<u>Ratio of MY to MY-1</u>	<u>Weight</u>	<u>Weighted Factors</u>
PPI Industrial Power	0.95	0.35	0.334
EIA Industrial Rate	1.00	0.40	0.400
PPI Industrial Commodities less fuel	1.00	0.25	<u>0.249</u>
AAF			0.983

STEP 3

Apply Collar of $\pm 5.0\%$ to Determine the Maximum/Minimum AAF.

$-5.0\% < 1.6\% < 5.0\%$; collar does not apply, assuming no cumulative excess.

STEP 4

Apply AAF to Calculate the New Rate Year Base Rate

	<u>Demand</u> \$/kW-mo.	<u>Energy</u> \$/MWh
Current Rate Year Base Rate	8.03	13.73
New Rate Year Base Rate	7.90	13.50

POWER AUTHORITY

OF THE

STATE OF NEW YORK

30 South Pearl Street
10th Floor
Albany, New York 12207-3425

AGREEMENT FOR THE SALE OF
PRESERVATION POWER AND ENERGY

SERVICE TARIFF NO. 20

North American Forest Group Inc.

The POWER AUTHORITY OF THE STATE OF NEW YORK (“Authority”), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law (“PAL”), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for Sale of Preservation Power and Energy (“Agreement”) with North American Forest Group Inc. (“Customer”) having offices at 263 Acco Drive, Ogdensburg, NY 13669. The Authority and the Customer are from time to time referred to in this Agreement as “Party” or collectively as “Parties” and agree as follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the St. Lawrence-FDR Power Project known as Preservation Power (or “PP”), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Customer applied for an allocation of PP or an extension of an existing PP allocation for use at its facilities defined in this Agreement as the “Facility”;

WHEREAS, the Customer has offered to make specific commitments relating to, among other things, the creation and retention of jobs, capital investments, power usage and energy efficiency measures at the Facility, in exchange for an allocation of PP;

WHEREAS, the Authority’s Board of Trustees approved an allocation of PP to the Customer;

WHEREAS, the Authority’s provision of Electric Service under this Agreement is an unbundled service separate from (i) the transmission of the allocation, and (ii) the delivery of the Allocation;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the Allocation for a term as provided in this Agreement;

WHEREAS, electric service hereunder shall be subject to the rates and other terms and conditions contained in the Service Tariff as further provided in this Agreement; and

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement.

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

ARTICLE I **DEFINITIONS**

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined in schedules or appendices to this

Agreement shall have the meanings set forth in such schedules or appendices. All other capitalized terms and abbreviations used in this Agreement but not defined in this Section or other provisions of this Agreement or its schedules or appendices shall have the same meaning as set forth in the Service Tariff.

“Adverse Water Condition” means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers who are served by the Project.

“Agreement” means this Agreement, and unless otherwise indicated herein, includes all schedules, appendices and addenda thereto, as the same may be amended from time to time.

“Allocation” refers to the allocation(s) of PP awarded to the Customer as specified in Schedule A.

“Alternative REC Compliance Program” has the meaning provided in Schedule E.

“Annual Capital Investment Commitment” has the meaning set forth in Schedule B.

“Annual CI Expenditures” has the meaning set forth in Schedule B.

“Base Employment Level” has the meaning set forth in Schedule B.

“Contract Demand” is as defined in applicable Service Tariff.

“Effective Date” means the date that this Agreement is fully executed by the Parties.

“Electric Service” is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, the Service Tariff and the Rules.

“Energy Services” has the meaning set forth in Article V of this Agreement.

“Expansion Project” has the meaning set forth in Section IV.3.a of this Agreement.

“Expansion Project Capital Investment Commitment” has the meaning set forth in Schedule B.

“Facility” means the Customer’s facilities as described in Schedule A to this Agreement.

“Firm Power” is as defined in the Service Tariff.

“Firm Energy” is as defined in the Service Tariff.

“FERC” means the Federal Energy Regulatory Commission (or any successor organization).

“FERC License” means the first new license issued by FERC to the Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act, which became effective September 1, 2007 after expiration of the Project’s original license which became effective in 1957.

“Hydropower Curtailment” means a temporary reduction in Firm Energy to which the Customer is entitled to receive under this Agreement made by the Authority in response to an Adverse Water Condition.

“International Joint Commission” or “IJC” refers to the entity with responsibility to prevent and resolve disputes between the United States of America and Canada under the *1909 Boundary Waters Treaty* and pursues the common good of both countries as an independent and objective advisor to the two governments. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects.

“Load Reduction” has the meaning set forth in Section IX.6 of this Agreement.

“Load Serving Entity” (or “LSE”) means an entity designated by a retail electricity customer (including the Customer) to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.

“Metering Arrangement” has the meaning set forth in Section II.8 of this Agreement.

“NYEM” means the New York Energy Manager, an energy management center owned and operated by the Authority.

“NYEM Agreement” means a written agreement between the Authority and the Customer providing for the Facility’s enrollment and Customer’s participation in NYEM.

“NYEM Participation” has the meaning specified in Schedule B of this Agreement.

“NYISO” means the New York Independent System Operator or any successor organization.

“NYISO Charges” has the meaning set forth in Section VII.3 of this Agreement.

“NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

“Physical Energy Audit” or “Audit” means a physical evaluation of the Facility in a manner approved by the Authority that includes at a minimum the following elements: (a) an assessment of the Facility’s energy use, cost and efficiency which produces an energy utilization index for the Facility (such as an Energy Use Intensity or Energy Performance Indicator); (b) a comparison of the Facility’s index to indices for similar buildings/facilities; (c) an analysis of low-cost/no-cost

measures for improving energy efficiency; (d) a listing of potential capital improvements for improving energy consumption; and (e) an initial assessment of potential costs and savings from such measures and improvements.

“Preservation Power” (or “PP”) consists of 490 megawatts (“MW”) of firm hydroelectric power and associated energy produced by the Authority’s St. Lawrence-FDR Power Project.

“Project” means the Authority’s St. Lawrence-FDR Power Project, FERC Project No. 2000.

“Reporting Year” means the yearly interval that the Authority uses for reporting, compliance and other purposes as specified in this Agreement. The Reporting Year for this Agreement is from January 1 through December 31, subject to change by the Authority without notice.

“Rolling Average” has the meaning set forth in Schedule B.

“Rules” are the applicable provisions of Authority’s rules and regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as may be modified from time to time by the Authority.

“Service Information” has the meaning set forth in Section II.12 of this Agreement.

“Service Tariff” means the Authority’s Service Tariff No. WNY-20, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

“Schedule A” refers to the Schedule A entitled “Preservation Power Allocations” which is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Supplemental Preservation Power Commitments” which is attached to and made part of this Agreement, including any appendices attached thereto.

“Schedule C” refers to the Schedule C entitled “Takedown Schedule” which is attached to and made part of this Agreement.

“Schedule D” refers to the Schedule D entitled “Zero Emission Credit Charge” which is attached to and made part of this Agreement.

“Schedule E” refers to the Schedule E entitled “Monthly Renewable Energy Credit Charge” which is attached to and made part of this Agreement.

“Substitute Energy” means energy that is provided to the Customer by or through the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Hydropower Curtailment.

“Takedown” means the portion of the Allocation that Customer requests to be scheduled for a specific period as provided for in Schedule C, if applicable.

“Taxes” is as defined in the Service Tariff.

“Unforced Capacity” (or “UCAP”) means the electric capacity required to be provided by LSEs to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

“Utility Tariff” means the retail tariff(s) of the Customer’s local electric utility filed and approved by the PSC that is applicable to the delivery of PP.

ARTICLE II **ELECTRIC SERVICE**

1. The Authority will make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, the Service Tariff and the Rules. The Customer is not be entitled to receive Electric Service under this Agreement for any PP allocation unless such PP allocation is identified in Schedule A.
2. The Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation specified in Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
3. The Authority shall provide UCAP in amounts necessary to meet the Customer’s NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with the Service Tariff.
4. The provision of Electric Service associated with the Allocation is an unbundled service separate from the transmission and the delivery of the Allocation. The Customer acknowledges and agrees that Customer’s local electric utility, not the Authority, is responsible for the delivery of the Allocation to the Facility in accordance with applicable Utility Tariff(s).
5. The Contract Demand for the Customer’s Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as PP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all PP customers receiving Electric Service under the Service Tariff, as applicable, based on the terms of such ruling, order, or decision.
6. The Contract Demand may not exceed the Allocation.

7. The Customer's Facility must be metered by the Customer's local electric utility in a manner that is satisfactory to the Authority, or another metering arrangement satisfactory to the Authority must be provided (collectively, "Metering Arrangement"). A Metering Arrangement that is not satisfactory to the Authority shall be grounds, after notice to the Customer, for the Authority to modify, withhold, suspend, or terminate Electric Service to the Customer. If a Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination that it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. After commencement of Electric Service, the Customer shall notify the Authority in writing within thirty (30) days of any alteration to the Facility's Metering Arrangement, and provide any information requested by the Authority (including Facility access) to enable the Authority to determine whether the Metering Arrangement remains satisfactory. If an altered Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. The Authority may, in its discretion, waive any of the requirements provided for in this Section in whole or in part where in the Authority's judgment, another mechanism satisfactory to the Authority can be implemented to enable the Authority to receive pertinent, timely and accurate information relating to the Customer's energy consumption and demand and render bills to the Customer for all fees, assessments and charges that become due in accordance with this Agreement, the Service Tariff, and the Rules.
8. The Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that such parties determine is necessary to provide for the allocation, sale and delivery of the Allocation to the Customer at the Facility, the proper and efficient implementation of the PP program, billing related to Electric Service, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters. In addition, the Customer agrees to complete such forms and consents that the Authority determines are necessary to effectuate such exchanges of information.
9. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement between the Authority and the Customer's local electric utility providing for the delivery of the Allocation on terms and conditions that are acceptable to the Authority.
10. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, execute consents, and provide information (collectively, "Service Information") that the Authority determines is necessary for the provision of Electric Service, the delivery of the Allocation, billing related to Electric Service, the effective administration of the PP program, and/or the performance of contracts or other arrangements between the Authority and the Customer's local electric utility. The Customer's failure to provide Service Information on a timely basis shall be grounds for the Authority in its discretion to modify, withhold, suspend, or terminate Electric Service to the Customer.

ARTICLE III
RATES, TERMS AND CONDITIONS

1. Electric Service shall be sold to the Customer in accordance with the rates, terms and conditions provided for in this Agreement, the Service Tariff and the Rules.
2. The Service Tariff and the Rules may be amended from time to time by the Authority and, if revised, the revised provisions thereof will apply under this Agreement with the same force and effect as if set forth herein. The Authority shall provide at least thirty (30) days prior written notice to the Customer of any proposed change in the Service Tariff or the Rules. No amendment to the Service Tariff or the Rules shall affect the determination of rates for PP to the Customer during the term of the Agreement except insofar as otherwise authorized by this Agreement. This provision shall not limit the Authority's discretion to determine rates applicable to allocations of power and energy awarded to the Customer beyond or in addition to the Allocation.
3. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates for Electric Service shall be subject to increase by Authority at any time upon 30 days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.
4. In addition to all other fees, assessments and charges provided for in the Agreement, the Service Tariff and the Rules, the Customer shall be responsible for payment of the Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge provided for in Schedule D and Schedule E, respectively, of this Agreement.

ARTICLE IV
SUPPLEMENTAL COMMITMENTS

1. Supplemental Commitments. Schedule B sets forth the Customer's "Supplemental Preservation Power Commitments" ("Supplemental Commitments"). The Authority's obligation to provide Electric Service under this Agreement is expressly conditioned upon the Customer's timely compliance with the Supplemental Commitments described in Schedule B as further provided in this Agreement. The Customer's Supplemental Commitments are in addition to all other commitments and obligations provided in this Agreement.

2. Special Provisions Relating to a New or Expanded Facility.

a. Proposed New or Expanded Facility; Failure to Complete.

If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, “Expansion Project”), and the Customer fails to complete the Expansion Project by the date specified in Schedule B, the Authority may, in its discretion, (a) cancel the Allocation, or (b) if it believes that the Expansion Project will be completed in a reasonable time, agree with the Customer to extend the time for completion of the Expansion Project.

b. Proposed New or Expanded Facility; Partial Performance.

If the Expansion Project results in a completed Facility that is only partially operational, or is materially different than the Expansion Project agreed to in Schedule B (as measured by such factors as size, capital investment expenditures, capital improvements, employment levels, estimated energy demand and/or other criteria determined by the Authority to be relevant), the Authority may, in its discretion, on its own initiative or at the Customer’s request, make a permanent reduction to the Allocation and Contract Demand to an amount that the Authority determines to fairly correspond to the completed Facility.

c. Notice of Completion; Commencement of Electric Service.

- (i) The Customer shall give the Authority not less than ninety (90) days' advance written notice of the anticipated date of completion of an Expansion Project. The Authority will inspect the Expansion Project for the purpose of verifying the status of the Expansion Project and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time subject to the other provisions of this Agreement based on applicable operating procedures of the Authority, Customer’s local electric utility and NYISO.
- (ii) In the event of an Expansion Project being completed in multiple phases, at the Customer’s request the Authority may, in its discretion, allow commencement of part of the Allocation upon completion of any such phase, provided the Authority will similarly inspect the Expansion Project for the purpose of verifying the status of the completed phase of the Expansion Project. Upon such verification by the Authority of any such completed phase, the Authority, in its discretion, will determine an amount of kW that fairly corresponds to the completed phase of the Expansion Project, taking into account relevant criteria such as any capital expenditures, increased employment levels, and/or increased electrical demand associated with the completed phase of the Expansion Project.

d. Other Rights and Remedies Unaffected.

Nothing in this Article is intended to limit the Authority's rights and remedies provided for in the other provisions of this Agreement, including without limitation the provisions in Schedule B of this Agreement.

ARTICLE V
ENERGY-RELATED PROJECTS, PROGRAMS AND SERVICES

The Authority shall periodically communicate with the Customer for the purpose of informing the Customer about energy-related projects, programs and services ("Energy Services") offered by the Authority that in the Authority's view could provide value to the Customer and/or support the State's Clean Energy Standard. The Customer shall review and respond to all such offers in good faith, provided, however, that, except as otherwise provided for in this Agreement, participation in any such Energy Services shall be at the Customer's option, and subject to such terms and conditions agreed to by the Parties in one or more definitive agreements.

ARTICLE VI
SERVICE TARIFF; CONFLICTS

1. A copy of the Service Tariff is attached to this Agreement as Exhibit 1 and shall apply under this Agreement with the same force and effect as if fully set forth herein. The Customer consents to the application of the Service Tariff.
2. In the event of any inconsistencies, conflicts, or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff or the Rules, the provisions of this Agreement shall govern.

ARTICLE VII
TRANSMISSION AND DELIVERY

1. The Customer shall be responsible for:
 - a. complying with all requirements of its local electric utility (including any other interconnecting utilities) that are necessary to enable the Customer to receive delivery service for the Allocation. Delivery of the Allocation shall be subject to the Utility Tariff;
 - b. paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff, and if the Authority incurs any charges associated with such delivery service, reimbursing the Authority for all such charges; and
 - c. obtaining any consents and agreements from any other person that are necessary for the delivery of the Allocation to the Facility, and complying with the requirements of any such person, provided that any such consents, agreements and requirements shall be subject to the Authority's approval.

2. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in the Service Tariff or any successor service tariff, regardless of whether such NYISO Charges are transmission-related.

ARTICLE VIII

BILLING AND BILLING METHODOLOGY

1. The billing methodology for the Allocation shall be determined on a "load factor sharing" basis in a manner consistent with the Utility Tariff and any agreement between the Authority and the Customer's local electric utility. An alternative basis for billing may be used provided the Parties agree in writing and the local electric utility provides its consent if such consent is deemed necessary.
2. Except as otherwise provided in this Agreement, all other provisions with respect to billing are set forth in the Service Tariff and the Rules.
3. The rights and remedies provided to the Authority in this Article are in addition to any and all other rights and remedies available to Authority at law or in equity.

ARTICLE IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. In the event of an Adverse Water Condition, the Authority will have the right in its discretion to implement Hydropower Curtailments. The Authority will implement Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
2. In the event of a Hydropower Curtailment, the Authority will provide Substitute Energy to the Customer and the Customer shall pay for such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, Substitute Energy shall be sourced from markets administered by the NYISO.
3. For each kilowatt-hour of Substitute Energy provided by the Authority during a Hydropower Curtailment, the Customer shall pay the Authority directly during the billing month: (1) the difference between the market cost of the Substitute Energy and the charge for firm energy as provided for in this Agreement; and (2) any NYISO charges and taxes the Authority incurs in connection with the provision of such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Hydropower Curtailments shall be governed by the provisions of the Service Tariff relating to the rendition and payment of bills for Electric Service.
4. The Authority shall be under no obligation to deliver, and will not deliver, any such curtailed energy to the Customer in later billing periods.

5. The Authority may require the Customer to enter into a separate agreement relating to the provision and sale of Substitute Energy. The provisions of this Agreement will remain in effect notwithstanding the existence of any such separate agreement.

ARTICLE X

EFFECTIVENESS, TERM AND TERMINATION

1. This Agreement shall become effective and legally binding on the Parties on the Effective Date.
2. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (a) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (b) termination by the Authority pursuant to this Agreement, the Service Tariff, or the Rules; or (c) expiration of the Allocation by its own term as specified in Schedule A.
3. The Customer may exercise a partial termination of the Allocation upon at least sixty (60) days' prior written notice to the Authority. The Authority will effectuate the partial termination as soon as practicable after receipt of such notice taking account of the Authority's internal procedures and requirements of the Customer's local electric utility.
4. The Authority may cancel service under this Agreement or modify the quantities of Firm Power and Firm Energy associated with the Allocation: (1) if such cancellation or modification is required to comply with any final ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, the Service Tariff, or the Rules.

ARTICLE XI

EXTENSIONS OF ALLOCATION; AWARD OF ADDITIONAL ALLOCATIONS

1. The Customer may apply to the Authority for an extension of the term of the Allocation identified in Schedule A:
 - a. during the thirty-six (36) month period immediately preceding the scheduled expiration of the Allocation;
 - b. pursuant to any other process that the Authority establishes; or
 - c. with the Authority's written consent.
2. Upon proper application by the Customer, the Authority may in accordance with applicable law and Authority procedures award additional allocations of PP at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (a) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (b) produce a modified Appendix to Schedule B, as the Authority determines to be appropriate. The Authority will furnish the Customer with any such modified Schedule A, supplemental schedule, and/or a modified

Appendix to Schedule B, within a reasonable time after commencement of Electric Service for any such additional allocation.

3. In addition to any requirements imposed by law, the Customer hereby agrees to furnish such documentation and other information as the Authority requests to enable the Authority to evaluate any requests for extension of the Allocation or additional allocations and consider the terms and conditions that should be applicable of any extension or additional allocations.

ARTICLE XII

NOTICES

1. Notices, consents, authorizations, approvals, instructions, waivers or other communications provided in this Agreement shall be in writing and transmitted to the Parties as follows:

To: The Authority

New York Power Authority
123 Main Street
White Plains, New York 10601

Email:

Facsimile: _____

Attention: Manager – Business Power Allocations and Compliance

To: The Customer

North American Forest Group Inc.
263 Acco Drive
Ogdensburg, NY 13669

Email:

Facsimile:

Attention:

2. The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XII.1.
3. Except where otherwise herein specifically provided, any notice, communication or request required or authorized by this Agreement by either Party to the other shall be deemed properly given: (a) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (b) if sent by a nationally recognized overnight delivery service, two (2) calendar days after being deposited for delivery to the appropriate address set forth above; (c) if delivered by hand, with written confirmation of receipt; (d) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (e) on the date of transmission if sent by electronic communication to the appropriate address as set forth above, with confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

ARTICLE XIII
SUCCESSORS AND ASSIGNS; RESALE OF HYDROPOWER

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto, provided that no assignment by either Party or any successor or assignee of such Party of its rights and obligations hereunder shall be made or become effective without the prior written consent of the other Party, which consent shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing sentence, the Authority may require such approvals, and such consents and other agreements from the Customer and other parties, that the Authority determines are necessary in order to effectuate any such assignment.
2. The Customer may not transfer any portion of the Allocation to any other person, or a location different than the Facility, unless: (a) the Authority in its discretion authorizes the transfer Authority; (b) all other requirements applicable to a transfer, including board approvals, are satisfied; and (c) the transfer is effectuated in a form and subject to such terms and conditions approved by the Authority. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service or terminate the Allocation and/or this Agreement.
3. The Customer may not sell any portion of the Allocation to any other person, allow any other person to use any portion of the Allocation, or allow any other person to interconnect to the Facility. Any purported sale shall be invalid and any violation of this provision shall constitute grounds for the Authority in its discretion to suspend Electric Service, or terminate the Allocation and/or this Agreement.

ARTICLE XIV
MISCELLANEOUS

1. Choice of Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a) and rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

The Parties: (a) consent to the exclusive jurisdiction and venue of any state court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement; (b) agree to accept service of process; and (c) will not raise any argument of inconvenient forum.

3. Previous Agreements; Modifications; and Interpretation

- a. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation and the subject matter of the Agreement, and

supersedes all previous communications and agreements between the Parties, oral or written, with reference to the sale of the Allocation.

- b. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.
- c. No provision shall be construed against a Party on the basis that such Party drafted such provision.

4. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

5. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof. Notwithstanding the preceding sentence, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

ARTICLE XV
EXECUTION

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

[SIGNATURES FOLLOW ON NEXT PAGE]

AGREED:

North American Forest Group Inc.

By: _____

Title: _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____
John R. Koelmel, Chairman

Date: _____

SCHEDULE A
PRESERVATION POWER ALLOCATIONS

Customer: North American Forest Group Inc.				
Type of Allocation	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Preservation Power	1,000	263 Acco Drive Ogdensburg, NY 13669	12/11/2018	Seven (7) years from the date of commencement of Electric Service

SCHEDULE B
SUPPLEMENTAL PRESERVATION POWER COMMITMENTS

ARTICLE I
SPECIFIC SUPPLEMENTAL COMMITMENTS

1. Employment Commitments

- a. The Customer shall create and maintain the employment level set forth in the Appendix to this Schedule B (the “Base Employment Level”). Such Base Employment Level shall be the total number of full-time positions held by: (a) individuals who are employed by the Customer at Customer’s Facility identified in the Appendix to this Schedule, and (b) individuals who are contractors or who are employed by contractors of the Customer and assigned to the Facility identified in such Appendix (collectively, “Base Level Employees”). The number of Base Level Employees shall not include individuals employed on a part-time basis (less than 35 hours per week); provided, however, that two individuals each working 20 hours per week or more at such Facility shall be counted as one Base Level Employee.
- b. The Base Employment Level shall not be created or maintained by transfers of employees from previously held positions with the Customer or its affiliates within the State of New York, except that the Base Employment Level may be filled by employees of the Customer laid off from other Customer facilities for *bona fide* economic or management reasons.
- c. The Authority may consider a request to change the Base Employment Level based on a claim of increased productivity, increased efficiency or adoption of new technologies or for other appropriate reasons as determined by the Authority. Any such change shall be within Authority’s discretion.

2. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule B.

3. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Billing Demand (as such term is described in the Service Tariff), provided, however, that if only part of the Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such partial amount of the Allocation.

4. Energy Efficiency and Conservation Program

- a. The Customer shall implement an energy efficiency and conservation program at the Facility through either (a) enrollment of the Facility and participation in NYEM in accordance with a NYEM Agreement, or (b) one or more Physical Energy Audits of the Facility, or (c) a combination of such measures, in accordance with the provisions of this Article.
- b. The Authority shall transmit to the Customer a NYEM Agreement and an election form. The Customer shall elect to either (a) enroll the Facility and participate in NYEM for a three-year term ("NYEM Participation") in accordance with the NYEM Agreement, or (b) perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit within three (3) years of the Effective Date of this Agreement, at its own expense.
- c. The Authority shall, on or before the expiration of the three-year term of the NYEM Agreement, transmit to the Customer a NYEM Agreement specifying the terms and conditions that would apply to NYEM participation for a second term, and an election form. The Customer shall elect either (a) NYEM Participation for a second term, or (b) to perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit during the calendar year that begins six years after of the Effective Date of this Agreement, at its own expense.
- d. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited energy audit of the Facility, where it determines that the Physical Energy Audit is unnecessary based on the age of the Facility, energy efficiency and conservation improvements made at the Facility, the length of the Allocation, or other considerations the Authority determines to be relevant.

ARTICLE II
RECORDKEEPING, REPORTING AND FACILITY ACCESS

1. Employment

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Base Level Employees who are employed at or assigned to the Customer's Facility identified in the Appendix to this Schedule, as reported to the United States Department of Labor (or as reported in such other record as agreed upon by the Authority and the Customer). Such report shall separately identify the individuals who are employed by the Customer, and the individuals who are contractors or who are employed by contractors of the Customer, and shall be certified to be correct by an officer of the Customer, plant manager or such other person authorized by the Customer to prepare and file such report and shall be provided to the Authority on or before the last day of February following the end of the most recent calendar year. The Authority shall have the right to examine and audit on reasonable advance written notice all non-confidential written and electronic records and data concerning employment levels including, but not limited to, personnel records and summaries held by the Customer and its affiliates relating to employment in New York State.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in the Appendix to this Schedule B.

3. Power Usage

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority on or before the last day of February following the end of the most recent calendar year, of the maximum demand utilized each month in the Facility receiving the power covered by the Agreement.

4. Energy Efficiency and Conservation Program

Upon the Authority's request, the Customer shall provide the Authority with (a) a copy of the results of any Physical Energy Audit performed at the Facility (or, at the Authority's option, a report describing the results), performed pursuant to this Article; and (b) a description of any energy efficiency or conservation measures that the Customer has implemented at the Facility in response to any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access

Notwithstanding any other provision of the Agreement, the Customer shall provide the Authority with such access to the Facility, and such documentation, as the

Authority deems necessary to determine the Customer's compliance with the Customer's Supplemental Commitments specified in this Schedule B.

ARTICLE III

COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in the Appendix to this Schedule B for the subject calendar year, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

2. Capital Investment Commitment

The Authority may reduce the Contract Demand as provided in the Appendix to this Schedule B if the Customer does not comply with the Capital Investment Commitment.

3. Power Utilization Level

If the average of the Customer's six (6) highest Billing Demands (as such term is described in the Service Tariff) for Preservation Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to in accordance with the procedures provide in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, the Service Tariff and the Rules, the Authority may suspend Electric Service to the Customer if the Customer does not comply with any of the requirements in Section I.4 or Article II of this Schedule B.

5. Notice of Intent to Reduce Contract Demand

In the event that the Authority determines that the Contract Demand will be wholly or partially reduced pursuant to Sections III.1, III.2, or III.3 of this Schedule B, the Authority shall provide the Customer with at least thirty (30) days prior written notice of the proposed reduction, specifying the amount and reason for the reduction. Before implementing any reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance, Facility upgrade periods, and the business cycle. If, at the end of the thirty (30) day notice period, the Authority determines that a reduction is warranted, it shall provide the Customer with notice of such determination and provide the Customer with sixty (60) days to present a proposed plan with actionable milestones to cure the deficiency. The Authority shall respond to the Customer concerning the acceptability of any proposed plan that is provided in accordance with this Section III.5 within thirty (30) days of the Authority's receipt of such proposed plan. It shall be within the Authority's discretion whether or not to accept the Customer's proposed plan, require a different plan, or implement the reduction of the Contract Demand.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

The Customer shall employ at least 21 full-time employees (“Base Employment Level”) at the Customer’s Facility within three (3) years of commencement of Electric Service. The Base Employment Level shall be maintained thereafter for the term of the Allocation through the Allocation Expiration Date specified in Schedule A in accordance with Article I of Schedule B.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the Facility (“Rolling Average”) shall total not less than \$ N/A (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the Facility during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the Facility during the two prior Reporting Years.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average as determined by the Authority is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.
2. **Expansion Project–Capital Investment Commitment** (if applicable, as specified below)
 - a. The Customer shall make a minimum capital investment of \$2,000,000 to construct, furnish and/or expand the Facility (“Expansion Project Capital Investment Commitment”). The Expansion Project Capital Investment Commitment is expected to consist of the following approximate expenditures on the items indicated:

\$600,000 – Purchase of building
\$300,000 – Renovations/Rehab of building
\$200,000 – Lot/Site improvement work
\$300,000 – Sawmill
\$100,000 – Kiln Planer Room
\$150,000 – Electrical for lighting, furnace, fans
\$300,000 – Other equipment
\$ 50,000 - Miscellaneous

\$2,000,000 Total Expansion Project Capital Investment Commitment

- b. The Expansion Project Capital Investment Commitment shall be made, and the Facility shall be completed and fully operational, no later than December 11, 2021 (*i.e.*, within three (3) years of the date of the Authority's award of the Allocation). Upon request of the Customer, such date may be extended in the discretion of the Authority.

SCHEDULE C
TAKEDOWN SCHEDULE

SCHEDULE D
ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Schedule D.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“PP Program ZEC Costs” has the meaning provided in Section II.4.b of this Schedule D.

“Government Action” has the meaning provided in Section II.8 of this Schedule D.

“Load Serving Entity” or “LSE” has the meaning provided in the CES Order.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Customer established in this Schedule D.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Schedule D.

“ZEC Program Year” has the meaning provided in Section II.2 of this Schedule D.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff or the Rules, the Customer shall be subject to a ZEC Charge as provided in this Schedule D. The ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as a load serving entity, including the load that the Authority serves under the PP power program.
4. The ZEC Charge, which is intended to recover from the Customer costs that the Authority incurs for purchasing ZECs in quantities that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as

provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the PP load that it serves (the “PP Program ZEC Costs”). Such allocation will be based on the forecasted kilowatt-hours load of the PP program to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the PP power program based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the PP Program ZEC Costs to the Customer as the ZEC Charge based on the proportion of the Customer’s actual kilowatt-hours load for the PP purchased by the Customer to total kilowatt-hours load served by the Authority under the PP power program (i.e., PP Program level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Customer based on the proportion of the Customer’s annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the PP power program by the Authority (PP Program level load). The ZEC Charge assessed to the Customer shall not include any costs resulting from the Authority’s inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the ZEC Charge pursuant to another Authority-established procedure.
6. The Authority may, in its discretion, modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected PP customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.
7. Nothing in this Schedule shall limit or otherwise affect the Authority’s right to charge or collect from the Customer any rate, charge, fee, assessment, or tax

provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

8. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, “Government Action”), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

SCHEDULE E
MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in the Service Tariff No, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule E.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Schedule E.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity” has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Schedule E.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSERDA in accordance with NYSERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

“Total Monthly PP Load” has the meaning provided in Section II.3.b of this Schedule E

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Schedule E.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff, or the Rules, the Customer shall be subject to a Monthly REC Charge as provided in this Schedule E. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly REC Charge.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its PP customers. Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total PP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
3. The Monthly REC Charge, which is intended to recover from the Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:

- a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total PP load that it will serve during such calendar year.
- b. The Authority will, for each month of each calendar year, calculate the total costs (“Total Monthly REC Costs”) that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total PP kilowatt-hour load for the month (“Total Monthly PP Load”). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly PP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly PP Load that the Authority served for the month.
- c. Each month, the Authority will assess to the Customer, as a Monthly REC Charge, which will represent the Customer’s share of the Total Monthly REC Costs assessed to the Total Monthly PP Load. The Monthly REC Charge will be assessed as the proportion of the Customer’s total kilowatt-hours load served by the Authority for such month to the Total Monthly PP Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority’s inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA’s published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly REC Charge pursuant to another Authority-established procedure.
5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Customer’s Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority’s bills for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Schedule E.

6. Notwithstanding the provisions of Section II.3 of this Schedule E, if Electric Service for the Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for Customer's load for the year, and bill the Customer for the costs associated with such separate REC Compliance Measures.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Schedule E (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.



POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

Schedule of Rates for Sale of Firm Power Service to
Preservation Power Customers
(Local Electric Utility Delivery)

Service Tariff No. 20

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Preservation Power made directly to a qualified business Customer for firm power service that is delivered by the Customer's local electric utility.

II. Abbreviations and Terms

- kW kilowatt(s)
- kW-mo. kilowatt-month
- kWh kilowatt-hour(s)
- MWh megawatt-hour(s)
- NYISO New York Independent System Operator, Inc. or any successor organization
- PAL New York Public Authorities Law
- OATT Open Access Transmission Tariff issued by the NYISO

Agreement: An executed written agreement between the Authority and the Customer for the sale of Preservation Power to the Customer.

Annual Adjustment Factor or **AAF**: This term shall have the meaning set forth in Section V herein.

Authority: The Power Authority of the State of New York, a corporate municipal instrumentality and a political subdivision of the State of New York created pursuant to Chapter 772 of the New York Laws of 1931 and existing and operating under Title 1 of Article 5 of the PAL, also known as the "New York Power Authority."

Customer: A business entity that (1) has received an Allocation of Preservation Power, (2) purchases such Preservation Power directly from the Authority, and (3) receives delivery of the Preservation Power from a local electric utility.

Electric Service: The power and energy provided to the Customer in accordance with the Agreement, this Service Tariff and the Rules.

Firm Power: Hydropower capacity (kW) that is intended to be always available from the Project subject to the curtailment provisions set forth in the Agreement between the Authority and the Customer and this Service Tariff. Firm Power shall not include peaking power.

Firm Energy: Energy (kWh) associated with Firm Power.

Load Factor Sharing or **LFS**: A type of billing methodology applicable to a Customer's Allocation which determines how a Customer's total Native System Load is apportioned between the power and energy supplied by the Allocation and the Customer's other source of electricity supply, if any. LFS is used to determine the amount of Firm Energy supplied and billed on the basis of the Customer's actual total Native System Load per the monthly billing cycle as follows:

1. When the Maximum Metered Demand is less than (<) the Contract Demand, then the Customer's entire load will be supplied by Firm Energy.
2. When the Maximum Metered Demand is greater than (>) the Contract Demand, then the Customer's portion of Firm Energy supply will be determined as follows:
 - a. For **Hourly Billing**: $\sum (\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the in-hour demand of Customer's total Native System Load for all hours})$.
 - b. For **Monthly Billing**: $(\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the total consumed energy by the Customer within the bill cycle})$.

Load Serving Entity or **LSE**: This term shall have the meaning set forth in the Agreement.

Maximum Metered Demand: The highest 15 or 30-minute integrated demand, as determined by the local electric utility, during each Billing Period recorded on the meter that is used by the Customer in accordance with this Service Tariff and the Agreement.

Native System Load: The total consumption of the Customer's electric system, as determined by the Authority's revenue-grade metering equipment, without the offset of Customer's behind the meter generation. It is represented as the sum of all incoming power, plus internal generation behind the system meter, minus power exports to the bulk electric system.

Preservation Power or **PP**: Firm Power and Firm Energy made available under this Service Tariff by the Authority from the Project for sale to the Customer for business purposes pursuant to PAL § 1005(5) and (13), and that is delivered by the Customer's local electric utility.

Project: The Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.

Rate Year or **RY**: The period from July 1 through June 30. For example, RY 2018 refers to July 1, 2018 through June 30, 2019.

Rules: The Authority's rules and regulations set forth in 21 NYCRR § 450 *et seq.*, as they may be amended from time to time.

Service Tariff: This Service Tariff No. 20.

All other capitalized terms and abbreviations used in this Service Tariff but not defined in this Section or other provisions of this Service Tariff shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Preservation Power (PP) Base Rates

The rates to be charged to the Customer by the Authority shall be as follows:

Rate Year	Billing Period	Demand (\$/kW)	Energy (\$/MWh)
2018	July 2018 – June 2019	7.90	13.50

B. PP Rates No Lower than Rural/Domestic Rate

At all times the applicable PP base rates for demand and energy determined in accordance with Sections III.A and V of this Service Tariff shall be no lower than the rates charged by the Authority for the sale of hydroelectricity for the benefit of rural and domestic customers receiving service in accordance with the Niagara Redevelopment Act, 16 U.S.C. § 836(b)(1) (the "Rural/Domestic Rate"). This provision shall be implemented as follows: if the base rates, as determined in accordance with Sections III.A and V of this Service Tariff, are lower than the Rural/Domestic Rate on an average \$/MWh basis, each set of rates measured at 80% load factor which is generally regarded as representative for PP Customers, then the base rates determined under Sections III.A and V of this Service Tariff will be revised to make them equal to the Rural/Domestic Rate on an average \$/MWh basis. However, the base rates as so revised will have no effect until such time as these base rates are lower than the Rural/Domestic Rate.

C. Monthly Base Rates Exclude Delivery Service Charges

The monthly base rates set forth in this Section III exclude any applicable costs for delivery services provided by the local electric utility.

D. Minimum Monthly Charge

The Minimum Monthly Charge shall equal the product of the demand rate specified in Section III.A and the Contract Demand (as defined herein). Such Minimum Monthly Charge shall be in addition to any NYISO Charges or Taxes (each as defined herein) incurred by the Authority with respect to the Customer's Allocation, and any other charges provided in this Service Tariff, the Agreement or the Rules.

E. Estimated Billing

If the Authority, in its discretion, determines that it lacks reliable data on the Customer's actual demand and/or energy usage for a Billing Period during which the Customer receives Electric Service from the Authority, the Authority shall have the right to render a bill to the Customer for such Billing Period based on estimated demand and estimated usage ("Estimated Bill").

For the purpose of calculating a Billing Demand charge for an Estimated Bill, the demand charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated demand amount (kW) will be calculated based on an average of the Customer's Billing Demand (kW) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated demand amount (kW) for the Estimated Bill will equal the Customer's takedown (kW) amount.

For the purpose of calculating a Billing Energy charge for an Estimated Bill, the energy charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated energy (kWh) will be based on the average of the Customer's Billing Energy (kWh) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated energy amount (kWh) will be equal to the takedown (kW) amount at 70 percent load factor for that Billing Period.

If an alternative billing methodology is applicable to the Customer, the demand charge and energy charge for rendering an Estimated Bill shall be calculated in a manner appropriate to such alternative billing methodology as determined by the Authority.

If data indicating the Customer's actual demand and usage for any Billing Period in which an Estimated Bill was rendered is subsequently provided to the Authority, the Authority will make necessary adjustments to the corresponding Estimated Bill and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The Minimum Monthly Charge provisions of Section III.D shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended and shall not be construed to limit the Authority's rights under the Agreement.

F. Adjustments to Charges

In addition to any other adjustments provided for in this Service Tariff, in any Billing Period, the Authority may make appropriate adjustments to billings and charges to address such matters as billing and payment errors, and the receipt of actual, additional, or corrected data concerning Customer energy or demand usage.

G. Billing Period

The Billing Period is any period of approximately thirty (30) days, generally ending with the last day of each calendar month but subject to the billing cycle requirements of the local electric utility in whose service territory the Customer's Facility is located.

H. Billing Demand

Billing Demand shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

I. Billing Energy

Billing Energy shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

J. Contract Demand

The Contract Demand will be the amount of Preservation Power, not to exceed the Allocation, provided by the Authority to the Customer in accordance with the Agreement.

IV. General Provisions

A. Character of Service

Alternating current; sixty cycles, three-phase.

B. Availability of Energy

1. Subject to Section IV.B.2, the Authority shall provide to the Customer in any Billing Period Firm Energy associated with Firm Power. The offer of Firm Energy for delivery shall fulfill the Authority's obligations for purposes of this provision whether or not the Firm Energy is taken by the Customer.
2. In the event of an Adverse Water Condition, the rights and obligations of the Customer and Authority, including but not limited to such matters as Substitute Energy and responsibility for payment of costs associated therewith, will be governed by the Agreement.

C. Delivery

For the purpose of this Service Tariff, Firm Power and Firm Energy shall be deemed to be offered when the Authority is able to supply Firm Power and Firm Energy to the Authority's designated NYISO load bus. If, despite such offer, there is a failure of delivery caused by the Customer, NYISO or local electric utility, such failure shall not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules or any successor provision addressing adjustments.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the base rates contained in this Service Tariff may be revised from time to time on not less than thirty (30) days written notice to the Customer.

E. Billing Methodology

Unless otherwise specified in the Agreement, the following provisions shall apply:

1. The billing methodology used to determine the amount of Firm Power and Firm Energy to be billed to the Customer related to its Allocation shall be Load Factor Sharing (“LFS”) in a manner consistent with the Agreement and any applicable delivery agreement between the Authority and the Customer’s local electric utility or both as determined by the Authority. An alternative billing methodology may be used provided the Customer and the Authority agree in writing and the Customer’s local electric utility provides its consent if the Authority determines that such consent is necessary.
2. Billing Energy - The LFS methodology will be applied against the Customer’s Native System Load during the Billing Period to determine the amount of Firm Energy (kWh) attributable to the Allocation (Billing Energy) to be billed to the Customer and charged at the applicable PP Rate. All energy quantities will be adjusted for losses.
3. Billing Demand – The LFS methodology will be applied against the Customer’s Maximum Metered Load during the Billing Period to determine the amount of Firm Power (kW) attributable to the Allocation (Billing Demand) to be billed to the Customer and charged at the applicable PP Rate. Billing Demand may not exceed the amount of the Contract Demand. All demand quantities will be adjusted for losses.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power and Firm Energy during any Billing Period the higher of either (i) the sum of (a), (b) and (c) below, or (ii) the Minimum Monthly Charge (as defined herein):

- a. The demand rate per kilowatt for Firm Power specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Demand (as defined in Section IV.E, above) for the Billing Period; and
- b. The energy rate per MWh for Firm Energy specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Energy (as defined in Section IV.E, above) for the Billing Period; and
- c. A charge representing reimbursement to the Authority for all applicable Taxes incurred by the Authority as a result of providing Preservation Power allocated to the Customer.

2. Transmission Charge

The Customer shall compensate the Authority for all transmission costs incurred by the Authority with respect to the Allocation, including such costs that are charged pursuant to the OATT.

3. NYISO Transmission and Related Charges

The Customer shall compensate the Authority for the following NYISO transmission and related charges (collectively, "NYISO Charges") assessed on the Authority for services provided by the NYISO pursuant to its OATT or other tariffs (as the provisions of those tariffs may be amended and in effect from time to time) associated with providing Electric Service to the Customer:

- A. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the OATT from time to time;
- B. Marginal losses;
- C. The New York Power Authority Transmission Adjustment Charge ("NTAC");
- D. Congestion costs inclusive of any rents collected or owed due to any associated grandfathered transmission congestion contracts as provided in Attachment K of the OATT;
- E. Any and all other charges, assessments, or other amounts associated with deliveries to Customers or otherwise associated with the Authority's responsibilities as a Load Serving Entity for the Customers that are assessed on the Authority by the NYISO under the provisions of its OATT or under other applicable tariffs; and
- F. Any charges assessed on the Authority with respect to the provision of Electric Service to Customers for facilities needed to maintain reliability and incurred in connection with the NYISO's Comprehensive System Planning Process (or similar reliability-related obligations incurred by the Authority with respect to Electric Service to the Customer), applicable tariffs, or required to be paid by the Authority in accordance with law, regardless of whether such charges are assessed by the NYISO or another party.

The NYISO Charges, if any, incurred by the Authority on behalf of the Customer, are in addition to the Authority production charges that are charged to the Customer in accordance with other provisions of this Service Tariff.

The method of billing NYISO charges to the Customer will be based on Authority's discretion.

4. Taxes Defined

Taxes shall be any adjustment as the Authority deems necessary to recover from the Customer any taxes, assessments or any other charges mandated by federal, state or local agencies or authorities that are levied on the Authority or that the Authority is required to collect from the Customer if and to the extent such taxes, assessments or charges are not recovered by the Authority pursuant to another provision of this Service Tariff.

5. Substitute Energy

The Customer shall pay for Substitute Energy, if applicable, as specified in the Agreement.

6. Other Charges

The Customer shall pay the Authority for all other charges provided for in the Agreement.

7. Payment Information

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by the Authority. The Authority may in its discretion change the foregoing account and routing information upon notice to the Customer.

8. Billing Disputes

In the event that there is a dispute on any items of a bill rendered by the Authority, the Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

G. Rendition and Payment of Bills

1. The Authority will render bills to the Customer for Electric Service on or before the tenth (10th) business day of the month for charges due for the previous Billing Period. Such bills shall include charges for Electric Service, NYISO Charges associated with the Allocation (subject to adjustment consistent with any later NYISO re-billings to the Authority), and all other applicable charges, and are subject to adjustment as provided for in the Agreement, the Service Tariff and the Rules.
2. The Authority will charge and collect from the Customer all Taxes (including local, state and federal taxes) the Authority determines are applicable, unless the Customer furnishes the Authority with proof satisfactory to the Authority that (i) the Customer is exempt from the payment of any such Taxes, and/or (ii) the Authority is not obligated to collect such Taxes from the Customer. If the Authority is not collecting Taxes from the Customer based on the circumstances described in (i) or (ii) above, the Customer shall immediately inform the Authority of any change in circumstances relating to its tax status that would require the Authority to charge and collect such Taxes from the Customer.
3. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority will render bills to the Customer electronically.
4. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
5. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
6. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its discretion to suspend Electric Service to the Customer or terminate the Agreement.

Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of any bill rendered by Authority, the Customer shall pay such bill in full within the time provided for by this Agreement, and adjustments, if appropriate, will be made thereafter.

H. Adjustment of Charges – Distribution Losses

The Authority will make appropriate adjustments to compensate for distribution losses of the local electric utility.

I. Conflicts

In the event of any inconsistencies, conflicts, or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of the Agreement and this Service Tariff or the Rules, the provisions of the Agreement shall govern.

V. Annual Adjustment Factor

A. Adjustment of Rates

1. The AAF will be based upon a weighted average of three indices described below. For each new Rate Year, the index value for the latest available calendar year ("Index Value for the Measuring Year") will be compared to the index value for the calendar year immediately preceding the latest available calendar year (the Index Value for the Measuring Year -1"). The change for each index will then be multiplied by the indicated weights. As described in detail below, these products are then summed, producing the AAF. The AAF will be multiplied by the base rate for the current Rate Year to produce the base rates for the new Rate Year, subject to a maximum adjustment of $\pm 5.0\%$ (" $\pm 5\%$ Collar"). Amounts outside the $\pm 5\%$ Collar shall be referred to as the "Excess."

Index 1, "BLS Industrial Power Price" (35% weight): The average of the monthly Producer Price Index for Industrial Electric Power, commodity code number 0543, not seasonally adjusted, as reported by the U.S. Department of Labor, Bureau of Labor Statistics ("BLS") electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 1, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

Index 2, "EIA Average Industrial Power Price" (40% weight): The average weighted annual price (as measured in cents/kWh) for electric sales to the industrial sector in the ten states of CT, MA, ME, NH, NJ, NY, OH, PA, RI and VT ("Selected States") as reported by Coal and Electric Data and Renewables Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration ("EIA"); U.S. Department of Energy Form EIA-861 Final Data File. For Index 2, the Index Value for the Measuring Year will be the index for the calendar year two years preceding July 1 of the new Rate Year.

Index 3, "BLS Industrial Commodities Price Less Fuel" (25% weight): The monthly average of the Producer Price Index for Industrial Commodities less fuel, commodity code number 03T15M05, not seasonally adjusted, as reported by the U.S. Department of Labor, BLS electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 3, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

2. Annual Adjustment Factor Computation Guide

- Step 1: For each of the three Indices, divide the Index Value for Measuring Year by the Index Value for the Measuring Year-1.
- Step 2: Multiply the ratios determined in Step 1 by percentage weights for each Index. Sum the results to determine the weighted average. This is the AAF.
- Step 3: Commencing RY 2014, modifications to the AAF will be subject to $\pm 5\%$ Collar, as described below.
- a) When the AAF falls outside the $\pm 5\%$ Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the $\pm 5\%$ Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the $\pm 5\%$ Collar.

- b) Excesses will continue to accrue without limit and carry over such that they will be added to/subtracted from the AAF in any year where the AAF is within the $\pm 5\%$ Collar.

Step 4: Multiply the current Rate Year base rate by the AAF calculated in Step 2 to determine the new Rate Year base rate.

The foregoing calculation shall be performed by the Authority consistent with the sample presented in Section V.B below.

3. The Authority shall provide the Customer with notice of any adjustment to the current base rate per the above and with all data and calculations necessary to compute such adjustment by June 15th of each year to be effective on July 1 of such year, commencing in 2014. The values of the latest officially published (electronically or otherwise) versions of the indices and data provided by the BLS and EIA as of June 1 shall be used notwithstanding any subsequent revisions to the indices.
4. If during the term of the Agreement any of the three above indices ceases to be available or ceases to be reflective of the relevant factors or of changes which the indices were intended to reflect, the Customer and the Authority may mutually select a substitute Index. The Customer and the Authority agree to mutually select substitute indices within 90 days, once one of them is notified by the other that the indices are no longer available or no longer reflect the relevant factors or changes which the indices were intended to reflect. Should the 90-day period cover a planned July 1 rate change, the current base rates will remain in effect until substitute indices are selected and the adjusted rates based on the substitute indices will be retroactive to the previous July 1. If the Customer and Authority are unable to reach agreement on substitute indices within the 90-day period, the Customer and the Authority agree to substitute the mathematic average of the PPI—Intermediate Materials, Supplies and Components (BLS Series ID WPUSOP2000) and the PPI-- Finished Goods (BLS Series ID WPUSOP3000) indices for one or more indices that have ceased to be available or reflective of their intended purpose and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2017 implementation):

STEP 1

Determine the Index Value for the Measuring Year (MY) and Measuring Year - 1 (MY-1) for Each Index

- Index 1 - Producer Price Index, Industrial Power

	Measuring Year <u>(2016)</u>	Measuring Year - 1 <u>(2015)</u>
January	205.3	167.8
February	204.3	167.6
March	204.5	168.2
April	202.4	168.6
May	206.3	171.6
June	220.4	180.1
July	226.2	182.7
August	227.3	179.2
September	228.1	181.8
October	214.9	170.2
November	211.3	168.8
December	211.7	166.6
Average	213.6	223.7
Ratio of MY/MY-1		0.95

- Index 2 – EIA Industrial Rate

<u>State</u>	<u>Revenues</u> ((\$000s))	<u>Sales</u> (MWh)	<u>Avg. Rate</u> (cents/kWh)
<u>Measuring Year (2015)</u>			
CT	444,588	3,432,002	
MA	1,068,927	7,892,165	
ME	290,360	3,208,045	
NH	252,331	1,981,028	
NJ	778,985	7,320,398	
NY	1,140,573	18,079,200	
OH	3,548,736	50,556,675	
PA	3,411,815	47,404,272	
RI	109,866	798,532	
VT	146,022	1,421,601	
TOTAL	11,192,203	142,093,918	7.88
<u>Measuring Year -1 (2014)</u>			
CT	453,958	3,514,798	
MA	1,014,262	7,960,941	
ME	300,412	3,357,486	
NH	234,900	1,969,064	
NJ	855,757	7,516,616	
NY	1,184,255	18,002,976	
OH	3,440,919	50,829,251	
PA	3,580,990	48,317,693	
RI	114,111	887,150	
VT	145,111	1,417,994	
TOTAL	11,324,673	143,773,969	7.88
Ratio of MY/MY-1			1.00

- Index 3 – Producer Price Index, Industrial Commodities Less Fuel

	Measuring Year (2016)	Measuring Year -1 (2015)
January	191.9	196.0
February	191.8	195.4
March	192.1	195.0
April	192.8	194.8
May	193.4	194.9
June	193.7	195.2
July	193.7	194.9
August	194.0	193.9
September	193.9	193.1
October	194.3	192.9
November	194.9	192.3
December	195.6	191.9
Average	193.5	194.2
Ratio of MY/MY-1		1.00

STEP 2

Determine AAF by Summing the Weighted Indices

<u>Index</u>	<u>Ratio of MY to MY-1</u>	<u>Weight</u>	<u>Weighted Factors</u>
PPI Industrial Power	0.95	0.35	0.334
EIA Industrial Rate	1.00	0.40	0.400
PPI Industrial Commodities less fuel	1.00	0.25	<u>0.249</u>
AAF			0.983

STEP 3

Apply Collar of $\pm 5.0\%$ to Determine the Maximum/Minimum AAF.

$-5.0\% < 1.6\% < 5.0\%$; collar does not apply, assuming no cumulative excess.

STEP 4

Apply AAF to Calculate the New Rate Year Base Rate

	<u>Demand</u> \$/kW-mo.	<u>Energy</u> \$/MWh
Current Rate Year Base Rate	8.03	13.73
New Rate Year Base Rate	7.90	13.50

POWER AUTHORITY

OF THE

STATE OF NEW YORK

30 South Pearl Street
10th Floor
Albany, New York 12207-3425

AGREEMENT FOR THE SALE OF
PRESERVATION POWER AND ENERGY

SERVICE TARIFF NO. 20

Upstate Niagara Cooperative, Inc.

The POWER AUTHORITY OF THE STATE OF NEW YORK (“Authority”), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law (“PAL”), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for Sale of Preservation Power and Energy (“Agreement”) with Upstate Niagara Cooperative, Inc. (“Customer”) having offices at 22 County Route 52, North Lawrence, NY 12967. The Authority and the Customer are from time to time referred to in this Agreement as “Party” or collectively as “Parties” and agree as follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the St. Lawrence-FDR Power Project known as Preservation Power (or “PP”), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Customer applied for an allocation of PP or an extension of an existing PP allocation for use at its facilities defined in this Agreement as the “Facility”;

WHEREAS, the Customer has offered to make specific commitments relating to, among other things, the creation and retention of jobs, capital investments, power usage and energy efficiency measures at the Facility, in exchange for an allocation of PP;

WHEREAS, the Authority’s Board of Trustees approved an allocation of PP to the Customer;

WHEREAS, the Authority’s provision of Electric Service under this Agreement is an unbundled service separate from (i) the transmission of the allocation, and (ii) the delivery of the Allocation;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the Allocation for a term as provided in this Agreement;

WHEREAS, electric service hereunder shall be subject to the rates and other terms and conditions contained in the Service Tariff as further provided in this Agreement; and

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement.

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

ARTICLE I **DEFINITIONS**

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined in schedules or appendices to this

Agreement shall have the meanings set forth in such schedules or appendices. All other capitalized terms and abbreviations used in this Agreement but not defined in this Section or other provisions of this Agreement or its schedules or appendices shall have the same meaning as set forth in the Service Tariff.

“Adverse Water Condition” means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers who are served by the Project.

“Agreement” means this Agreement, and unless otherwise indicated herein, includes all schedules, appendices and addenda thereto, as the same may be amended from time to time.

“Allocation” refers to the allocation(s) of PP awarded to the Customer as specified in Schedule A.

“Alternative REC Compliance Program” has the meaning provided in Schedule E.

“Annual Capital Investment Commitment” has the meaning set forth in Schedule B.

“Annual CI Expenditures” has the meaning set forth in Schedule B.

“Base Employment Level” has the meaning set forth in Schedule B.

“Contract Demand” is as defined in applicable Service Tariff.

“Effective Date” means the date that this Agreement is fully executed by the Parties.

“Electric Service” is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, the Service Tariff and the Rules.

“Energy Services” has the meaning set forth in Article V of this Agreement.

“Expansion Project” has the meaning set forth in Section IV.3.a of this Agreement.

“Expansion Project Capital Investment Commitment” has the meaning set forth in Schedule B.

“Facility” means the Customer’s facilities as described in Schedule A to this Agreement.

“Firm Power” is as defined in the Service Tariff.

“Firm Energy” is as defined in the Service Tariff.

“FERC” means the Federal Energy Regulatory Commission (or any successor organization).

“FERC License” means the first new license issued by FERC to the Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act, which became effective September 1, 2007 after expiration of the Project’s original license which became effective in 1957.

“Hydropower Curtailment” means a temporary reduction in Firm Energy to which the Customer is entitled to receive under this Agreement made by the Authority in response to an Adverse Water Condition.

“International Joint Commission” or “IJC” refers to the entity with responsibility to prevent and resolve disputes between the United States of America and Canada under the *1909 Boundary Waters Treaty* and pursues the common good of both countries as an independent and objective advisor to the two governments. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects.

“Load Reduction” has the meaning set forth in Section IX.6 of this Agreement.

“Load Serving Entity” (or “LSE”) means an entity designated by a retail electricity customer (including the Customer) to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.

“Metering Arrangement” has the meaning set forth in Section II.8 of this Agreement.

“NYEM” means the New York Energy Manager, an energy management center owned and operated by the Authority.

“NYEM Agreement” means a written agreement between the Authority and the Customer providing for the Facility’s enrollment and Customer’s participation in NYEM.

“NYEM Participation” has the meaning specified in Schedule B of this Agreement.

“NYISO” means the New York Independent System Operator or any successor organization.

“NYISO Charges” has the meaning set forth in Section VII.3 of this Agreement.

“NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

“Physical Energy Audit” or “Audit” means a physical evaluation of the Facility in a manner approved by the Authority that includes at a minimum the following elements: (a) an assessment of the Facility’s energy use, cost and efficiency which produces an energy utilization index for the Facility (such as an Energy Use Intensity or Energy Performance Indicator); (b) a comparison of the Facility’s index to indices for similar buildings/facilities; (c) an analysis of low-cost/no-cost

measures for improving energy efficiency; (d) a listing of potential capital improvements for improving energy consumption; and (e) an initial assessment of potential costs and savings from such measures and improvements.

“Preservation Power” (or “PP”) consists of 490 megawatts (“MW”) of firm hydroelectric power and associated energy produced by the Authority’s St. Lawrence-FDR Power Project.

“Project” means the Authority’s St. Lawrence-FDR Power Project, FERC Project No. 2000.

“Reporting Year” means the yearly interval that the Authority uses for reporting, compliance and other purposes as specified in this Agreement. The Reporting Year for this Agreement is from January 1 through December 31, subject to change by the Authority without notice.

“Rolling Average” has the meaning set forth in Schedule B.

“Rules” are the applicable provisions of Authority’s rules and regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as may be modified from time to time by the Authority.

“Service Information” has the meaning set forth in Section II.12 of this Agreement.

“Service Tariff” means the Authority’s Service Tariff No. WNY-20, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

“Schedule A” refers to the Schedule A entitled “Preservation Power Allocations” which is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Supplemental Preservation Power Commitments” which is attached to and made part of this Agreement, including any appendices attached thereto.

“Schedule C” refers to the Schedule C entitled “Takedown Schedule” which is attached to and made part of this Agreement.

“Schedule D” refers to the Schedule D entitled “Zero Emission Credit Charge” which is attached to and made part of this Agreement.

“Schedule E” refers to the Schedule E entitled “Monthly Renewable Energy Credit Charge” which is attached to and made part of this Agreement.

“Substitute Energy” means energy that is provided to the Customer by or through the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Hydropower Curtailment.

“Takedown” means the portion of the Allocation that Customer requests to be scheduled for a specific period as provided for in Schedule C, if applicable.

“Taxes” is as defined in the Service Tariff.

“Unforced Capacity” (or “UCAP”) means the electric capacity required to be provided by LSEs to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

“Utility Tariff” means the retail tariff(s) of the Customer’s local electric utility filed and approved by the PSC that is applicable to the delivery of PP.

ARTICLE II

ELECTRIC SERVICE

1. The Authority will make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, the Service Tariff and the Rules. The Customer is not be entitled to receive Electric Service under this Agreement for any PP allocation unless such PP allocation is identified in Schedule A.
2. The Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation specified in Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
3. The Authority shall provide UCAP in amounts necessary to meet the Customer’s NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with the Service Tariff.
4. The provision of Electric Service associated with the Allocation is an unbundled service separate from the transmission and the delivery of the Allocation. The Customer acknowledges and agrees that Customer’s local electric utility, not the Authority, is responsible for the delivery of the Allocation to the Facility in accordance with applicable UtilityTariff(s).
5. The Contract Demand for the Customer’s Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as PP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all PP customers receiving Electric Service under the Service Tariff, as applicable, based on the terms of such ruling, order, or decision.
6. The Contract Demand may not exceed the Allocation.

7. The Customer's Facility must be metered by the Customer's local electric utility in a manner that is satisfactory to the Authority, or another metering arrangement satisfactory to the Authority must be provided (collectively, "Metering Arrangement"). A Metering Arrangement that is not satisfactory to the Authority shall be grounds, after notice to the Customer, for the Authority to modify, withhold, suspend, or terminate Electric Service to the Customer. If a Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination that it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. After commencement of Electric Service, the Customer shall notify the Authority in writing within thirty (30) days of any alteration to the Facility's Metering Arrangement, and provide any information requested by the Authority (including Facility access) to enable the Authority to determine whether the Metering Arrangement remains satisfactory. If an altered Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. The Authority may, in its discretion, waive any of the requirements provided for in this Section in whole or in part where in the Authority's judgment, another mechanism satisfactory to the Authority can be implemented to enable the Authority to receive pertinent, timely and accurate information relating to the Customer's energy consumption and demand and render bills to the Customer for all fees, assessments and charges that become due in accordance with this Agreement, the Service Tariff, and the Rules.
8. The Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that such parties determine is necessary to provide for the allocation, sale and delivery of the Allocation to the Customer at the Facility, the proper and efficient implementation of the PP program, billing related to Electric Service, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters. In addition, the Customer agrees to complete such forms and consents that the Authority determines are necessary to effectuate such exchanges of information.
9. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement between the Authority and the Customer's local electric utility providing for the delivery of the Allocation on terms and conditions that are acceptable to the Authority.
10. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, execute consents, and provide information (collectively, "Service Information") that the Authority determines is necessary for the provision of Electric Service, the delivery of the Allocation, billing related to Electric Service, the effective administration of the PP program, and/or the performance of contracts or other arrangements between the Authority and the Customer's local electric utility. The Customer's failure to provide Service Information on a timely basis shall be grounds for the Authority in its discretion to modify, withhold, suspend, or terminate Electric Service to the Customer.

ARTICLE III
RATES, TERMS AND CONDITIONS

1. Electric Service shall be sold to the Customer in accordance with the rates, terms and conditions provided for in this Agreement, the Service Tariff and the Rules.
2. The Service Tariff and the Rules may be amended from time to time by the Authority and, if revised, the revised provisions thereof will apply under this Agreement with the same force and effect as if set forth herein. The Authority shall provide at least thirty (30) days prior written notice to the Customer of any proposed change in the Service Tariff or the Rules. No amendment to the Service Tariff or the Rules shall affect the determination of rates for PP to the Customer during the term of the Agreement except insofar as otherwise authorized by this Agreement. This provision shall not limit the Authority's discretion to determine rates applicable to allocations of power and energy awarded to the Customer beyond or in addition to the Allocation.
3. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates for Electric Service shall be subject to increase by Authority at any time upon 30 days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.
4. In addition to all other fees, assessments and charges provided for in the Agreement, the Service Tariff and the Rules, the Customer shall be responsible for payment of the Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge provided for in Schedule D and Schedule E, respectively, of this Agreement.

ARTICLE IV
SUPPLEMENTAL COMMITMENTS

1. Supplemental Commitments. Schedule B sets forth the Customer's "Supplemental Preservation Power Commitments" ("Supplemental Commitments"). The Authority's obligation to provide Electric Service under this Agreement is expressly conditioned upon the Customer's timely compliance with the Supplemental Commitments described in Schedule B as further provided in this Agreement. The Customer's Supplemental Commitments are in addition to all other commitments and obligations provided in this Agreement.

2. Special Provisions Relating to a New or Expanded Facility.

a. Proposed New or Expanded Facility; Failure to Complete.

If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, “Expansion Project”), and the Customer fails to complete the Expansion Project by the date specified in Schedule B, the Authority may, in its discretion, (a) cancel the Allocation, or (b) if it believes that the Expansion Project will be completed in a reasonable time, agree with the Customer to extend the time for completion of the Expansion Project.

b. Proposed New or Expanded Facility; Partial Performance.

If the Expansion Project results in a completed Facility that is only partially operational, or is materially different than the Expansion Project agreed to in Schedule B (as measured by such factors as size, capital investment expenditures, capital improvements, employment levels, estimated energy demand and/or other criteria determined by the Authority to be relevant), the Authority may, in its discretion, on its own initiative or at the Customer’s request, make a permanent reduction to the Allocation and Contract Demand to an amount that the Authority determines to fairly correspond to the completed Facility.

c. Notice of Completion; Commencement of Electric Service.

- (i) The Customer shall give the Authority not less than ninety (90) days' advance written notice of the anticipated date of completion of an Expansion Project. The Authority will inspect the Expansion Project for the purpose of verifying the status of the Expansion Project and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time subject to the other provisions of this Agreement based on applicable operating procedures of the Authority, Customer’s local electric utility and NYISO.
- (ii) In the event of an Expansion Project being completed in multiple phases, at the Customer’s request the Authority may, in its discretion, allow commencement of part of the Allocation upon completion of any such phase, provided the Authority will similarly inspect the Expansion Project for the purpose of verifying the status of the completed phase of the Expansion Project. Upon such verification by the Authority of any such completed phase, the Authority, in its discretion, will determine an amount of kW that fairly corresponds to the completed phase of the Expansion Project, taking into account relevant criteria such as any capital expenditures, increased employment levels, and/or increased electrical demand associated with the completed phase of the Expansion Project.

d. Other Rights and Remedies Unaffected.

Nothing in this Article is intended to limit the Authority's rights and remedies provided for in the other provisions of this Agreement, including without limitation the provisions in Schedule B of this Agreement.

ARTICLE V
ENERGY-RELATED PROJECTS, PROGRAMS AND SERVICES

The Authority shall periodically communicate with the Customer for the purpose of informing the Customer about energy-related projects, programs and services ("Energy Services") offered by the Authority that in the Authority's view could provide value to the Customer and/or support the State's Clean Energy Standard. The Customer shall review and respond to all such offers in good faith, provided, however, that, except as otherwise provided for in this Agreement, participation in any such Energy Services shall be at the Customer's option, and subject to such terms and conditions agreed to by the Parties in one or more definitive agreements.

ARTICLE VI
SERVICE TARIFF; CONFLICTS

1. A copy of the Service Tariff is attached to this Agreement as Exhibit 1 and shall apply under this Agreement with the same force and effect as if fully set forth herein. The Customer consents to the application of the Service Tariff.
2. In the event of any inconsistencies, conflicts, or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff or the Rules, the provisions of this Agreement shall govern.

ARTICLE VII
TRANSMISSION AND DELIVERY

1. The Customer shall be responsible for:
 - a. complying with all requirements of its local electric utility (including any other interconnecting utilities) that are necessary to enable the Customer to receive delivery service for the Allocation. Delivery of the Allocation shall be subject to the Utility Tariff;
 - b. paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff, and if the Authority incurs any charges associated with such delivery service, reimbursing the Authority for all such charges; and
 - c. obtaining any consents and agreements from any other person that are necessary for the delivery of the Allocation to the Facility, and complying with the requirements of any such person, provided that any such consents, agreements and requirements shall be subject to the Authority's approval.

2. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in the Service Tariff or any successor service tariff, regardless of whether such NYISO Charges are transmission-related.

ARTICLE VIII

BILLING AND BILLING METHODOLOGY

1. The billing methodology for the Allocation shall be determined on a "load factor sharing" basis in a manner consistent with the Utility Tariff and any agreement between the Authority and the Customer's local electric utility. An alternative basis for billing may be used provided the Parties agree in writing and the local electric utility provides its consent if such consent is deemed necessary.
2. Except as otherwise provided in this Agreement, all other provisions with respect to billing are set forth in the Service Tariff and the Rules.
3. The rights and remedies provided to the Authority in this Article are in addition to any and all other rights and remedies available to Authority at law or in equity.

ARTICLE IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. In the event of an Adverse Water Condition, the Authority will have the right in its discretion to implement Hydropower Curtailments. The Authority will implement Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
2. In the event of a Hydropower Curtailment, the Authority will provide Substitute Energy to the Customer and the Customer shall pay for such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, Substitute Energy shall be sourced from markets administered by the NYISO.
3. For each kilowatt-hour of Substitute Energy provided by the Authority during a Hydropower Curtailment, the Customer shall pay the Authority directly during the billing month: (1) the difference between the market cost of the Substitute Energy and the charge for firm energy as provided for in this Agreement; and (2) any NYISO charges and taxes the Authority incurs in connection with the provision of such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Hydropower Curtailments shall be governed by the provisions of the Service Tariff relating to the rendition and payment of bills for Electric Service.
4. The Authority shall be under no obligation to deliver, and will not deliver, any such curtailed energy to the Customer in later billing periods.

5. The Authority may require the Customer to enter into a separate agreement relating to the provision and sale of Substitute Energy. The provisions of this Agreement will remain in effect notwithstanding the existence of any such separate agreement.

ARTICLE X

EFFECTIVENESS, TERM AND TERMINATION

1. This Agreement shall become effective and legally binding on the Parties on the Effective Date.
2. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (a) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (b) termination by the Authority pursuant to this Agreement, the Service Tariff, or the Rules; or (c) expiration of the Allocation by its own term as specified in Schedule A.
3. The Customer may exercise a partial termination of the Allocation upon at least sixty (60) days' prior written notice to the Authority. The Authority will effectuate the partial termination as soon as practicable after receipt of such notice taking account of the Authority's internal procedures and requirements of the Customer's local electric utility.
4. The Authority may cancel service under this Agreement or modify the quantities of Firm Power and Firm Energy associated with the Allocation: (1) if such cancellation or modification is required to comply with any final ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, the Service Tariff, or the Rules.

ARTICLE XI

EXTENSIONS OF ALLOCATION; AWARD OF ADDITIONAL ALLOCATIONS

1. The Customer may apply to the Authority for an extension of the term of the Allocation identified in Schedule A:
 - a. during the thirty-six (36) month period immediately preceding the scheduled expiration of the Allocation;
 - b. pursuant to any other process that the Authority establishes; or
 - c. with the Authority's written consent.
2. Upon proper application by the Customer, the Authority may in accordance with applicable law and Authority procedures award additional allocations of PP at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (a) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (b) produce a modified Appendix to Schedule B, as the Authority determines to be appropriate. The Authority will furnish the Customer with any such modified Schedule A, supplemental schedule, and/or a modified

Appendix to Schedule B, within a reasonable time after commencement of Electric Service for any such additional allocation.

3. In addition to any requirements imposed by law, the Customer hereby agrees to furnish such documentation and other information as the Authority requests to enable the Authority to evaluate any requests for extension of the Allocation or additional allocations and consider the terms and conditions that should be applicable of any extension or additional allocations.

ARTICLE XII

NOTICES

1. Notices, consents, authorizations, approvals, instructions, waivers or other communications provided in this Agreement shall be in writing and transmitted to the Parties as follows:

To: The Authority

New York Power Authority
123 Main Street
White Plains, New York 10601

Email:

Facsimile: _____

Attention: Manager – Business Power Allocations and Compliance

To: The Customer

Upstate Niagara Cooperative, Inc.
22 County Route 52
North Lawrence, NY 12967

Email:

Facsimile:

Attention:

2. The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XII.1.
3. Except where otherwise herein specifically provided, any notice, communication or request required or authorized by this Agreement by either Party to the other shall be deemed properly given: (a) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (b) if sent by a nationally recognized overnight delivery service, two (2) calendar days after being deposited for delivery to the appropriate address set forth above; (c) if delivered by hand, with written confirmation of receipt; (d) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (e) on the date of transmission if sent by electronic communication to the appropriate address as set forth above, with confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

ARTICLE XIII
SUCCESSORS AND ASSIGNS; RESALE OF HYDROPOWER

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto, provided that no assignment by either Party or any successor or assignee of such Party of its rights and obligations hereunder shall be made or become effective without the prior written consent of the other Party, which consent shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing sentence, the Authority may require such approvals, and such consents and other agreements from the Customer and other parties, that the Authority determines are necessary in order to effectuate any such assignment.
2. The Customer may not transfer any portion of the Allocation to any other person, or a location different than the Facility, unless: (a) the Authority in its discretion authorizes the transfer Authority; (b) all other requirements applicable to a transfer, including board approvals, are satisfied; and (c) the transfer is effectuated in a form and subject to such terms and conditions approved by the Authority. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service or terminate the Allocation and/or this Agreement.
3. The Customer may not sell any portion of the Allocation to any other person, allow any other person to use any portion of the Allocation, or allow any other person to interconnect to the Facility. Any purported sale shall be invalid and any violation of this provision shall constitute grounds for the Authority in its discretion to suspend Electric Service, or terminate the Allocation and/or this Agreement.

ARTICLE XIV
MISCELLANEOUS

1. Choice of Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a) and rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

The Parties: (a) consent to the exclusive jurisdiction and venue of any state court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement; (b) agree to accept service of process; and (c) will not raise any argument of inconvenient forum.

3. Previous Agreements; Modifications; and Interpretation

- a. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation and the subject matter of the Agreement, and

supersedes all previous communications and agreements between the Parties, oral or written, with reference to the sale of the Allocation.

- b. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.
- c. No provision shall be construed against a Party on the basis that such Party drafted such provision.

4. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

5. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof. Notwithstanding the preceding sentence, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

ARTICLE XV
EXECUTION

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

[SIGNATURES FOLLOW ON NEXT PAGE]

AGREED:

Upstate Niagara Cooperative, Inc.

By: _____

Title: _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____
John R. Koelmel, Chairman

Date: _____

SCHEDULE A
PRESERVATION POWER ALLOCATIONS

Customer: Upstate Niagara Cooperative, Inc.				
Type of Allocation	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Preservation Power	850	22 County Route 52 North Lawrence, NY 12967	1/30/2019	Seven (7) years from the date of commencement of Electric Service

SCHEDULE B
SUPPLEMENTAL PRESERVATION POWER COMMITMENTS

ARTICLE I
SPECIFIC SUPPLEMENTAL COMMITMENTS

1. Employment Commitments

- a. The Customer shall create and maintain the employment level set forth in the Appendix to this Schedule B (the “Base Employment Level”). Such Base Employment Level shall be the total number of full-time positions held by: (a) individuals who are employed by the Customer at Customer’s Facility identified in the Appendix to this Schedule, and (b) individuals who are contractors or who are employed by contractors of the Customer and assigned to the Facility identified in such Appendix (collectively, “Base Level Employees”). The number of Base Level Employees shall not include individuals employed on a part-time basis (less than 35 hours per week); provided, however, that two individuals each working 20 hours per week or more at such Facility shall be counted as one Base Level Employee.
- b. The Base Employment Level shall not be created or maintained by transfers of employees from previously held positions with the Customer or its affiliates within the State of New York, except that the Base Employment Level may be filled by employees of the Customer laid off from other Customer facilities for *bona fide* economic or management reasons.
- c. The Authority may consider a request to change the Base Employment Level based on a claim of increased productivity, increased efficiency or adoption of new technologies or for other appropriate reasons as determined by the Authority. Any such change shall be within Authority’s discretion.

2. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule B.

3. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Billing Demand (as such term is described in the Service Tariff), provided, however, that if only part of the Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such partial amount of the Allocation.

4. Energy Efficiency and Conservation Program

- a. The Customer shall implement an energy efficiency and conservation program at the Facility through either (a) enrollment of the Facility and participation in NYEM in accordance with a NYEM Agreement, or (b) one or more Physical Energy Audits of the Facility, or (c) a combination of such measures, in accordance with the provisions of this Article.
- b. The Authority shall transmit to the Customer a NYEM Agreement and an election form. The Customer shall elect to either (a) enroll the Facility and participate in NYEM for a three-year term (“NYEM Participation”) in accordance with the NYEM Agreement, or (b) perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority’s communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit within three (3) years of the Effective Date of this Agreement, at its own expense.
- c. The Authority shall, on or before the expiration of the three-year term of the NYEM Agreement, transmit to the Customer a NYEM Agreement specifying the terms and conditions that would apply to NYEM participation for a second term, and an election form. The Customer shall elect either (a) NYEM Participation for a second term, or (b) to perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority’s communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit during the calendar year that begins six years after of the Effective Date of this Agreement, at its own expense.
- d. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited energy audit of the Facility, where it determines that the Physical Energy Audit is unnecessary based on the age of the Facility, energy efficiency and conservation improvements made at the Facility, the length of the Allocation, or other considerations the Authority determines to be relevant.

ARTICLE II
RECORDKEEPING, REPORTING AND FACILITY ACCESS

1. Employment

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Base Level Employees who are employed at or assigned to the Customer's Facility identified in the Appendix to this Schedule, as reported to the United States Department of Labor (or as reported in such other record as agreed upon by the Authority and the Customer). Such report shall separately identify the individuals who are employed by the Customer, and the individuals who are contractors or who are employed by contractors of the Customer, and shall be certified to be correct by an officer of the Customer, plant manager or such other person authorized by the Customer to prepare and file such report and shall be provided to the Authority on or before the last day of February following the end of the most recent calendar year. The Authority shall have the right to examine and audit on reasonable advance written notice all non-confidential written and electronic records and data concerning employment levels including, but not limited to, personnel records and summaries held by the Customer and its affiliates relating to employment in New York State.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in the Appendix to this Schedule B.

3. Power Usage

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority on or before the last day of February following the end of the most recent calendar year, of the maximum demand utilized each month in the Facility receiving the power covered by the Agreement.

4. Energy Efficiency and Conservation Program

Upon the Authority's request, the Customer shall provide the Authority with (a) a copy of the results of any Physical Energy Audit performed at the Facility (or, at the Authority's option, a report describing the results), performed pursuant to this Article; and (b) a description of any energy efficiency or conservation measures that the Customer has implemented at the Facility in response to any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access

Notwithstanding any other provision of the Agreement, the Customer shall provide the Authority with such access to the Facility, and such documentation, as the

Authority deems necessary to determine the Customer's compliance with the Customer's Supplemental Commitments specified in this Schedule B.

ARTICLE III

COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in the Appendix to this Schedule B for the subject calendar year, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

2. Capital Investment Commitment

The Authority may reduce the Contract Demand as provided in the Appendix to this Schedule B if the Customer does not comply with the Capital Investment Commitment.

3. Power Utilization Level

If the average of the Customer's six (6) highest Billing Demands (as such term is described in the Service Tariff) for Preservation Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to in accordance with the procedures provide in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, the Service Tariff and the Rules, the Authority may suspend Electric Service to the Customer if the Customer does not comply with any of the requirements in Section I.4 or Article II of this Schedule B.

5. Notice of Intent to Reduce Contract Demand

In the event that the Authority determines that the Contract Demand will be wholly or partially reduced pursuant to Sections III.1, III.2, or III.3 of this Schedule B, the Authority shall provide the Customer with at least thirty (30) days prior written notice of the proposed reduction, specifying the amount and reason for the reduction. Before implementing any reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance, Facility upgrade periods, and the business cycle. If, at the end of the thirty (30) day notice period, the Authority determines that a reduction is warranted, it shall provide the Customer with notice of such determination and provide the Customer with sixty (60) days to present a proposed plan with actionable milestones to cure the deficiency. The Authority shall respond to the Customer concerning the acceptability of any proposed plan that is provided in accordance with this Section III.5 within thirty (30) days of the Authority's receipt of such proposed plan. It shall be within the Authority's discretion whether or not to accept the Customer's proposed plan, require a different plan, or implement the reduction of the Contract Demand.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

The Customer shall employ at least 97 full-time employees (“Base Employment Level”) at the Customer’s Facility within three (3) years of commencement of Electric Service. The Base Employment Level shall be maintained thereafter for the term of the Allocation through the Allocation Expiration Date specified in Schedule A in accordance with Article I of Schedule B.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the Facility (“Rolling Average”) shall total not less than \$ N/A (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the Facility during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the Facility during the two prior Reporting Years.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average as determined by the Authority is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.
2. **Expansion Project–Capital Investment Commitment** (if applicable, as specified below)
 - a. The Customer shall make a minimum capital investment of \$3,400,000 to construct, furnish and/or expand the Facility (“Expansion Project Capital Investment Commitment”). The Expansion Project Capital Investment Commitment is expected to consist of the following approximate expenditures on the items indicated:

\$1,600,000 – Storage tanks and installation
\$ 200,000 – Fruit mixing system
\$ 250,000 – Clean in place sanitation equipment
\$1,350,000 – Ultrafiltration, palletizing, building modifications,
and miscellaneous project items

\$3,400,000 Total Expansion Project Capital Investment Commitment

- b. The Expansion Project Capital Investment Commitment shall be made, and the Facility shall be completed and fully operational, no later than January 30, 2022 (*i.e.*, within three (3) years of the date of the Authority's award of the Allocation). Upon request of the Customer, such date may be extended in the discretion of the Authority.

SCHEDULE C
TAKEDOWN SCHEDULE

SCHEDULE D
ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Schedule D.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“PP Program ZEC Costs” has the meaning provided in Section II.4.b of this Schedule D.

“Government Action” has the meaning provided in Section II.8 of this Schedule D.

“Load Serving Entity” or “LSE” has the meaning provided in the CES Order.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Customer established in this Schedule D.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Schedule D.

“ZEC Program Year” has the meaning provided in Section II.2 of this Schedule D.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff or the Rules, the Customer shall be subject to a ZEC Charge as provided in this Schedule D. The ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as a load serving entity, including the load that the Authority serves under the PP power program.
4. The ZEC Charge, which is intended to recover from the Customer costs that the Authority incurs for purchasing ZECs in quantities that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as

provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the PP load that it serves (the “PP Program ZEC Costs”). Such allocation will be based on the forecasted kilowatt-hours load of the PP program to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the PP power program based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the PP Program ZEC Costs to the Customer as the ZEC Charge based on the proportion of the Customer’s actual kilowatt-hours load for the PP purchased by the Customer to total kilowatt-hours load served by the Authority under the PP power program (i.e., PP Program level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Customer based on the proportion of the Customer’s annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the PP power program by the Authority (PP Program level load). The ZEC Charge assessed to the Customer shall not include any costs resulting from the Authority’s inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the ZEC Charge pursuant to another Authority-established procedure.
6. The Authority may, in its discretion, modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected PP customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.
7. Nothing in this Schedule shall limit or otherwise affect the Authority’s right to charge or collect from the Customer any rate, charge, fee, assessment, or tax

provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

8. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, “Government Action”), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

SCHEDULE E
MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in the Service Tariff No, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule E.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Schedule E.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity” has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Schedule E.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSERDA in accordance with NYSERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

“Total Monthly PP Load” has the meaning provided in Section II.3.b of this Schedule E

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Schedule E.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff, or the Rules, the Customer shall be subject to a Monthly REC Charge as provided in this Schedule E. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly REC Charge.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its PP customers. Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total PP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
3. The Monthly REC Charge, which is intended to recover from the Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:

- a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total PP load that it will serve during such calendar year.
- b. The Authority will, for each month of each calendar year, calculate the total costs ("Total Monthly REC Costs") that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total PP kilowatt-hour load for the month ("Total Monthly PP Load"). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly PP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly PP Load that the Authority served for the month.
- c. Each month, the Authority will assess to the Customer, as a Monthly REC Charge, which will represent the Customer's share of the Total Monthly REC Costs assessed to the Total Monthly PP Load. The Monthly REC Charge will be assessed as the proportion of the Customer's total kilowatt-hours load served by the Authority for such month to the Total Monthly PP Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority's inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA's published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly REC Charge pursuant to another Authority-established procedure.
5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Customer's Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority's bills for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Schedule E.

6. Notwithstanding the provisions of Section II.3 of this Schedule E, if Electric Service for the Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for Customer's load for the year, and bill the Customer for the costs associated with such separate REC Compliance Measures.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Schedule E (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.



POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

Schedule of Rates for Sale of Firm Power Service to
Preservation Power Customers
(Local Electric Utility Delivery)

Service Tariff No. 20

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Preservation Power made directly to a qualified business Customer for firm power service that is delivered by the Customer's local electric utility.

II. Abbreviations and Terms

- kW kilowatt(s)
- kW-mo. kilowatt-month
- kWh kilowatt-hour(s)
- MWh megawatt-hour(s)
- NYISO New York Independent System Operator, Inc. or any successor organization
- PAL New York Public Authorities Law
- OATT Open Access Transmission Tariff issued by the NYISO

Agreement: An executed written agreement between the Authority and the Customer for the sale of Preservation Power to the Customer.

Annual Adjustment Factor or **AAF**: This term shall have the meaning set forth in Section V herein.

Authority: The Power Authority of the State of New York, a corporate municipal instrumentality and a political subdivision of the State of New York created pursuant to Chapter 772 of the New York Laws of 1931 and existing and operating under Title 1 of Article 5 of the PAL, also known as the "New York Power Authority."

Customer: A business entity that (1) has received an Allocation of Preservation Power, (2) purchases such Preservation Power directly from the Authority, and (3) receives delivery of the Preservation Power from a local electric utility.

Electric Service: The power and energy provided to the Customer in accordance with the Agreement, this Service Tariff and the Rules.

Firm Power: Hydropower capacity (kW) that is intended to be always available from the Project subject to the curtailment provisions set forth in the Agreement between the Authority and the Customer and this Service Tariff. Firm Power shall not include peaking power.

Firm Energy: Energy (kWh) associated with Firm Power.

Load Factor Sharing or **LFS**: A type of billing methodology applicable to a Customer's Allocation which determines how a Customer's total Native System Load is apportioned between the power and energy supplied by the Allocation and the Customer's other source of electricity supply, if any. LFS is used to determine the amount of Firm Energy supplied and billed on the basis of the Customer's actual total Native System Load per the monthly billing cycle as follows:

1. When the Maximum Metered Demand is less than (<) the Contract Demand, then the Customer's entire load will be supplied by Firm Energy.
2. When the Maximum Metered Demand is greater than (>) the Contract Demand, then the Customer's portion of Firm Energy supply will be determined as follows:
 - a. For **Hourly Billing**: $\sum (\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the in-hour demand of Customer's total Native System Load for all hours})$.
 - b. For **Monthly Billing**: $(\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the total consumed energy by the Customer within the bill cycle})$.

Load Serving Entity or **LSE**: This term shall have the meaning set forth in the Agreement.

Maximum Metered Demand: The highest 15 or 30-minute integrated demand, as determined by the local electric utility, during each Billing Period recorded on the meter that is used by the Customer in accordance with this Service Tariff and the Agreement.

Native System Load: The total consumption of the Customer's electric system, as determined by the Authority's revenue-grade metering equipment, without the offset of Customer's behind the meter generation. It is represented as the sum of all incoming power, plus internal generation behind the system meter, minus power exports to the bulk electric system.

Preservation Power or **PP**: Firm Power and Firm Energy made available under this Service Tariff by the Authority from the Project for sale to the Customer for business purposes pursuant to PAL § 1005(5) and (13), and that is delivered by the Customer's local electric utility.

Project: The Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.

Rate Year or **RY**: The period from July 1 through June 30. For example, RY 2018 refers to July 1, 2018 through June 30, 2019.

Rules: The Authority's rules and regulations set forth in 21 NYCRR § 450 *et seq.*, as they may be amended from time to time.

Service Tariff: This Service Tariff No. 20.

All other capitalized terms and abbreviations used in this Service Tariff but not defined in this Section or other provisions of this Service Tariff shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Preservation Power (PP) Base Rates

The rates to be charged to the Customer by the Authority shall be as follows:

Rate Year	Billing Period	Demand (\$/kW)	Energy (\$/MWh)
2018	July 2018 – June 2019	7.90	13.50

B. PP Rates No Lower than Rural/Domestic Rate

At all times the applicable PP base rates for demand and energy determined in accordance with Sections III.A and V of this Service Tariff shall be no lower than the rates charged by the Authority for the sale of hydroelectricity for the benefit of rural and domestic customers receiving service in accordance with the Niagara Redevelopment Act, 16 U.S.C. § 836(b)(1) (the "Rural/Domestic Rate"). This provision shall be implemented as follows: if the base rates, as determined in accordance with Sections III.A and V of this Service Tariff, are lower than the Rural/Domestic Rate on an average \$/MWh basis, each set of rates measured at 80% load factor which is generally regarded as representative for PP Customers, then the base rates determined under Sections III.A and V of this Service Tariff will be revised to make them equal to the Rural/Domestic Rate on an average \$/MWh basis. However, the base rates as so revised will have no effect until such time as these base rates are lower than the Rural/Domestic Rate.

C. Monthly Base Rates Exclude Delivery Service Charges

The monthly base rates set forth in this Section III exclude any applicable costs for delivery services provided by the local electric utility.

D. Minimum Monthly Charge

The Minimum Monthly Charge shall equal the product of the demand rate specified in Section III.A and the Contract Demand (as defined herein). Such Minimum Monthly Charge shall be in addition to any NYISO Charges or Taxes (each as defined herein) incurred by the Authority with respect to the Customer's Allocation, and any other charges provided in this Service Tariff, the Agreement or the Rules.

E. Estimated Billing

If the Authority, in its discretion, determines that it lacks reliable data on the Customer's actual demand and/or energy usage for a Billing Period during which the Customer receives Electric Service from the Authority, the Authority shall have the right to render a bill to the Customer for such Billing Period based on estimated demand and estimated usage ("Estimated Bill").

For the purpose of calculating a Billing Demand charge for an Estimated Bill, the demand charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated demand amount (kW) will be calculated based on an average of the Customer's Billing Demand (kW) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated demand amount (kW) for the Estimated Bill will equal the Customer's takedown (kW) amount.

For the purpose of calculating a Billing Energy charge for an Estimated Bill, the energy charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated energy (kWh) will be based on the average of the Customer's Billing Energy (kWh) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated energy amount (kWh) will be equal to the takedown (kW) amount at 70 percent load factor for that Billing Period.

If an alternative billing methodology is applicable to the Customer, the demand charge and energy charge for rendering an Estimated Bill shall be calculated in a manner appropriate to such alternative billing methodology as determined by the Authority.

If data indicating the Customer's actual demand and usage for any Billing Period in which an Estimated Bill was rendered is subsequently provided to the Authority, the Authority will make necessary adjustments to the corresponding Estimated Bill and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The Minimum Monthly Charge provisions of Section III.D shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended and shall not be construed to limit the Authority's rights under the Agreement.

F. Adjustments to Charges

In addition to any other adjustments provided for in this Service Tariff, in any Billing Period, the Authority may make appropriate adjustments to billings and charges to address such matters as billing and payment errors, and the receipt of actual, additional, or corrected data concerning Customer energy or demand usage.

G. Billing Period

The Billing Period is any period of approximately thirty (30) days, generally ending with the last day of each calendar month but subject to the billing cycle requirements of the local electric utility in whose service territory the Customer's Facility is located.

H. Billing Demand

Billing Demand shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

I. Billing Energy

Billing Energy shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

J. Contract Demand

The Contract Demand will be the amount of Preservation Power, not to exceed the Allocation, provided by the Authority to the Customer in accordance with the Agreement.

IV. General Provisions

A. Character of Service

Alternating current; sixty cycles, three-phase.

B. Availability of Energy

1. Subject to Section IV.B.2, the Authority shall provide to the Customer in any Billing Period Firm Energy associated with Firm Power. The offer of Firm Energy for delivery shall fulfill the Authority's obligations for purposes of this provision whether or not the Firm Energy is taken by the Customer.
2. In the event of an Adverse Water Condition, the rights and obligations of the Customer and Authority, including but not limited to such matters as Substitute Energy and responsibility for payment of costs associated therewith, will be governed by the Agreement.

C. Delivery

For the purpose of this Service Tariff, Firm Power and Firm Energy shall be deemed to be offered when the Authority is able to supply Firm Power and Firm Energy to the Authority's designated NYISO load bus. If, despite such offer, there is a failure of delivery caused by the Customer, NYISO or local electric utility, such failure shall not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules or any successor provision addressing adjustments.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the base rates contained in this Service Tariff may be revised from time to time on not less than thirty (30) days written notice to the Customer.

E. Billing Methodology

Unless otherwise specified in the Agreement, the following provisions shall apply:

1. The billing methodology used to determine the amount of Firm Power and Firm Energy to be billed to the Customer related to its Allocation shall be Load Factor Sharing (“LFS”) in a manner consistent with the Agreement and any applicable delivery agreement between the Authority and the Customer’s local electric utility or both as determined by the Authority. An alternative billing methodology may be used provided the Customer and the Authority agree in writing and the Customer’s local electric utility provides its consent if the Authority determines that such consent is necessary.
2. Billing Energy - The LFS methodology will be applied against the Customer’s Native System Load during the Billing Period to determine the amount of Firm Energy (kWh) attributable to the Allocation (Billing Energy) to be billed to the Customer and charged at the applicable PP Rate. All energy quantities will be adjusted for losses.
3. Billing Demand – The LFS methodology will be applied against the Customer’s Maximum Metered Load during the Billing Period to determine the amount of Firm Power (kW) attributable to the Allocation (Billing Demand) to be billed to the Customer and charged at the applicable PP Rate. Billing Demand may not exceed the amount of the Contract Demand. All demand quantities will be adjusted for losses.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power and Firm Energy during any Billing Period the higher of either (i) the sum of (a), (b) and (c) below, or (ii) the Minimum Monthly Charge (as defined herein):

- a. The demand rate per kilowatt for Firm Power specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Demand (as defined in Section IV.E, above) for the Billing Period; and
- b. The energy rate per MWh for Firm Energy specified in this Service Tariff or any modification thereof applied to the Customer’s Billing Energy (as defined in Section IV.E, above) for the Billing Period; and
- c. A charge representing reimbursement to the Authority for all applicable Taxes incurred by the Authority as a result of providing Preservation Power allocated to the Customer.

2. Transmission Charge

The Customer shall compensate the Authority for all transmission costs incurred by the Authority with respect to the Allocation, including such costs that are charged pursuant to the OATT.

3. NYISO Transmission and Related Charges

The Customer shall compensate the Authority for the following NYISO transmission and related charges (collectively, "NYISO Charges") assessed on the Authority for services provided by the NYISO pursuant to its OATT or other tariffs (as the provisions of those tariffs may be amended and in effect from time to time) associated with providing Electric Service to the Customer:

- A. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the OATT from time to time;
- B. Marginal losses;
- C. The New York Power Authority Transmission Adjustment Charge ("NTAC");
- D. Congestion costs inclusive of any rents collected or owed due to any associated grandfathered transmission congestion contracts as provided in Attachment K of the OATT;
- E. Any and all other charges, assessments, or other amounts associated with deliveries to Customers or otherwise associated with the Authority's responsibilities as a Load Serving Entity for the Customers that are assessed on the Authority by the NYISO under the provisions of its OATT or under other applicable tariffs; and
- F. Any charges assessed on the Authority with respect to the provision of Electric Service to Customers for facilities needed to maintain reliability and incurred in connection with the NYISO's Comprehensive System Planning Process (or similar reliability-related obligations incurred by the Authority with respect to Electric Service to the Customer), applicable tariffs, or required to be paid by the Authority in accordance with law, regardless of whether such charges are assessed by the NYISO or another party.

The NYISO Charges, if any, incurred by the Authority on behalf of the Customer, are in addition to the Authority production charges that are charged to the Customer in accordance with other provisions of this Service Tariff.

The method of billing NYISO charges to the Customer will be based on Authority's discretion.

4. Taxes Defined

Taxes shall be any adjustment as the Authority deems necessary to recover from the Customer any taxes, assessments or any other charges mandated by federal, state or local agencies or authorities that are levied on the Authority or that the Authority is required to collect from the Customer if and to the extent such taxes, assessments or charges are not recovered by the Authority pursuant to another provision of this Service Tariff.

5. Substitute Energy

The Customer shall pay for Substitute Energy, if applicable, as specified in the Agreement.

6. Other Charges

The Customer shall pay the Authority for all other charges provided for in the Agreement.

7. Payment Information

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by the Authority. The Authority may in its discretion change the foregoing account and routing information upon notice to the Customer.

8. Billing Disputes

In the event that there is a dispute on any items of a bill rendered by the Authority, the Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

G. Rendition and Payment of Bills

1. The Authority will render bills to the Customer for Electric Service on or before the tenth (10th) business day of the month for charges due for the previous Billing Period. Such bills shall include charges for Electric Service, NYISO Charges associated with the Allocation (subject to adjustment consistent with any later NYISO re-billings to the Authority), and all other applicable charges, and are subject to adjustment as provided for in the Agreement, the Service Tariff and the Rules.
2. The Authority will charge and collect from the Customer all Taxes (including local, state and federal taxes) the Authority determines are applicable, unless the Customer furnishes the Authority with proof satisfactory to the Authority that (i) the Customer is exempt from the payment of any such Taxes, and/or (ii) the Authority is not obligated to collect such Taxes from the Customer. If the Authority is not collecting Taxes from the Customer based on the circumstances described in (i) or (ii) above, the Customer shall immediately inform the Authority of any change in circumstances relating to its tax status that would require the Authority to charge and collect such Taxes from the Customer.
3. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority will render bills to the Customer electronically.
4. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
5. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
6. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its discretion to suspend Electric Service to the Customer or terminate the Agreement.

Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of any bill rendered by Authority, the Customer shall pay such bill in full within the time provided for by this Agreement, and adjustments, if appropriate, will be made thereafter.

H. Adjustment of Charges – Distribution Losses

The Authority will make appropriate adjustments to compensate for distribution losses of the local electric utility.

I. Conflicts

In the event of any inconsistencies, conflicts, or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of the Agreement and this Service Tariff or the Rules, the provisions of the Agreement shall govern.

V. Annual Adjustment Factor

A. Adjustment of Rates

1. The AAF will be based upon a weighted average of three indices described below. For each new Rate Year, the index value for the latest available calendar year ("Index Value for the Measuring Year") will be compared to the index value for the calendar year immediately preceding the latest available calendar year (the Index Value for the Measuring Year -1"). The change for each index will then be multiplied by the indicated weights. As described in detail below, these products are then summed, producing the AAF. The AAF will be multiplied by the base rate for the current Rate Year to produce the base rates for the new Rate Year, subject to a maximum adjustment of $\pm 5.0\%$ (" $\pm 5\%$ Collar"). Amounts outside the $\pm 5\%$ Collar shall be referred to as the "Excess."

Index 1, "BLS Industrial Power Price" (35% weight): The average of the monthly Producer Price Index for Industrial Electric Power, commodity code number 0543, not seasonally adjusted, as reported by the U.S. Department of Labor, Bureau of Labor Statistics ("BLS") electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 1, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

Index 2, "EIA Average Industrial Power Price" (40% weight): The average weighted annual price (as measured in cents/kWh) for electric sales to the industrial sector in the ten states of CT, MA, ME, NH, NJ, NY, OH, PA, RI and VT ("Selected States") as reported by Coal and Electric Data and Renewables Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration ("EIA"); U.S. Department of Energy Form EIA-861 Final Data File. For Index 2, the Index Value for the Measuring Year will be the index for the calendar year two years preceding July 1 of the new Rate Year.

Index 3, "BLS Industrial Commodities Price Less Fuel" (25% weight): The monthly average of the Producer Price Index for Industrial Commodities less fuel, commodity code number 03T15M05, not seasonally adjusted, as reported by the U.S. Department of Labor, BLS electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 3, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

2. Annual Adjustment Factor Computation Guide

- Step 1: For each of the three Indices, divide the Index Value for Measuring Year by the Index Value for the Measuring Year-1.
- Step 2: Multiply the ratios determined in Step 1 by percentage weights for each Index. Sum the results to determine the weighted average. This is the AAF.
- Step 3: Commencing RY 2014, modifications to the AAF will be subject to $\pm 5\%$ Collar, as described below.
- a) When the AAF falls outside the $\pm 5\%$ Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the $\pm 5\%$ Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the $\pm 5\%$ Collar.

- b) Excesses will continue to accrue without limit and carry over such that they will be added to/subtracted from the AAF in any year where the AAF is within the $\pm 5\%$ Collar.

Step 4: Multiply the current Rate Year base rate by the AAF calculated in Step 2 to determine the new Rate Year base rate.

The foregoing calculation shall be performed by the Authority consistent with the sample presented in Section V.B below.

3. The Authority shall provide the Customer with notice of any adjustment to the current base rate per the above and with all data and calculations necessary to compute such adjustment by June 15th of each year to be effective on July 1 of such year, commencing in 2014. The values of the latest officially published (electronically or otherwise) versions of the indices and data provided by the BLS and EIA as of June 1 shall be used notwithstanding any subsequent revisions to the indices.
4. If during the term of the Agreement any of the three above indices ceases to be available or ceases to be reflective of the relevant factors or of changes which the indices were intended to reflect, the Customer and the Authority may mutually select a substitute Index. The Customer and the Authority agree to mutually select substitute indices within 90 days, once one of them is notified by the other that the indices are no longer available or no longer reflect the relevant factors or changes which the indices were intended to reflect. Should the 90-day period cover a planned July 1 rate change, the current base rates will remain in effect until substitute indices are selected and the adjusted rates based on the substitute indices will be retroactive to the previous July 1. If the Customer and Authority are unable to reach agreement on substitute indices within the 90-day period, the Customer and the Authority agree to substitute the mathematic average of the PPI—Intermediate Materials, Supplies and Components (BLS Series ID WPUSOP2000) and the PPI-- Finished Goods (BLS Series ID WPUSOP3000) indices for one or more indices that have ceased to be available or reflective of their intended purpose and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2017 implementation):

STEP 1

Determine the Index Value for the Measuring Year (MY) and Measuring Year - 1 (MY-1) for Each Index

- Index 1 - Producer Price Index, Industrial Power

	Measuring Year (2016)	Measuring Year - 1 (2015)
January	205.3	167.8
February	204.3	167.6
March	204.5	168.2
April	202.4	168.6
May	206.3	171.6
June	220.4	180.1
July	226.2	182.7
August	227.3	179.2
September	228.1	181.8
October	214.9	170.2
November	211.3	168.8
December	211.7	166.6
Average	213.6	223.7
Ratio of MY/MY-1		0.95

- Index 2 – EIA Industrial Rate

<u>State</u>	<u>Revenues</u> ((\$000s))	<u>Sales</u> (MWh)	<u>Avg. Rate</u> (cents/kWh)
<u>Measuring Year (2015)</u>			
CT	444,588	3,432,002	
MA	1,068,927	7,892,165	
ME	290,360	3,208,045	
NH	252,331	1,981,028	
NJ	778,985	7,320,398	
NY	1,140,573	18,079,200	
OH	3,548,736	50,556,675	
PA	3,411,815	47,404,272	
RI	109,866	798,532	
VT	146,022	1,421,601	
TOTAL	11,192,203	142,093,918	7.88

Measuring Year -1 (2014)

CT	453,958	3,514,798	
MA	1,014,262	7,960,941	
ME	300,412	3,357,486	
NH	234,900	1,969,064	
NJ	855,757	7,516,616	
NY	1,184,255	18,002,976	
OH	3,440,919	50,829,251	
PA	3,580,990	48,317,693	
RI	114,111	887,150	
VT	145,111	1,417,994	
TOTAL	11,324,673	143,773,969	7.88

Ratio of MY/MY-1 **1.00**

- Index 3 – Producer Price Index, Industrial Commodities Less Fuel

	Measuring Year (2016)	Measuring Year -1 (2015)
January	191.9	196.0
February	191.8	195.4
March	192.1	195.0
April	192.8	194.8
May	193.4	194.9
June	193.7	195.2
July	193.7	194.9
August	194.0	193.9
September	193.9	193.1
October	194.3	192.9
November	194.9	192.3
December	195.6	191.9
Average	193.5	194.2
Ratio of MY/MY-1		1.00

STEP 2

Determine AAF by Summing the Weighted Indices

<u>Index</u>	<u>Ratio of MY to MY-1</u>	<u>Weight</u>	<u>Weighted Factors</u>
PPI Industrial Power	0.95	0.35	0.334
EIA Industrial Rate	1.00	0.40	0.400
PPI Industrial Commodities less fuel	1.00	0.25	<u>0.249</u>
AAF			0.983

STEP 3

Apply Collar of $\pm 5.0\%$ to Determine the Maximum/Minimum AAF.

$-5.0\% < 1.6\% < 5.0\%$; collar does not apply, assuming no cumulative excess.

STEP 4

Apply AAF to Calculate the New Rate Year Base Rate

	<u>Demand</u> \$/kW-mo.	<u>Energy</u> \$/MWh
Current Rate Year Base Rate	8.03	13.73
New Rate Year Base Rate	7.90	13.50

POWER AUTHORITY

OF THE

STATE OF NEW YORK

30 South Pearl Street
Albany, New York 12207

AGREEMENT FOR THE SALE

OF NIAGARA PROJECT WHOLESALE POWER AND ENERGY TO

Customer

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POWER AUTHORITY OF THE STATE OF NEW YORK

30 South Pearl Street

Albany, New York 12207

**AGREEMENT FOR THE SALE OF NIAGARA PROJECT
WHOLESALE POWER AND ENERGY**

The POWER AUTHORITY OF THE STATE OF NEW YORK ("Authority" or "NYPA"), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law ("PAL"), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for the Sale of Niagara Project Wholesale Power and Energy ("Agreement") with <Customer Legal Name> ("Customer") with offices and principal place of business at <Customer Address>. The Authority and the Customer are from time to time referred to in this Agreement as "Party" or collectively as "Parties" and agree as follows:

RECITALS

WHEREAS, the Authority operates the Niagara Power Project, Federal Energy Regulatory Commission ("FERC") Project No. 2216, in accordance with the Niagara Redevelopment Act, and Title 1 of Article 5 of the Public Authorities Law ("PAL") also known as the Power Authority Act;

WHEREAS, prior to the Effective Date, the Authority has provided the Customer with electric service in accordance with one or more written agreements (collectively, "Prior Agreement") to enable the Customer to receive Electric Service consisting of Niagara Project Power and Energy;

WHEREAS, the Customer has requested that the term of its allocation of Niagara Project Power and Energy be extended to September 1, 2040;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the allocation of Niagara Project Power and Energy for an extended term as provided for in this Agreement;

WHEREAS, the Parties desire to enter into this Agreement in advance of expiration of the Prior Agreement in order to promote commercial and financial certainty and long-term planning by each of the Parties;

WHEREAS, the Authority's Board of Trustees ("Trustees") approved the extension of the Customer's allocation of Niagara Project Power and Energy, subject to

agreement on the terms and conditions for the sale of such allocation and related matters;

WHEREAS, the Parties intend that the Clean Energy Standard obligations of the Full Requirements Customers be substantially equivalent by contract to the Clean Energy Standard obligations of the Partial Requirements Customers.

WHEREAS, electric service under this Agreement will be subject to the rates and other terms and conditions of Service Tariff Nos. 38A or 39A, as applicable, as provided for in this Agreement;

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

I. Definitions

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined elsewhere in this Agreement or in appendices or other attachments to this Agreement, shall have the meanings set forth therein.

Adverse Water Condition means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers of the Authority who are served by the Project.

Agreement means this Agreement including the appendices hereto (also known as "Long Term Agreement" or "LTA").

Allocation refers to Customer's allocation of Niagara Project Power and Energy as specified in Appendix A.

Ancillary Services are services necessary to support the transmission of capacity and energy from generation resources to consumers, while maintaining the reliable operation of New York's transmission system.

Authority has the meaning set forth in the opening paragraph of this Agreement.

CES means Clean Energy Standard as defined in Appendix D.

Commission or **PSC** means the New York Public Service Commission.

Contract Demand will be the amount of kilowatts ("kW") set forth in Appendix A hereto or such other amount as may be determined in accordance with the provisions of this Agreement.

Customer is the municipality or rural electric cooperative identified in Appendix A and a signatory to this Agreement. Customer does not include the retail customers of municipal and rural electric cooperative systems. Customers means the group of municipalities and rural electric cooperatives identified in Appendix B.

Customer Associations are the Municipal Electric Utilities Association of New York State ("MEUA"), and the New York Association of Public Power ("NYAPP"), or any successor organization.

Effective Date means the date that this Agreement is fully executed by the Parties.

Electric Service is any type of power and energy made available to Customer under this Agreement in accordance with applicable Service Tariffs and Rules.

FERC means the U.S. Federal Energy Regulatory Commission (or any successor organization).

FERC License means the license issued by the FERC to the Authority for the continued operation and maintenance of the Niagara Power Project (Project No. 2216), dated March 15, 2007.

Firm and Peaking Hydroelectric Power and Energy means Firm Hydroelectric Energy, Firm Hydroelectric Power, Firm Hydroelectric Peaking Energy, and Firm Hydroelectric Peaking Power supplied from the Project under this Agreement, the Rules, and applicable Service Tariff.

Firm Hydroelectric Energy means energy (kWh) associated with Firm Hydroelectric Power intended to be available at all times except for limitations provided in this Agreement, the Rules, and applicable Service Tariff.

Firm Hydroelectric Power means capacity (kW) from the Project including the capacity adjustments necessary to meet the Installed Reserve Margin set by the New York State Reliability Council intended to be available at all times except for limitations provided in this Agreement, the Rules, or applicable Service Tariff and subject further to limitations provided in the NYISO Tariffs or applicable rules as

they may be modified from time to time. Firm Hydroelectric Power shall not include Firm Hydroelectric Peaking Power.

Firm Hydroelectric Peaking Energy means energy (kWh) associated with Firm Hydroelectric Peaking Power supplied at 12.5% monthly load factor.

Firm Hydroelectric Peaking Power means additional capacity (kW) from the Project intended to be available during Customer's peak load periods and limited as to the associated Firm Hydroelectric Peaking Energy to be supplied as set forth in this Agreement, the Rules, and applicable Service Tariff.

Full Requirements Customers are those Customers that receive Electric Service from the Authority under Service Tariff No. 38A, or the successor to such Service Tariff.

Industrial Economic Development Program (or IEDP) means the Industrial Economic Development Program which is comprised of 54 MW of the total Firm Hydroelectric Power allocated to the Customers. It is intended to support economic development in the Customers' respective service territories.

Load Factor means the Native System Load recorded during the billing period divided by the product of maximum metered demand and the number of hours in the same billing period.

Load Serving Entity or LSE: An entity, including a municipal electric system, a joint action agency, and an electric cooperative, authorized or required by law, regulatory authorization or requirement, agreement, or contractual obligation to supply Energy, Capacity and/or Ancillary Services to retail customers located within the New York Control Area ("NYCA"), including an entity that takes service directly from the NYISO to supply its own load in the NYCA, or otherwise defined in the NYISO Tariffs.

Native System Load means the total consumption of the Customer's electric system without the offset of any municipal or rural cooperative system-owned, behind-the-meter generation. It represents the sum of all incoming energy, plus internal generation behind the system meter, minus energy exports to the bulk electric system.

Niagara Project Power and Energy means the Firm and Peaking Hydroelectric Power and Energy supplied from the Project in accordance with this Agreement, the Rules, and applicable Service Tariff.

Niagara Redevelopment Act ("NRA") means the federal statute enacted in 1957, and codified at 16 U.S.C. § 836.

NYISO means the New York Independent System Operator or any successor organization.

NYISO Capability Period is as defined in the NYISO Open Access Transmission Tariff: Six-month periods which are established as follows: (1) from May 1 through October 31 of each year; and (2) from November 1 of each year through April 30 of the following year; or such other periods as may be determined by the Operating Committee of the NYISO.

NYISO Tariffs means the NYISO's Open Access Transmission Tariff or the NYISO's Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

Partial Requirements Customers are those Customers that receive Electric Service from the Authority under Service Tariff No. 39A, or the successor to such Service Tariff.

Planned Hydropower Curtailment means a temporary reduction in the amount of Firm Hydroelectric Energy (and Firm Hydroelectric Peaking Energy, if being supplied at the time) which the Customer is entitled to receive under this Agreement, which the Authority makes in response to an Adverse Water Condition that the Authority (i) anticipated, and (ii) provided advance notice of pursuant to Section V.b of this Agreement.

Project means the Niagara Power Project, FERC Project No. 2216.

RES means Renewable Energy Standard as defined in Appendices C & D.

Rules are the applicable provisions of the Authority's Rules and Regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as amended from time to time by the Authority.

Scheduling and Settlement Procedures means the systems and procedures in place as of the Effective Date to arrange for the scheduling and settlement of Firm and Peaking Hydroelectric Power and Energy on an hourly, daily and monthly basis, and any adjustments thereto.

Service Tariff means the Authority's Service Tariff No. 38A applicable to Full Requirements Customers, and Service Tariff No. 39A applicable to Partial Requirements Customers, which contain, among other things, the rates and other conditions for sale of Electric Service to Customer, as each such Service Tariff may be modified from time to time by the Authority.

State Energy Plan ("SEP") means the 2015 New York State Energy Plan as amended from time to time.

Substitute Energy means energy that is provided to a Customer by or through the Authority for the purpose of replacing Firm Hydroelectric Energy (and Firm Hydroelectric Peaking Energy, if being supplied at the time) that is not supplied to the Customer due to a Planned Hydropower Curtailment or Unplanned Hydropower Curtailment.

Term means the time period during which this Agreement is in effect, which includes from the Effective Date to September 1, 2040.

Unplanned Hydropower Curtailment means a temporary reduction in the amount of Firm Hydroelectric Energy (and Firm Hydroelectric Peaking Energy, if being supplied at the time) which the Customer is entitled to receive under this Agreement, which is made by the Authority in response to an Adverse Water Condition that the Authority did not anticipate.

II. Actions to Support the State's CES, RES, and SEP

- a. The Customers agree to take actions to support the goals underlying the CES, RES and SEP. As more specifically described in the SEP and PSC orders issued as of the Effective Date of this Agreement, such goals, which are targeted to be achieved statewide by 2030, include: a) reduction of greenhouse gas emissions from 1990 levels of 40%; b) achievement of a goal of 50% of the statewide generation of electricity coming from carbon-free renewable energy sources, such as solar, wind, hydropower and biomass; and c) a 23% decrease in energy consumption in buildings statewide from the baseline of 2012 levels.
- b. For the purpose of supporting these goals, the Customer, working with its respective Customer Association(s), shall work with NYPA to:
 - i. Revise existing Customer retail tariffs in order to encourage efficient off-peak usage and overall economic usage, acknowledging that such Customer tariffs are retail tariffs and may be subject to further regulatory approval from the Commission. The Parties further understand that the application of such tariffs, including, but not limited to time-of-use rates, energy storage options, and other options shall only be implemented if deemed cost-effective by the Customer. The Parties further agree that due to their unique characteristics, the Customer shall facilitate as appropriate, manage and control the interaction of its retail customers with the grid.
 - ii. Implement distribution-level technologies that encourage the adoption of cost-effective distributed energy resources ("DER") and other energy services through improved end-use consumer and

practical third-party engagement. The Customer shall adopt cost-effective DER programs appropriate to its system configuration and size. The Customer shall adopt tariff modifications, subject to regulatory approval as applicable, to attempt to implement such changes, though individual participation rates are expected to vary at the retail level.

- iii. The Customers will work towards implementing specific goals, consistent with the ultimate objectives of the CES (as it may be modified over time, subject to final legal action), on a proportionate and aggregate basis, and consistent with the goals of the SEP. The Parties acknowledge and agree that the Customers may work together to implement various projects, policies and programs consistent with these goals, and the Parties further acknowledge that the specific method of implementation shall be in the discretion of the Customers. The Customers and NYPA agree to work together and with the Customer Associations to implement these activities in a cost-effective and efficient manner, consistent with the unique characteristics of the Customers.
- c. In addition to the foregoing requirements in Section II.b.i-iii, each of the Full Requirements Customers shall pay the Zero Emissions Credit Charge and Renewable Energy Credit Charge provided in Appendix C and Appendix D, respectively.

III. Implementation of Energy Efficiency and Renewable Energy Programs

- a. The Customer shall continue to implement “REV”¹-related items in order to expand energy efficiency and energy conservation activities to benefit its respective service area. Such activities shall include, but not be limited to, the ongoing and successful Independent Energy Efficiency Program (“IEEP”), as well as other individual programs and Customer system accomplishments involving residential, commercial and industrial lighting, motors, solar programs, smart meters, ENERGY STAR(R), demand response and various energy saving programs, projects and policies.
- b. The Customer shall, at a minimum, make 1 mil (one-thousandth of a dollar/kWh) available for the activities set forth under this LTA, and that such funds shall remain available within each Customer’s budget for ongoing energy efficiency, renewable energy or other related technologies. The Parties further acknowledge and agree that for those Customers subject to the jurisdiction of the Commission, such commitments are subject to its review and approval. NYPA acknowledges and agrees that the Customers

¹ See, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Case 14-M-0101.

shall have unfettered discretion to implement programs, policies and projects, and the timing of such implementation, consistent with this Article, so long as a minimum of 1 mil is made available.

- c. A joint Customer/NYPA "Implementation Task Force" is hereby created as of the Effective Date of this Agreement and will meet regularly to track projects implemented and in process, as well as to provide assistance in project development and creation for all Customers. A full description of the powers and duties of this task force is found in Appendix E to this Agreement.
- d. A "Technology & Innovation Task Force" is hereby created as of the Effective Date of this Agreement. A description of the Technology & Innovation Task Force's powers and duties is found in Appendix E to this Agreement.
- e. The Parties agree that the Customers shall make energy usage data available to NYPA as required to support the activities implemented pursuant to this Article, consistent with the Customer's privacy protocols, including individual customer anonymity, law and regulation.
- f. The Parties agree to work collectively for the purpose of developing a reporting process that will track and highlight annual achievements through a standardized format, and such report shall be submitted to NYPA annually. The goal of this initiative is to develop the reporting process no later than six (6) months from the Effective Date of this Agreement. The Parties acknowledge and agree that such reports shall conform to existing Commission reports for energy efficiency plans, spending and achievements, and shall conform to the reports provided by IEEP and the individual Customers. For the avoidance of doubt, the existing IEEP reports are satisfactory for these purposes.

IV. Electric Service to be Provided

- a. The Authority shall provide Electric Service pursuant to the applicable Service Tariff to enable the Customer to receive its Allocation, as described in Appendix A, from the Project in accordance with this Agreement, the Service Tariffs and the Rules, and consistent with the provisions of the NRA and the FERC License. Except as provided in this Agreement and IEDP reallocations, the Authority shall not reduce the Niagara Project Power and Energy sold to the Customer below the level and rates of delivery prescribed in this Agreement.
- b. In the event the Authority increases the capability of the Project, the Authority shall conduct a study to determine whether additional quantities of Firm and Peaking Hydroelectric Power and Energy will be produced. If the Authority determines that additional quantities of Firm and Peaking Hydroelectric Power

and Energy will be produced from the Project as a result of such changes or upgrades, the aggregate percentage of such classes of power and/or energy to be offered to Customers shall be associated with the percentage allocations of power and energy referenced in the NRA, including the preference for public bodies and rural electric cooperatives contained in the NRA 16 U.S.C. § 836(b)(1).

- c. To the extent practicable, the allocations among the Customers of additional quantities of power and energy of any type shall be in accordance with the percentages reflected in Appendix B.

V. Hydropower Curtailments and Substitute Energy

- a. The Authority shall have the right to implement Planned Hydropower Curtailments for any Adverse Water Condition that the Authority anticipated and for which the Authority provided advance notice pursuant to Section V.b of this Agreement. The Authority will implement Planned Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
- b. The Authority will provide the Customer with advance notice of any Planned Hydropower Curtailment that in the Authority's judgment will impact Electric Service. Such notice will be provided no later than the tenth (10th) business day of the month prior to the month in which the Planned Hydropower Curtailment is expected to occur, unless the Authority is unable to provide such notice due to the circumstances that impede such notice, in which case the Authority will provide such advance notice that is practicable under the circumstances.
- c. The Authority shall have the right to implement Unplanned Hydropower Curtailments for any Adverse Water Condition that the Authority did not anticipate. The Authority will implement Unplanned Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
- d. The Authority shall notify the Customer of the occurrence of an Unplanned Hydropower Curtailment which in the Authority's judgment will impact Electric Service to the Customer. Such notice will be provided within five (5) business days after the first occurrence of an Unplanned Hydropower Curtailment that occurs within a month, and thereafter will provide the Customer with reasonable notice under the circumstances of the potential for any other Unplanned Hydropower Curtailments that are expected to occur within such month or beyond.

- e. The Authority will supply each Full Requirements Customer with Substitute Energy during Planned Hydropower Curtailments, and will supply each Full Requirements Customer and Partial Requirements Customer with Substitute Energy during Unplanned Hydropower Curtailments, provided, however, that the supply of Substitute Energy during an Unplanned Hydropower Curtailment will be for the shortest duration that is commercially reasonable considering the circumstances, including but not limited to the operating procedures of the Authority, third-party transmission or delivery utilities who deliver the Substitute Energy, and the NYISO.²
- f. Unless otherwise agreed upon by the Parties in writing, Substitute Energy will be sourced from markets administered by the NYISO.
- g. The Authority will provide each Customer with an explanation of all Planned Hydropower Curtailments and Unplanned Hydropower Curtailments, and an accounting of all charges assessed to such Customer for Substitute Energy.
- h. Each Customer shall reimburse the Authority for all costs that the Authority incurs for providing Substitute Energy to such Customer. The charges for such costs shall appear on the Authority's bills, and payment of such charges are subject to the provisions of the applicable Service Tariff and the Rules relating to the payment of bills. The Authority's failure to provide notice pursuant to Section V.b or Section V.d shall not affect the obligation of any Customer to pay for Substitute Energy.

VI. NYISO

The Authority shall act as the LSE with respect to the NYISO for the Full Requirements Customers.

Each Partial Requirements Customer acknowledges that it is responsible for all appropriate NYISO charges, and that the Authority does not act as the LSE for Partial Requirements Customers with respect to the NYISO.

VII. Operational Control

Nothing in this Agreement shall affect NYPA's sole operational control of the Project or require that NYPA operate the Project in any particular manner, including by

² For the sake of clarity, the Parties acknowledge and agree that the Authority has no obligation, and by entering into this Agreement it is not undertaking any obligation, to supply Substitute Energy during Planned Hydropower Curtailments to any Partial Requirements Customer at any time.

way of example, a manner inconsistent with its historical operational practices or with contractual, license, or other legal requirements relating to the Project, including the FERC License.

VIII. Term and Termination of Service

Once initiated, Electric Service shall continue until the earliest of: (a) termination by Customer with respect to all or part of its Allocation upon one (1) year's prior written notice; (b) termination by the Authority pursuant to this Agreement, the applicable Service Tariff, or the Rules; or (3) September 1, 2040.

The Authority shall invite the Customer to commence good faith negotiations for the purpose of attempting to reach agreement on proposed terms and conditions for an extension of this Agreement by contacting Customer Associations, who the Customer hereby designates to act as its agent for such purpose. Such invitation shall be made no later than September 1, 2035, or on a date agreed upon by the Parties.

IX. Service Tariff; Conflicts

The Rules, Service Tariff No. 38A, or Service Tariff No. 39A, as applicable, as now in effect and/or such superseding tariffs or other tariffs as the Authority may later promulgate, all as such Rules and Service Tariffs may be later amended from time to time, by the Authority are hereby incorporated into this Agreement with the same force and effect as if herein set forth at length.

In the event of any inconsistencies, conflicts or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff or the Rules, the provisions of this Agreement shall govern.

To the extent the New York State Administrative Procedure Act ("SAPA") applies to any proposed change to the Rules or Service Tariffs, the applicable notice period under such statute shall apply.

The Authority shall provide the Customer with a copy of the Authority Board of Trustees' approval of any proposed change to the Rules or Service Tariffs within two (2) business days of Board approval.

To the extent the SAPA does not apply to any proposed change to the Rules or Service Tariffs, the Authority shall provide at least sixty (60) days prior written notice of

the change to Customer, during which time consultation with Customers shall take place.

X. Scheduling and Settlement Procedures

NYPA will settle all Customers Native System Load uniformly and in accordance with (a) NYPA Scheduling and Settlement Procedures, and (b) NYISO principles and practices.

In the event the Authority determines that a modification to the Scheduling and Settlement Procedures and/or methodologies is necessary for consistency with this Agreement, to conform such procedures and/or methodologies to the requirements of the NYISO, or to improve the efficiency of NYPA and/or Customer operations, the Authority shall first consult with Customers and Customer Associations in order to identify and attempt to mitigate any adverse impacts on the Customers that may result from the proposed modification. Where such modification in procedure and/or methodology may result in a more than de minimis adverse impact on the Customer, such good faith consultations shall seek to maintain or restore the relative positions of the Parties with respect to the rights, obligations, benefits and burdens as contemplated at the time of execution of this Agreement. Ninety (90) days after the commencement of such consultation, NYPA will have the sole discretion to finalize such procedure and/or methodology unless one or more of the Customers in good faith informs NYPA that it cannot conform to the new procedures within that time, in which case it will be allowed a reasonable extension to make the necessary changes. Any modifications to the procedures and/or methodologies must be consistent with this Agreement and the NRA.

XI. Metering

Each Customer delivery point shall utilize revenue grade metering instrumentation, consistent with the NYISO Metering Requirements Manual (or its successor) that measures the Native System Load from all sources. In cases in which NYPA does not own the meter as of the Effective Date, NYPA shall have direct remote read access to the meter interval and register data via NYPA's MV90 system (or its successor or equivalent), and NYPA shall be invited to witness calibration test(s) of the meter. All new interconnections shall be metered by NYPA-owned metering instrumentation. In the event that NYPA determines that the cost of new interconnections to a legacy metering system is unreasonably expensive, the Customer and NYPA will meet to develop a reasonably acceptable alternative.

In the event that remote access is temporarily unavailable, Customer shall send such interval and register data to NYPA, through a medium and protocol specified by NYPA in its sole discretion, provided, however, that there shall be no requirement of a daily provision of such data during the period of temporary unavailability. Customer

shall provide such data to NYPA on a reasonable but no less than weekly basis. Any requirements of this paragraph shall be at the sole cost of the Authority.

At the Customer's sole discretion, and at no cost to the Customer, the Customer may access information produced by the "Base" service level (or the "Base" service level's prospective equivalent) of NYPA's New York Energy Manager ("NYEM") based upon the data collected from Customer's electric system. Should Customer enroll in NYEM at levels other than the NYEM "Base" or its prospective equivalent, the Customer must pay the fees and associated equipment costs applicable to such level.

XII. Rates

Niagara Project Power and Energy provided by the Authority from the Project shall be sold to the Customer at cost-based rates, consistent with the NRA and the FERC License and based on Cost of Service ("CoS") Principles and Methodologies set forth in the March 5, 1986 Settlement Agreement settling *Auer v. Dyson*, No. 81-124 (Sup. Ct. Oswego Co.), *Auer v. Power Authority*, Index No. 11999-84 (Sup. Ct. N.Y. Co.) and *Delaware County Electric Cooperative, Inc. v. Power Authority*, 82 Civ. 7256 (S.D.N.Y.) (the "Auer Settlement"). The Authority shall charge and the Customer shall pay the preference power rates as adopted by the Authority from time to time as long as those rates remain in effect. During the Term of this Agreement, the Customer and Customer Associations will not object to rates that apply the following additional and current CoS Principles and Methodologies:

- a. Recovery of capital costs;
- b. Treatment of energy sales to third parties, including the NYISO;
- c. Allocation of Indirect Overheads;
- d. Recovery in rates of all prudent Hydro Project relicensing, life extension and modernization costs;
- e. Use of the Rate Stabilization Reserve described in Appendix F; and
- f. Crediting sales of excess Unforced Capacity ("UCAP") to the CoS.

In the event the Authority ceases to employ any of the CoS Principles and Methodologies enumerated above, the Customer shall have the right to dispute such action, but shall not have the right to challenge any of the other CoS Principles and Methodologies that are employed in the CoS. Notwithstanding the foregoing, in the event that the Authority, the Customer, or the Customer Associations believe that circumstances call for adding or changing CoS Principles or Methodologies, the Parties and Customer Associations agree to good faith negotiations to address these matters.

XIII. Other Classes of Power and Energy

- a. In the event that the Authority, in its sole discretion, and consistent with applicable law, determines that any class of power and energy other than those

classes sold pursuant to Service Tariff Nos. 38A and 39A is available for sale to Customer or that additional power and energy under the applicable Service Tariffs is available for sale to Customer, the Authority shall notify Customer as soon as practicable and follow the procedures set forth in Article IV herein.

b. Customer or its representatives may raise a claim for quantities or classes of Project power and energy beyond those sold to Customer under this Agreement only if and to the extent that the Project capability existing on the date of execution hereof is modified.

XIV. NYISO Ancillary Services

- a. Customer shall receive the lesser of i) a pro-rata share of NYPA's Niagara and St. Lawrence-FDR Project generation-related NYISO Ancillary Services revenues (Schedules 2, 3, 5, and 6); or ii) the pro-rata share that the Customer owes to the NYISO with respect to NYISO Schedules 2, 3, 5 and 6 (or in the case of the Full Requirements Customers, the amounts NYPA owes to the NYISO on their behalf) with respect to their Niagara Project Power and Energy purchases. For the purposes of this provision, a Customer's Niagara Project Power and Energy purchases shall be determined without regard to any Planned Hydropower Curtailments and/or Unplanned Hydropower Curtailments. NYPA's reimbursement of the LSE-related charges for NYISO Schedules 2, 3, 5, and 6 under this Section of the Agreement will be offset by the costs of such services.
- b. If the Project or St. Lawrence-FDR Power Project garner revenues from the sale of new Ancillary Services after the date of this Agreement, and the Customer (or NYPA as the LSE) is required to purchase such service from the NYISO, then the Parties will negotiate in good faith and for the mutual benefit of all Parties to include such services in a manner consistent with this section.
- c. If self-supply of any Ancillary Service is allowed in the future the Parties will engage in good faith negotiations for the mutual benefit of all Parties with regard to potential implementation of self-supply arrangements.
- d. If during the Term of this Agreement there is a fundamental change in the structure of the electricity market in New York, and such change has a material effect on the rights, obligations, benefits and burdens contemplated by this section on Ancillary Services, the Parties shall negotiate in good faith to restore the relative positions of the Parties.

XV. Communications

- a. Prior to implementing any changes in procedures related to the sale of Firm and Peaking Hydroelectric Power and Energy provided to the Customer under this Agreement, which the Authority determines will impact the Customer, the Authority will notify the Customer of the nature of and reasons for the proposed change and the date of its proposed implementation. Except where the circumstances prevent such notice, such notice shall be provided no fewer than sixty (60) days before the change is implemented.
- b. Any notification or communication required by paragraph (a) or by any other provision of this Agreement shall be provided in writing directly to the individual who has been designated by the Customer as the appropriate contact person, as set forth below:

[Name]
[Title]
[Organization]
[Address]
[phone #]
[e-mail address]

It shall be the responsibility of the individual designated above, and not the Authority, to provide the notification or communication required by paragraph (a) to the individual employed by each Customer in the highest executive or senior managerial position with direct responsibility for electric utility matters.

- c. Any notification or communication by the Customer regarding this Agreement shall be provided in writing directly to the individual in the position designated by the Authority as the appropriate contact person, as set forth below:

[Name]
[Title]
[Organization]
[Address]
[phone #]
[e-mail address]

- d. Any change by the Authority or the Customer regarding the individual designated to receive notices or communications shall be provided in writing, via mail or email.
- e. To the extent practicable, each Party shall provide the maximum time period possible for the notice required in this Article.

XVI. Legal or Regulatory Change

If at any time after the effective date of this Agreement there is any change to any law or regulation applicable to this Agreement, or to any tariff or rule of the NYISO, that substantially alters the contractual relationship between the Parties or the allocation of benefits hereunder, the Parties shall meet for the purpose of determining whether any amendments, revisions or additions to this Agreement are necessary in order to maintain or restore the benefits of this Agreement to each Party as contemplated at the time of execution hereof. If the Parties agree that an amendment, revision or addition is necessary, the Parties shall negotiate in good faith concerning any such amendment, revision or addition to this Agreement.

XVII. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the NRA or the FERC License.

XVIII. Venue

Each Party consents to exclusive jurisdiction and venue of any state or federal court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under or in any way relating to this Agreement.

XIX. Assignment or Transfer

The Customer may not assign or transfer any part of this Agreement unless the Authority in its sole discretion provides its prior written consent, which consent will not be unreasonably withheld, to such assignment or transfer.

XX. Previous Agreements; Modifications; and Interpretations

This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation listed in Appendix A and the subject matter of this Agreement. Such agreement supersedes all previous agreements and communications between the Parties hereto, either oral or written, with reference to the subject matter of this Agreement.

The Prior Agreement is superseded and terminated effective as of the Effective Date of this Agreement, provided, however, that: (i) the Customer shall remain liable to

the Authority for all duties, liabilities, charges and obligations due in accordance with the Prior Agreement that have accrued prior to the Effective Date.

No person who is not a Party/signatory to this Agreement shall have any rights under this Agreement.

No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.

No provision of this Agreement shall be construed against a Party on the basis that such Party drafted such provision.

XXI. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC, the Commission, or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof.

Notwithstanding the preceding paragraph, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be void and unenforceable.

NYPA and Customer agree that each and every part of this Agreement is in consideration of every other part thereof and if any provision is rendered invalid or unenforceable by the action of any public official, agency, court or other entity having jurisdiction, NYPA and Customer shall have the right to withdraw from the Agreement. The withdrawal of any Customer shall not affect the right of any other Customer to remain bound by this Agreement.

XXII. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

XXIII. Execution

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud-based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

XXIV. Effectiveness of Agreement

This Agreement shall take effect on the Effective Date.

CUSTOMER

By: _____

Authorized Officer's Title

Date: _____

(Seal)

Attested to by: _____

Accepted:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____

Authorized Officer's Title

Date: _____

(Seal)

Attested to by: _____

APPENDIX A

ALLOCATION INFORMATION

Firm and Peaking Hydroelectric Power and Energy Service pursuant to
Service Tariff No. XX - X,XXX kW ("Contract Demand")

The Contract Demand described in this Appendix A represents the Customer's single system allocation as of the Effective Date. The Contract Demand includes the impact of all previous IEDP adjustments. NYPA will provide documentation to Customer of any future change(s) in Contract Demand in accordance with Article XV of this Agreement, but will not revise this Appendix. Customer's Contract Demand may change from time to time in accordance with this Agreement and Service Tariff No. XX.

APPENDIX B

HISTORICAL PREFERENCE HYDRO ALLOCATIONS WITHOUT IMPACTS OF INDUSTRIAL ECONOMIC DEVELOPMENT POWER ALLOCATIONS AND EFFICIENCY GAINS

To the extent practical and in accordance with Article IV of this Agreement, historical preference hydro allocations as of June 1989 without the impacts of IEDP allocations and efficiency gains of the Project as described within this Appendix B shall be utilized to allocate among the Customers, additional quantities of Firm Hydroelectric Peaking Power, Firm Hydroelectric Peaking Energy, and other newly developed or categorized classes of power and energy or other products that become available with changes in the electric system.

Customer	Allocation (kW)	Allocation (%)
Akron	7,800	1.0372%
Andover	1,400	0.1862%
Angelica	1,600	0.2128%
Arcade	24,200	3.2181%
Bath	13,500	1.7952%
Bergen	2,400	0.3191%
Boonville	12,900	1.7154%
Brocton	2,700	0.3590%
Castile	1,500	0.1995%
Churchville	3,400	0.4521%
Delaware	9,400	1.2500%
Endicott	9,300	1.2367%
Fairport	76,700	10.1995%
Frankfurt	3,400	0.4521%
Freeport	38,500	5.1197%
Green Island	2,500	0.3324%
Greene	6,800	0.9043%
Greenport	5,300	0.7048%
Groton	4,400	0.5851%
Hamilton	10,800	1.4362%
Holley	4,300	0.5718%
Ilion	12,800	1.7021%

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Jamestown	73,700	9.8005%
Lake Placid	29,300	3.8963%
Little Valley	3,800	0.5053%
Marathon	4,100	0.5452%
Massena	22,800	3.0319%
Mayville	4,500	0.5984%
Mohawk	4,300	0.5718%
Oneida-Madison	3,500	0.4654%
Otsego	7,900	1.0505%
Penn Yan	11,800	1.5691%
Philadelphia	2,100	0.2793%
Plattsburgh	103,000	13.6968%
Richmondville	2,700	0.3590%
Rockville Centre	28,800	3.8298%
Rouses Point	13,900	1.8484%
Salamanca	13,000	1.7287%
Sherburne	12,900	1.7154%
Sherrill	11,700	1.5559%
Silver Springs	900	0.1197%
Skaneateles	5,100	0.6782%
Solvay	53,200	7.0745%
Spencerport	12,500	1.6622%
Springville	9,300	1.2367%
Steuben	12,600	1.6755%
Theresa	1,500	0.1995%
Tupper Lake	18,800	2.5000%
Watkins Glen	6,200	0.8245%
Wellsville	10,200	1.3564%
Westfield	12,300	1.6356%
Total	752,000	100.000%

APPENDIX C

FULL REQUIREMENTS CUSTOMERS - ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Appendix, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. 38A, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Appendix C.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Full Requirements Customers ZEC Costs” has the meaning provided in Section II.4.b of this Appendix C.

“Government Action” has the meaning provided in Section II.7 of this Appendix C.

“Load Serving Entity” or “LSE”, for the purpose of this Appendix, has the meaning provided in the CES Order.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under its power programs as authorized in the Power Authority Act.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

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“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Full Requirements Customer established in this Appendix C.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Appendix C.

“ZEC Program Year” has the meaning provided in Section II.2 of this Appendix C.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of Service Tariff No. 38A or the Rules, each Full Requirements Customer shall be subject to a ZEC Charge as provided in this Appendix C. The monthly ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, Service Tariff No. 38A and the Rules. By accepting Electric Service under the Agreement, each Full Requirements Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all LSEs in the New York Control Area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing Authority power programs in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as LSE, including the load that the Authority serves to the Full Requirements Customers.
4. The ZEC Charge, which is intended to recover from each Full Requirements Customer the costs that the Authority incurs for purchasing ZECs in quantities that are attributable to each Full Requirements Customer’s load served under this Agreement, will be determined and assessed to each Full Requirements Customer as follows:

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- a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as an Affected LSE, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.
 - b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the Full Requirements Customers load that it serves (the "Full Requirements Customers ZEC Costs"). Such allocation will be based on the forecasted kilowatt-hours load of the Full Requirements Customers to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the Full Requirements Customers based on the proportion of the actual annual kilowatt-hours load served to such Full Requirements Customers to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the Full Requirements Customers ZEC Costs to each Full Requirements Customer as the ZEC Charge based on the proportion of each Full Requirements Customer's forecasted annual kilowatt-hours load to be purchased by the Full Requirements Customer to total kilowatt-hours load to be served by the Authority to the Full Requirements Customers (i.e., forecasted Full Requirements Customers level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Full Requirements Customer based on the proportion of the Full Requirements Customer's actual annual kilowatt-hours load purchased under this Agreement to total actual annual kilowatt-hours load served to the Full Requirements Customers by the Authority (actual Full Requirements Customers level load). The ZEC Charge assessed to the Full Requirements Customers shall not include any costs resulting from the Authority's inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill each Full Requirements Customer for the ZEC Charge pursuant to another

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Authority-established procedure. In either case, the ZEC Charge shall be billed monthly.

The Authority may, in consultation with affected Full Requirements Customers, but in its sole discretion modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected Full Requirements Customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Full Requirements Customers with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.

6. Nothing in this Appendix shall limit or otherwise affect the Authority's right to charge or collect from the Full Requirements Customers any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of Service Tariff No. 38A or the Rules.
7. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, "Government Action"), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Full Requirements Customers, to the extent that the Authority determines such actions are appropriate based on such Government Action.

APPENDIX D

FULL REQUIREMENTS CUSTOMERS – MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. 38A, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Appendix D.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Appendix D.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity”, for the purpose of this Appendix, has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Appendix D.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

APPENDIX D

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under its power programs as authorized in the Power Authority Act.

“Renewable Energy Standard” or **“RES”** means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSERDA in accordance with NYSERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

“Total Monthly Full Requirements Customers Load” has the meaning provided in Section II.3.b of this Appendix D.

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Appendix D.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of Service Tariff No. 38A or the Rules, each Full Requirements Customer shall be subject to a Monthly REC Charge as provided in this Appendix D. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, Service Tariff No. 38A and the Rules. By accepting Electric Service under the Agreement, each Full Requirements Customer agrees to pay the Monthly REC Charge assessed to it.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the power allocations and sales made under Authority power programs in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its customers. Such investments will be made through the procurement of RECs or other REC Compliance Measures in a manner that is intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total Full Requirements Customers load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.

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3. The Monthly REC Charge, which is intended to recover from each Full Requirements Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the load of each such Full Requirements Customer served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total Full Requirements Customers load that it will serve during such calendar year.
 - b. The Authority will, for each month of each calendar year, calculate the total costs ("Total Monthly REC Costs") that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total Full Requirements Customers kilowatt-hour load for the month ("Total Monthly Full Requirements Customers Load"). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly Full Requirements Customers Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly Full Requirements Customers Load that the Authority served for the month.
 - c. Each month, the Authority will assess to each Full Requirements Customer, as a Monthly REC Charge, an amount which will represent the Full Requirements Customer's share of the Total Monthly REC Costs assessed to the Total Monthly Full Requirements Customers Load. The Monthly REC Charge will be assessed as the proportion of the Full Requirements Customer's total kilowatt-hours load served by the Authority for such month to the Total Monthly Full Requirements Customers Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority's inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA's published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Full Requirements Customers for the Monthly REC Charge pursuant

APPENDIX D

to another Authority-established procedure. In either case, the REC Charge shall be billed monthly.

5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Full Requirements Customer's Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority's bills for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Appendix D.
6. Notwithstanding the provisions of Section II.3 of this Appendix D, if Electric Service for a Full Requirements Customer's Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Full Requirements Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for such Full Requirements Customer's load for the year, and bill the Full Requirements Customer for the costs associated with such separate REC Compliance Measures. For the avoidance of doubt, the reconciled annual REC Compliance Charge for a Full Requirements Customer can never exceed the Full Requirements Customer's total annual load multiplied by the Annual REC Percentage Target for that year multiplied by NYSERDA's published REC price for the REC Program Year.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of Service Tariff No. 38A or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Appendix D shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Full Requirements Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Appendix D (collectively, "Alternative REC Compliance Program").

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2. The Authority shall communicate at least biennially with the Full Requirements Customers concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.

APPENDIX E

JOINT CUSTOMER/NYPA TASK FORCES: POWERS AND DUTIES

1. The Implementation Task Force shall be composed of up to three representatives from each of NYPA and MEUA respectively and two representatives from NYAPP. The Implementation Task Force shall meet at a minimum, every six months. The Implementation Task Force shall also identify and assist those non-compliant Customers to stay on track prior to NYPA initiating any further actions to enforce the terms of the LTA. The Implementation Task Force shall have a defined, limited time period, of not less than six months, to encourage and support a corrective action plan that will ensure proper compliance. If within one month after the defined time period, the Customer has not completed a mutually agreeable corrective action plan, as between NYPA and the Customers, then NYPA reserves the right to direct the Customer to implement reasonable measures within a reasonable time frame and may, at NYPA's sole discretion, direct the use of the funds collected under Article III(b), supra, to satisfy the intent of this Appendix; provided, however, that NYPA shall first consult with the non-NYPA Implementation Task Force members prior to any such actions directing the Customer to implement such measures and use such funds in a manner consistent thereto. After the exhaustion of remedies by the Customer, NYPA's exclusive enforcement mechanism under this Appendix is to direct the collection of a 1 mil adder and to direct the Customer to spend such adder on a qualified program. Notwithstanding the foregoing, to the extent the Commission has jurisdiction over the Customer, such corrective action plans may be subject to Commission approval.
2. The Technology & Innovation Task Force shall be composed of up to three representatives from each of NYPA and MEUA respectively and two representatives from NYAPP, and may have additional members, including but not limited to the New York State Energy Research and Development Authority, the Electric Power Research Institute, the Large Public Power Council, and the Independent Energy Efficiency Program, as appropriate. The Technology & Innovation Task Force shall meet at a minimum, every six months. The Technology & Innovation Task Force will investigate and pursue as appropriate, technologies and innovations at the locus of New York State energy policy, Customer needs, and Authority leadership.
3. With NYPA's support, the Customers may pursue with best efforts additional funding resources (Federal and State) for all Customers to access in support of larger-scale and multi-Customer projects.

APPENDIX F

NEW YORK POWER AUTHORITY RATE STABILIZATION RESERVE METHODOLOGY

The Rate Stabilization Reserve (“RSR”) is a rate making mechanism by which NYPA reconciles its actual annual cost of service and revenues to the projections used to set rates. The purpose is to reconcile the projected cost of service and associated revenues to actuals. The difference is then added to or subtracted from the reserve (the accumulation of previous annual differences). If the absolute value of the reserve exceeds \$25MM, the excess will be charged or credited to Customers. The Parties recognize that the current RSR methodology may be changed if such change is deemed to be advantageous to the Parties. Any Party may propose changes to the RSR calculation method. Following notification of a proposed change, the Parties will engage in good faith discussions about the proposed change. It is presently calculated consistent with Service Tariff Nos. 38A and 39A regarding the Flow Adjustment Computation (FAC). The calculation (an example of which is included below) is described below:

1. Calculate the total Cost of Service (CoS) for the Niagara/St. Lawrence projects. Costs include: Operations and Maintenance, Relicensing Costs paid to others, post-employment benefits other than pensions (OPEBs), Indirect Overheads (Shared Services, Research and Development, debt service), Administrative and General Costs (A&G), and Capital Costs (using Trended Original Cost for equity funded and Original Cost for debt funded).
2. Reduce the CoS by any revenues arising from excess capacity (UCAP) sales to the ISO,³ including calculated revenues associated with internal transfers of UCAP for NYPA’s non-hydro customers, and accounting for UCAP adjustments for firm supply customers with locational capacity requirements. Normalized ReCharge NY customer UCAP sales are applied in the UCAP credit calculation.
3. Allocate costs to the demand function by multiplying the sum of the Customers’ billed demands (entire 455 MW of Recharge NY Power, i.e., Normalized demand for ReCharge NY Customers) by the preference demand rate, which has been adjusted to include Ancillary Services production costs and UCAP sales revenue. This demand charge is used only for the purposes of calculating the RSR methodology.
4. Calculate the cost-based energy rate by dividing the remaining assigned costs (after allocation of costs to the demand function) by the annual metered generation.

³ As part of the CoS, NYPA will track the amount of excess UCAP and associated revenues from the Niagara/St. Lawrence projects that is sold in the various ISO auction markets.

APPENDIX F

5. Calculate the difference between the cost-based energy rate and the billed preference energy rate.
6. Multiply the difference in the rates by the actual annual billed preference energy sales to determine the annual change in the RSR.
7. Add the annual change to the RSR balance from the prior year-end to get the current year-end RSR balance.
8. If the current year-end balance is in excess of +/- \$25 million, the excess would be subject to a credit or a surcharge in the subsequent rate year.

APPENDIX F

RSR EXAMPLE

NEW YORK POWER AUTHORITY
HYDROELECTRIC PROJECTS
RATE STABILIZATION RESERVE (RSR) COMPUTATION
@ DECEMBER 31, 2016

Line NO.	<u>DESCRIPTION</u>	<u>YEAR ENDING 2015</u>	<u>CURRENT YEAR 2016</u>
	<u>COST OF SERVICE (COS) (\$000)</u>		
1	TOTAL COS		290,568
2	UCAP CREDIT		(32,457)
3	NET COS		258,111
4	DEMAND 1/		155,590
5	ENERGY 2/		102,522
	<u>GENERATION (GWH)</u>		
6	LONG TERM AVERAGE		20,226
7	ANNUAL NET GENERATION		21,695
	<u>ENERGY RATE (MILLS/KWH)</u>		
8	@ LONG TERM AVERAGE GENERATION 3/		5.07
9	@ ANNUAL NET GENERATION 4/		4.73
10	RATE IN EFFECT (MILLS/KWH)		4.92
11	RATE DIFFERENTIAL 5/		0.19
12	ANNUAL PREFERENCE SALES (GWH)		6,869
13	TOTAL FOR YEAR 6/		1,305
14	ADJUSTMENT TO RSR		
15	RSR BALANCE @ YEAR END 7/	(8,225)	<u>(6,920)</u>

1/	The demand charge is a weighted average of the January-April and May-December periods, inclusive of the projected ancillary service costs that were removed using the methodology from the 2003 rate action.
2/	Line (3) – line (4)
3/	Line (5) / (6).
4/	Line (5) / (7).
5/	Line (10) – (9).
6/	Line (11) * (12).
7/	Line (13) + line (15) [prior-year balance] + line (14) adjustment.
	Amounts shown in this RSR example were rounded for display purposes, but calculations were performed using more precise figures.



POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

Electric Service Tariff for Full Requirements
Municipal and Rural Electric Cooperative Systems
Firm and Peaking Hydroelectric Power Service

Service Tariff No. 38A

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Schedule of Rates for Firm and Peaking Hydroelectric Power and Energy Service

I. Applicability

For wholesale sales of Project Firm and Peaking Hydroelectric Power and Energy (terms as defined below) to Full Requirements Municipal and Rural Electric Cooperative Systems (terms as defined below) in New York State.

II. Abbreviations and Terms

A. The following abbreviations are used:

kW	kilowatt(s)
kWh	kilowatt-hour(s)

B. The term "Agreement" means an executed written agreement between Customer and Authority for the sale of Niagara Project Power and Energy.

C. The term "Authority" means the Power Authority of the State of New York, a corporate municipal instrumentality and political subdivision of the State of New York as defined in the Agreement.

D. The term "Billing Demand" has the meaning set forth in Section III of this Service Tariff.

E. The term "Billing Period" has the meaning set forth in Section III of this Service Tariff.

F. The term "Contract Demand" has the meaning set forth in Section III of this Service Tariff.

G. The term "Customer" means any of the Full Requirements Municipal and Rural Electric Cooperative Systems located within the State of New York identified as a counter-party in an Agreement with Authority.

H. The term "Firm Hydroelectric Power" means capacity (kW) from the Project including the capacity adjustments necessary to meet the Installed Reserve Margin set by the New York State Reliability Council intended to be available at all times except for limitations provided in the Agreement, the Service Tariff or Rules and subject further to limitations provided in the NYISO Tariffs or applicable rules as they may be modified from time to time. Firm Hydroelectric Power shall not include peaking power.

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- I. The term “Firm Hydroelectric Energy” means energy (kWh) associated with Firm Hydroelectric Power as defined in the Agreement.
- J. The term “Firm Hydroelectric Peaking Power” means additional capacity (kW) from Project as defined in the Agreement.
- K. The term “Firm Hydroelectric Peaking Energy” means energy (kWh) associated with Firm Hydroelectric Peaking Power supplied at 12.5% monthly load factor.
- L. The term “Full Requirements” means all of a Customer’s power and energy requirements. As used in this Service Tariff, a Full Requirements Customer purchases all of its power and energy requirements from Authority.
- M. The term “Load Factor Share” (“LFS”) has the meaning defined within Section IV of this Service Tariff.
- N. The term “Load Serving Entity” (“LSE”) has the meaning set forth in the Agreement, consistent with the NYISO Tariffs as may be modified from time to time.
- O. The term “Municipal and Rural Electric Cooperative Systems” means the public bodies and nonprofit cooperatives located in New York State eligible to be served by Authority under the Niagara Redevelopment Act, 16 U.S.C. § 836, *et seq.*
- P. The term “NYISO” refers to the New York Independent System Operator, Inc. or any successor organization.
- Q. The term “NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff (“OATT”) or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, or any successor tariffs to such NYISO Tariffs.
- R. The term “Project” means the Authority’s Niagara Power Project.
- S. The term “Rules” means Authority’s Rules and Regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as applicable, as now in effect and as may be later amended from time to time by Authority.
- T. The term “Service Tariff” means this Service Tariff No. 38A.
- U. The term “Transmission Service Charge” (“TSC”) has the meaning set forth in the NYISO Tariffs, as such definition may be modified from time to time.

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III. Monthly Rates and Charges

A. Monthly Base Rates

The monthly demand and energy charges paid by Customers to Authority shall be based on the preference power rates charged by Authority, as shown below.

<u>Effective Date</u>	<u>Demand Rate</u> \$/kW-month	<u>Energy Rate</u> Mills/kWh
5/1/2018 until superseded	4.07	4.92

B. Monthly Demand Charge

The product of the demand rate set forth above and the Billing Demand.

C. Monthly Energy Charge

The product of the energy rate set forth above and the amount of energy provided under this Service Tariff.

D. Contract Demand

The maximum hydroelectric kilowatts contracted for in the Agreement, as measured at Authority's generating station switchyards.

E. Billing Demand

The Billing Demand under this service tariff shall be the lesser of (a) the Contract Demand, or (b) Customer's highest 30-minute integrated demand measured during the billing period, adjusted for losses.

F. Billing Period

Any period of approximately thirty (30) days, generally ending with the last day of each calendar month.

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G. NYISO Transmission and Related Charges ("NYISO Charges")

Unless otherwise stated in the Agreement, Customer shall compensate the Authority for the following NYISO Charges assessed on the Authority, if any, for services provided by the NYISO pursuant to the NYISO Tariffs (as the provisions of those tariffs maybe amended and in effect from time to time) with respect to power service to Customer under this Service Tariff:

1. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the NYISO Tariffs from time to time;
2. Marginal losses;
3. The New York Power Authority Transmission Adjustment Charge ("NTAC");
4. Congestion costs, less any associated grandfathered Transmission Congestion Contracts ("TCCs") as provided in Attachment K of the NYISO OATT;
5. Any TSC assessed upon Authority by the local utility;
6. Any and all other charges, assessments or other amounts associated with deliveries to Customer or otherwise associated with the Authority's responsibilities as agent for the Customer in the performance of LSE functions that are assessed on the Authority by the NYISO under the provisions of NYISO Tariffs or under other applicable tariffs; and
7. Any charges assessed on the Authority for facilities needed to maintain reliability or incurred in connection with the NYISO's Comprehensive System Planning Process (including both economic projects and reliability backstop projects) with respect to power service to Customer under this Service Tariff, or required to be paid by the Authority in accordance with law, whether charged by the NYISO or some other third party.

The NYISO Charges in this section, if applicable, are in addition to the Authority production charges that are charged to the Customer in accordance with other provisions of this Service Tariff.

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H. Resale of Power and Energy

Customer agrees that in reselling power and energy purchased from Authority under this Service Tariff that the benefits of such power and energy will be made available to the extent practicable to all retail consumers located within Customer's service area on a nondiscriminatory basis as may be approved by Authority.

I. Taxes and Other Charges

The charges under this Service Tariff shall be subject to adjustment as Authority deems necessary to recover from Customer any rates, taxes, assessments charged to Authority or any other charges mandated by federal, state and local agencies that are levied on Authority or that Authority is required to collect from its Customer if and to the extent such rates, charges, taxes or assessments are not recovered by Authority pursuant to another provision of this Service Tariff.

IV. General Provisions

General Provisions for service supplementing or modifying the Rules and this Service Tariff with regard to deliveries to Customer are as follows:

A. Character of Service

Alternating current, 60 hertz, three-phase or as may be required by Customer.

B. Allocation of Energy

1. For Firm Service

The kilowatt-hours of Firm Hydroelectric Energy associated with the Customer's allocation of Firm Hydroelectric Power provided to Customer under this Service Tariff shall be quantified using the LFS methodology as follows:

- a. For every hour of the Billing Period, the Customer receives hydropower energy (Firm Hydroelectric Energy) equal to the hourly metered load multiplied by the ratio of Customer's Contract Demand divided by the maximum hourly metered demand recorded in a given Billing Period, such ratio not to exceed the value of 1.
- b. When the maximum hourly metered demand for the Billing Period is less than or equal to the Contract Demand, all of the Customer's metered load will be supplied by Firm Hydroelectric Energy.
- c. When the maximum hourly metered demand for the Billing Period is greater than the Contract Demand, the portion of the Customer's metered load to be supplied by Firm Hydroelectric Energy is the sum of the values, for each hour of the Billing Period, of the Contract Demand divided by the maximum hourly metered demand in the Billing Period multiplied by the hourly metered energy consumption.
- d. All demand values will be adjusted for losses.

2. For Firm Peaking Service

Authority shall normally supply Firm Hydroelectric Peaking Power & Energy to Customer at 12.5 percent (12.5%) monthly load factor.

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3. Adverse Water Condition

Consistent with the Agreement, in the event of an Adverse Water Condition, the Authority may reduce the amount of Firm and Peaking Hydroelectric Power and Energy provided to Customer under this Service Tariff to an amount below such normal level, reductions shall be applied to all Customers served under this Service Tariff in proportion to their relative allocations of Firm and Peaking Hydroelectric Power and Energy.

C. Adjustment of Rates

The rates for power and energy contained in this Service Tariff may be revised by Authority from time to time in accordance with the Rules.

D. Adjustment of Charges

1. Transformer Losses

If delivery is made at transmission voltage but metered on the low side of Customer's substation, the meter readings will be adjusted by an amount based on the manufacturer's actual test report for such transformer or for a transformer of similar age and type, or in the absence of such test reports, by two percent to compensate for transformer losses.

2. Power Factor

There is no Power Factor adjustment of charges. Customer shall maintain a power factor at the point of delivery of not less than 90 percent lagging or leading.

E. Construction, Operation and Maintenance of Customer's Power Systems

For purposes herein, Customer's power system shall mean the power system of Customer and of any purchaser, transmitter or distributor designated by Customer to receive or handle the power contracted for herein, and for the purposes of this Provision, Authority's power system shall mean all facilities over which power and energy are delivered to Customer or Customer's local utility, whether or not owned by Authority.

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Customer shall construct, operate and maintain its power system and/or electrical equipment in a manner which will not interfere with any service supplied from Authority's power system. If, after reasonable notice of an unsatisfactory condition on Customer's power system, which interferes or may interfere with any service supplied from Authority's power system, Customer fails or refuses to cause such changes to be made as may be necessary to eliminate such unsatisfactory condition, Authority may discontinue furnishing electric service to Customer so long as such interference exists. Such a discontinuance of electric service will not relieve Customer of liability for the monthly charges provided for herein during the term said electric service is so discontinued. Nothing in this paragraph shall be construed to render Authority liable for any claims, demands, costs, losses, causes of action, damages, or liability of whatsoever kind or nature arising out of or resulting from the construction, operation or maintenance of Customer's power system.

F. Payment by Customer for Firm and Peaking Hydroelectric Power and Energy

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by Authority. In the event that there is a dispute on any items of a bill rendered by Authority, Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

G. Conflicts

In the event of any inconsistencies, conflicts or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Service Tariff and the Agreement, the provisions of the Agreement shall govern.

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V. Flow Adjustment Computation ("FAC")

The energy charges under this Service Tariff and the applicable Service Tariffs associated with the St. Lawrence Hydroelectric Project, in the aggregate, are subject to a credit or surcharge pursuant to a FAC in any rate year following a calendar year for which the Hydroelectric Project Rate Stabilization Reserve ("RSR") is greater than \$+25 million, or less than \$-25 million, respectively. The RSR will be used to ensure rate stability and cost recovery and its level will be determined and any credit or surcharge for the succeeding rate year will be calculated after the prior calendar year's costs and generation levels are known. Any credit or surcharge will be applied on a uniform basis to the monthly billing statements rendered pursuant to this Service Tariff during the succeeding rate year.

The FAC is inapplicable in any rate year succeeding a calendar year at the end of which the RSR is within the \$+25 million to \$-25 million range. If at the end of any calendar year, the RSR is determined to exceed \$+25 million, such excess amount will be credited pro-rata to Customers during the succeeding rate year pursuant to the FAC. If the RSR at the end of any calendar year is determined to be less than \$-25 million, the difference below \$-25 million will be surcharged pro-rata to Customers during the succeeding rate year pursuant to the FAC.

To the extent that there is a balance in the RSR (positive or negative) on the effective date of service under the applicable Agreement, arising out of service under a prior agreement for the sale of Project power and energy, that RSR balance shall be carried forward and maintained as the balance as of the effective date of service under such applicable Agreement.

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POWER AUTHORITY OF THE STATE OF NEW YORK
30 SOUTH PEARL STREET
ALBANY, NY 12207

**Electric Service Tariff for Partial Requirements
Municipal and Rural Electric Cooperative Systems
Firm and Peaking Hydroelectric Power Service**

Service Tariff No. 39A

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Schedule of Rates for Firm and Peaking Hydroelectric Power and Energy Service

I. Applicability

For wholesale sales of Project Firm and Peaking Hydroelectric Power and Energy (terms as defined below) to Partial Requirements Municipal and Rural Electric Cooperative Systems (terms as defined below) in New York State.

II. Abbreviations and Terms

A. The following abbreviations are used:

kW	kilowatt(s)
kWh	kilowatt-hour(s)

B. The term "Agreement" means an executed written agreement between Customer and Authority for the sale of Niagara Project Power and Energy.

C. The term "Authority" means the Power Authority of the State of New York, a corporate municipal instrumentality and political subdivision of the State of New York as defined in the Agreement.

D. The term "Billing Demand" has the meaning set forth in Section III of this Service Tariff.

E. The term "Billing Period" has the meaning set forth in Section III of this Service Tariff.

F. The term "Contract Demand" has the meaning set forth in Section III of this Service Tariff.

G. The term "Customer" means any of the Partial Requirements Municipal and Rural Electric Cooperative systems located within the State of New York identified as a counter-party in an Agreement with Authority.

H. The term "Firm Hydroelectric Power" means capacity (kW) from the Project including the capacity adjustments necessary to meet the Installed Reserve Margin set by the New York State Reliability Council intended to be available at all times, except for limitations provided in the Agreement, Service Tariff or Rules, and subject further to limitations provided in the NYISO Tariffs or applicable rules as they may be modified from time to time. Firm Hydroelectric Power shall not include peaking power.

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- I. The term “Firm Hydroelectric Energy” means energy (kWh) associated with Firm Hydroelectric Power as defined in the Agreement.
- J. The term “Firm Hydroelectric Peaking Power” means additional capacity (kW) from Project as defined in the Agreement.
- K. The term “Firm Hydroelectric Peaking Energy” means energy (kWh) associated with Firm Hydroelectric Peaking Power supplied at 12.5% monthly load factor.
- L. The term “Load Serving Entity” (“LSE”) has the meaning set forth in the Agreement, consistent with the NYISO Tariffs, as may be modified from time to time.
- M. The term “Municipal and Rural Electric Cooperative Systems” means the public bodies and nonprofit cooperatives located in New York State eligible to be served by Authority under the Niagara Redevelopment Act, 16 U.S.C. § 836, et seq.
- N. The term “NYISO” refers to the New York Independent System Operator, Inc. or any successor organization.
- O. The term “NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff (“OATT”) or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, or any successor tariffs to such NYISO Tariffs.
- P. The term “Partial Requirements” as used in this Service Tariff to describe Customer, means that Customer does not purchase all of its power and energy requirements from Authority.
- Q. The term “Project” means Authority’s Niagara Power Project.
- R. The term “Rules” means Authority’s Rules and Regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as applicable, as now in effect and as may be later amended from time to time by Authority.
- S. The term “Service Tariff” means this Service Tariff No. 39A.
- T. The term “Transmission Service Charge” (“TSC”) has the meaning set forth in the NYISO Tariffs, as such definition may be modified from time to time.

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III. Monthly Rates and Charges

A. Monthly Base Rates

The monthly demand and energy charges paid by Customers to Authority shall be based on the preference power rates charged by Authority, as shown below.

<u>Effective Date</u>	<u>Demand Rate</u> \$/kW-month	<u>Energy Rate</u> Mills/kWh
5/1/2018 until superseded	4.07	4.92

B. Monthly Demand Charge

The product of the demand rate set forth above and the Billing Demand.

C. Monthly Energy Charge

The product of the energy rate set forth above and the amount of energy provided under this Service Tariff.

D. Contract Demand

The maximum amount of hydroelectric kilowatts contracted for in the Agreement, as such amount may be modified from time to time pursuant to the terms of the Agreement, as measured at Authority's generating station switchyards.

E. Billing Demand

The Billing Demand shall be the lesser of (a) the hydroelectric Contract Demand, or (b) Customer's highest 30-minute integrated demand measured during the Billing Period, adjusted for losses.

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F. Billing Period

Any period of approximately thirty (30) days, generally ending with the last day of each calendar month.

G. NYISO Transmission and Related Charges ("NYISO Charges")

Each Customer is directly responsible for NYISO Charges because either it 1) is its own Load Serving Entity, or 2) has made provisions for a third party to perform LSE functions on its behalf. Authority is not responsible for NYISO Charges related to sales of Project Firm and Peaking Hydroelectric Power and Energy to the Partial Requirements Municipal and Rural Electric Cooperative Systems under this Service Tariff. Should these arrangements cease, and no new arrangements for (1) or (2) be made and instead Authority assumes the role of performing Load Serving Entity functions for any Customer receiving power service under this Service Tariff, the Customer shall compensate Authority for the following NYISO Charges if assessed on the Authority for services provided by the NYISO pursuant to the NYISO Tariffs(as the provisions of those tariffs maybe amended and in effect from time to time) with respect to power service to Customer under this Service Tariff, provided however, that such compensation shall be consistent with all provisions of the Agreement between Authority and Customer:

1. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the NYISO Tariffs from time to time;
2. Marginal losses;
3. The New York Power Authority Transmission Adjustment Charge ("NTAC");
4. Congestion costs, less any associated grandfathered Transmission Congestion Contracts ("TCCs") as provided in Attachment K of the NYISO OATT;
5. Any TSC assessed upon Authority by the local utility;
6. Any and all other charges, assessments or other amounts associated with deliveries to Customer that are assessed on Authority by the NYISO under the provisions of the NYISO Tariffs or under other applicable tariffs; and

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7. Any charges assessed on Authority for facilities needed to maintain reliability or incurred in connection with the NYISO's Comprehensive System Planning Process (including both economic projects and reliability backstop projects) with respect to power service to Customer under this Service Tariff, or required to be paid by Authority in accordance with law, whether charged by the NYISO or some other third party.

The NYISO Charges in this section, if applicable, are in addition to Authority production charges that are charged to Customer in accordance with other provisions of this Service Tariff.

H. Taxes and Other Charges

The charges under this Service Tariff shall be subject to adjustment as Authority deems necessary to recover from Customer any rates, taxes, assessments charged to Authority or any other charges mandated by federal, state and local agencies that are levied on Authority or that Authority is required to collect from its Customer if and to the extent such rates, charges, taxes or assessments are not recovered by Authority pursuant to another provision of this Service Tariff.

IV. General Provisions

General Provisions for service supplementing or modifying the Rules and this Service Tariff with regard to deliveries to Customer are as follows:

A. Character of Service

Alternating current, 60 hertz, three-phase or as may be required by Customer.

B. Allocation of Energy

1. For Firm Service

The kilowatt-hours allocated to Customer under this Service Tariff during a Billing Period shall be the amount scheduled for the Billing Period up to a maximum of the product of (a) the Billing Demand, (b) the number of hours in the Billing Period and (c) Customer's system load factor for the corresponding billing period in the previous year.

2. For Firm Peaking Service

Authority shall normally supply Firm Hydroelectric Peaking Power & Energy to Customer at 12.5 percent (12.5%) monthly load factor.

3. Adverse Water Condition

Consistent with the Agreement, in the event of an Adverse Water Condition, the Authority may reduce the amount of Firm and Peaking Hydroelectric Power and Energy provided to Customer under this Service Tariff to an amount below such normal level, reductions shall be applied to all Customers served under this Service Tariff in proportion to their relative allocations of Firm and Peaking Hydroelectric Power and Energy.

C. Energy Scheduling

Subject to the provisions of Authority Partial Requirements Customer Scheduling and Reconciliation Procedures ("the Procedures") which may be modified by Authority from time to time pursuant to the Agreement, Customer may schedule during Billing Period an amount of energy equaling up to the product of (a) the Contract Demand, (b) the number of hours in the Billing Period and (c) Customer's system load factor for the corresponding billing

period in the previous year. Over-scheduled energy shall be reconciled in accordance with the Procedures.

Customer will use Good Utility Practices (as defined in section D herein) to ensure that it does not schedule in any hour more energy than the lesser of Customer's load in such hour, adjusted for losses, or Customer's Contract Demand. Over the course of a billing period, Customer will use Good Utility Practices to ensure that it does not schedule more energy than the lesser of Customer's total monthly energy requirements, adjusted for losses, or Customer's energy entitlement for the Billing Period as determined in the foregoing Section IV,B entitled "Allocation of Energy".

In the event that the amount of energy scheduled by Customer in any hour during the Billing Period exceeds the "highest 30-minute integrated demand" referenced in the foregoing Section III-E entitled "Billing Demand", then for purposes of computing the Billing Demand, the highest hourly schedule submitted by Customer for the Billing Period shall be deemed to be the highest 30-minute integrated demand measured during the Billing Period, adjusted for losses.

D. Good Utility Practices

For the purposes of this Service Tariff, "Good Utility Practices" shall mean any of the practices, methods and acts engaged in or accepted by the NYISO or its successor, the Northeast Power Coordinating Council ("NPCC"), the North American Electric Reliability Corporation ("NERC") and a significant portion of the electric utility industry ("Industry") at the time the decision was made, which would have been expected to accomplish the desired result at a reasonable cost given the circumstances, consistent with the NYISO's, the NPCC's, the NERC's and the Industry's standards and practices for economy, reliability, safety and expedition with due regard for the protection of the environment. Good Utility Practices are not intended to be limited to the optimum practices, methods or acts to the exclusion of all others, but rather to a spectrum of possible practices, methods or acts engaged in or accepted by the NYISO, NPCC, NERC and Industry at the time the decision was made. Should there be conflicts between the practices, methods and acts of the NYISO, NPCC and NERC versus the Industry, the NYISO, NPCC and NERC standards and practices shall prevail.

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E. Payment by Customer for Firm and Peaking Hydroelectric Power and Energy

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by Authority. In the event that there is a dispute on any items of a bill rendered by Authority, Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

F. Conflicts

In the event of any inconsistencies, conflicts or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Service Tariff and the Agreement, the provisions of the Agreement shall govern.

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V. Flow Adjustment Computation ("FAC")

The energy charges under this Service Tariff and the applicable Service Tariffs associated with the St. Lawrence Hydroelectric Project, in the aggregate, are subject to a credit or surcharge pursuant to a FAC in any rate year following a calendar year for which the Hydroelectric Project Rate Stabilization Reserve ("RSR") is greater than \$+25 million, or less than \$-25 million, respectively. The RSR will be used to ensure rate stability and cost recovery and its level will be determined and any credit or surcharge for the succeeding rate year will be calculated after the prior calendar year's costs and generation levels are known. Any credit or surcharge will be applied on a uniform basis to the monthly billing statements rendered pursuant to this Service Tariff during the succeeding rate year.

The FAC is inapplicable in any rate year succeeding a calendar year at the end of which the RSR is within the \$+25 million to \$-25 million range. If at the end of any calendar year, the RSR is determined to exceed \$+25 million, such excess amount will be credited pro-rata to Customers during the succeeding rate year pursuant to the FAC. If the RSR at the end of any calendar year is determined to be less than \$-25 million, the difference below \$-25 million will be surcharged pro-rata to Customers during the succeeding rate year pursuant to the FAC.

To the extent that there is a balance in the RSR (positive or negative) on the effective date of service under the applicable Agreement, arising out of service under a prior agreement for the sale of Project power and energy, that RSR balance shall be carried forward and maintained as the balance as of the effective date of service under such applicable Agreement.

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New York Power Authority
Municipal Electric Utility and Rural Electric Cooperative Systems
Hydropower Contracts - Transmittal to the Governor

Exhibit "B"
July 30, 2019

Municipal Electric Utility or Rural Electric Cooperative System	City/ Town/ Village	Full or Partial Requirement	Firm Hydropower Allocation* (kW)	Peaking Power Allocation (kW)	Total Hydropower Allocation* (kW)	County	Region
Village of Akron	Akron	Partial	7,796	37	7,833	Erie	Western New York
Village of Andover	Andover	Partial	1,413	7	1,420	Allegany	Western New York
Village of Angelica	Angelica	Partial	1,616	8	1,624	Allegany	Western New York
Village of Arcade	Arcade	Partial	24,923	120	25,043	Wyoming	Finger Lakes
Steuben Rural Electric Cooperative Inc.	Bath	Full	12,733	60	12,793	Madison	Southern Tier
Village of Bath	Bath	Partial	13,489	64	13,553	Steuben	Southern Tier
Village of Bergen	Bergen	Partial	2,707	11	2,718	Genesee	Finger Lakes
Village of Boonville	Boonville	Partial	13,427	61	13,488	Oneida	Mohawk Valley
Oneida-Madison Electric Cooperative Inc.	Bouckville	Full	3,549	17	3,566	Madison	Central New York
Village of Brocton	Brocton	Partial	2,804	14	2,818	Chautauqua	Western New York
Village of Castile	Castile	Partial	1,515	7	1,522	Wyoming	Finger Lakes
Village of Churchville	Churchville	Partial	3,563	17	3,580	Monroe	Finger Lakes
Delaware County Electric Cooperative Inc.	Delhi	Full	11,607	46	11,653	Delaware	Southern Tier
Village of Endicott	Endicott	Partial	9,312	44	9,356	Broome	Southern Tier
Village of Fairport	Fairport	Partial	76,706	366	77,072	Monroe	Finger Lakes
Village of Frankfort	Frankfort	Partial	3,449	17	3,466	Herkimer	Mohawk Valley
Village of Freeport	Freeport	Partial	38,155	181	38,336	Nassau	Long Island
Village of Green Island	Green Island	Partial	3,028	13	3,041	Albany	Capital District
Village of Greene	Greene	Partial	6,835	32	6,867	Chenango	Southern Tier
Village of Greenport	Greenport	Full	5,278	25	5,303	Suffolk	Long Island
Village of Groton	Groton	Partial	4,447	21	4,468	Tompkins	Southern Tier
Village of Hamilton	Hamilton	Partial	10,755	51	10,806	Madison	Central New York
Otsego Electric Cooperative Inc.	Hartwick	Full	7,984	38	8,022	Otsego	Mohawk Valley
Village of Holley	Holley	Partial	4,350	21	4,371	Orleans	Finger Lakes
Village of Ilion	Ilion	Partial	16,131	61	16,192	Herkimer	Mohawk Valley
City of Jamestown	Jamestown	Partial	72,744	346	73,090	Chautauqua	Western New York
Village of Lake Placid	Lake Placid	Full	28,915	137	29,052	Essex	North Country
Village of Little Valley	Little Valley	Partial	3,840	18	3,858	Cattaraugus	Western New York
Village of Marathon	Marathon	Full	4,285	20	4,305	Cortland	Central New York
Massena Electric Department	Massena	Partial	23,570	107	23,677	St. Lawrence	North Country
Village of Mayville	Mayville	Full	4,523	21	4,544	Chautauqua	Western New York
Village of Mohawk	Mohawk	Partial	4,315	20	4,335	Herkimer	Mohawk Valley
Village of Penn Yan	Penn Yan	Partial	12,982	62	13,044	Yates	Finger Lakes
Village of Philadelphia	Philadelphia	Partial	2,092	10	2,102	Jefferson	North Country
City of Plattsburgh	Plattsburgh	Partial	103,916	492	104,408	Clinton	North Country
Village of Richmondville	Richmondville	Partial	2,700	13	2,713	Schoharie	Mohawk Valley
Village of Rockville Centre	Rockville Centre	Partial	28,660	136	28,796	Nassau	Long Island
Village of Rouses Point	Rouses Point	Partial	13,765	70	13,835	Clinton	North Country
City of Salamanca	Salamanca	Partial	13,029	61	13,090	Cattaraugus	Western New York
Village of Sherburne	Sherburne	Partial	12,829	63	12,892	Chenango	Southern Tier
City of Sherrill	Sherrill	Full	12,937	56	12,993	Oneida	Mohawk Valley
Village of Silver Springs	Silver Springs	Partial	908	4	912	Wyoming	Finger Lakes
Village of Skaneateles	Skaneateles	Partial	5,200	24	5,224	Onondaga	Central New York
Village of Solway	Solway	Partial	54,741	260	55,001	Onondaga	Central New York
Village of Spencerport	Spencerport	Partial	12,605	60	12,665	Monroe	Finger Lakes
Village of Springville	Springville	Partial	9,327	44	9,371	Erie	Western New York
Village of Theresa	Theresa	Partial	1,511	7	1,518	Jefferson	North Country
Village of Tupper Lake	Tupper Lake	Full	18,835	91	18,926	Franklin	North Country
Village of Watkins Glen	Watkins Glen	Full	6,218	29	6,247	Schuyler	Southern Tier
Village of Wellsville	Wellsville	Partial	10,306	49	10,355	Allegany	Western New York
Village of Westfield	Westfield	Partial	12,476	60	12,536	Chautauqua	Western New York
Total (kW)			764,800	3,600	768,400		

* Firm Hydropower and Total Hydropower amounts as of this date; the Contract accomodates future re-distribution of the IEDP program's 54 MW portion of Firm hydropower that is shared amongst the Customers.

A PUBLIC HEARING AUTHORIZED BY THE NEW YORK POWER
AUTHORITY'S BOARD OF TRUSTEES ON THE CONTRACT
EXTENSION FOR THE SALE OF HYDROPOWER TO
51 MUNICIPAL ELECTRIC UTILITY AND RURAL
ELECTRIC COOPERATIVE SYSTEMS

THE STENOGRAPHIC MINUTES of the above entitled matter
by NANCY L. STRANG, a Shorthand Reporter, on June 10,
2019 at 2:00 p.m. at the New York Power Authority, 30
South Pearl Street, Albany, New York

PRESENT:

David Work, Director of the Power Contracts, New York
Power Authority

Konstantin Podolny, Esq., Read & Laniado, LLP

Mark Schneider, CEO, New York Association at Public
Power c/o Delaware County Electric Corporation

APPEARING BY VIDEO CONFERENCE:

New York Power Authority
123 Main Street
White Plains, New York, 10601

Lorna Johnson, New York Power Authority

Karen Delince, Corporate Secretary, New York Power
Authority

1 MS. DELINCE: Good afternoon. This is a public
2 hearing required by law and authorized by the New York
3 Power Authority's Board of Trustees on the contract
4 extension for the sale of hydropower to 51 municipal
5 electric utility and rural electric cooperative
6 systems.

7 My name is Karen Delince and I'm the Authority's
8 Corporate Secretary.

9 New York State Public Authorities Law, Section 1009,
10 sets forth procedures for executing certain contracts
11 negotiated by the Authority.

12 First, prior to the hearing, it requires that notice
13 of the hearing be provided. Therefore, a notice was sent
14 to the Governor, the Senate's President Pro Temp, the
15 Senate Minority Leader and the Senate Finance Committee
16 Chair, the Assembly Speaker, the Assembly Minority
17 Leader and the Assembly Ways and Means Committee Chair.

18 In addition, notices appeared once a week for the
19 four weeks leading up to this hearing in the following
20 newspapers: Albany Times Union, Buffalo News, Dunkirk
21 Observer, Niagara Gazette, Plattsburg Press Republican
22 and Newsday.

23 The public was also given access to the proposed
24 contracts on the Authority's website and at the
25 Authority's White Plains office during the 30-day period

1 prior to today's hearing.

2 After the hearing, the public will be given access
3 to the hearing transcript, once it is completed, at
4 www.nypa.gov and at the White Plains office.

5 The next step in the process set forth in Section
6 1009 will be for the NYPA Trustees to reconsider the
7 proposed contract extensions in light of public
8 comments.

9 Once the Trustees have completed their final review,
10 the contracts will be forwarded to the Governor for his
11 consideration and approval.

12 If you plan to make an oral statement at this
13 hearing, I ask that you so indicate on the sign-in
14 sheet. Also, if you have a written statement, please
15 give a copy to Dave Work and one to the reporter.

16 Written statements may be of any length and will
17 appear in the record of the hearing in addition to oral
18 statements.

19 The record of the hearing will remain open for
20 additional comments through close of business, Tuesday,
21 June 11, 2019. Additional comments should be mailed,
22 faxed or emailed to the Corporate Secretary at 123 Main
23 Street, 9-B, White Plains, 10601, or 914-390-8040 or
24 secretarys.office@nypa.gov.

25 At this point, I would like to introduce Mr. Dave

1 Work, the Authority's Director of Power Contracts,
2 Allocations and Compliance, who will provide additional
3 details on the proposed customer contract extensions.
4 Thank you.

5 Mr. Work?

6 MR. WORK: Thank you, Ms. Delince. Good afternoon.
7 My name is Dave Work and I'm the Director of the Power
8 Contracts, Allocations and Compliance Division within
9 NYPA's Economic Development Department. I'm here today
10 to present a summary of the proposed new contracts for
11 the sale of Niagara hydropower to 47 municipal electric
12 utility and four rural electric cooperative system
13 customers located all across New York State.

14 The Authority sells 764.8 megawatts of firm
15 hydropower generated at the Niagara Project as
16 preference power to the Muni & Coop customers pursuant
17 to the Niagara Redevelopment Act and Public Authorities
18 Law Section 1005(5). These 51 Muni & Coops are the only
19 entities in New York that qualify as public bodies and
20 non-profit cooperatives entitled to preference power and
21 priority in the allocation of project power under the
22 Niagara Redevelopment Act. Preference Power is sold at
23 the Authority's cost-based rates to the Muni & Coops who
24 then resell the hydropower to the electricity consumers
25 located within their service territories under the Muni

1 & Coop Customers' retail service tariffs. The Muni &
2 Coop Customers' resale of Niagara hydropower to its
3 consumers is regulated pursuant to either A. the
4 Authority's applicable rules and regulations, contained
5 in Chapter X of Title 21 of the Official Compilation of
6 Codes, Rules and Regulations of the State of New York,
7 in the case of 12 full requirement customers, or B. the
8 Public Service Commission's substantially similar
9 applicable rules and regulations in the case of the 39
10 partial requirement customers, without profit but
11 allowing for a reasonable return on the customers'
12 investments in their electric distribution systems.

13 In addition, the Authority sells 3.6 megawatts of
14 firm peaking hydropower from the Niagara Power Project
15 to the Muni & Coops at Preference Power rates.

16 The Authority's current power sales agreements
17 with the Muni & Coop Customers originated in 1986, were
18 amended in 1991 and again in 2003 to, among other
19 things, extend the term to September 30, 2013 and
20 September 1, 2025, respectively.

21 The Muni & Coop Customers, represented by two
22 organizations, the Municipal Electric Utility
23 Association of New York State and the New York
24 Association of Public Power, collectively, the Customer
25 Associations, requested that the Authority consider

6
1 extension of the hydropower allocations purchased under
2 the current agreements prior to their expiration in 2025
3 because of the importance of the low-cost preference
4 power to the economic vitality of their communities. The
5 Customer Associations and Authority staff began meeting
6 periodically during the last three years to discuss
7 possible terms and conditions for the extension of the
8 allocations beyond September 2025.

9 At their March 26, 2019 meeting the NYPA Trustees
10 conditionally approved a long-term extension to the term
11 of service for the Muni & Coops' hydropower allocations
12 through September 1, 2040.

13 The following is a summary of a few of the pertinent
14 provisions in the proposed Muni & Coop contracts:

15 Existing individual Muni & Coop allocations would be
16 extended through September 1, 2040; The Customers agreed
17 to take actions to support the goals underlying the
18 Clean Energy Standard, Renewable Energy Standard and
19 State Energy Plan. As more specifically described in the
20 State Energy Plan and Clean Energy Standard, such goals,
21 which are targeted to be achieved statewide by 2030,
22 include: A. reduction of greenhouse gas emissions from
23 1990 levels of 40%; B. achievement of a goal of 50% of
24 the statewide generation of electricity coming from
25 carbon-free renewable energy sources, such as solar,

1 wind, hydropower and biomass; and C. a 23% decrease in
2 energy consumption in buildings statewide from 2012
3 baseline levels; For the purpose of supporting the Clean
4 Energy Standard, Renewable energy standard and state
5 energy plan goals, the customers, working with their
6 respective Customer Associations, agreed to work with
7 NYPA to, among other things, revise existing Customer
8 retail tariffs in order to encourage efficient off-peak
9 usage and to implement 4 June 10, 2019
10 distribution-level technologies that encourage the
11 adoption of cost-effective distributed energy resources
12 and other energy services; The Proposed Contract
13 incorporates a more developed approach by the Authority
14 to administering its Niagara hydropower sales to the
15 Customers in a manner that is consistent with the Clean
16 Energy Standard and State Energy Plan; The customers
17 agreed to continue expanding energy efficiency and
18 energy conservation activities to benefit their
19 respective service territories including agreeing to a
20 mandatory 1 mil, which is one-thousandth of a dollar per
21 kilowatt hour, added charge to their retail rates, at a
22 minimum, to fund energy projects such as high efficiency
23 residential, commercial and industrial lighting, motors,
24 solar programs, smart meters, demand response and
25 various energy saving programs, projects and policies;

1 The Proposed Contract creates a joint Customer/NYPA,
2 Implementation Task Force to, among other things, meet
3 regularly to track energy projects funded through this
4 mechanism. The Task Force will track achievements to be
5 submitted to NYPA annually, as well as monitor,
6 identify, and assist individual Muni & Coop Customers
7 that may be struggling to comply with energy project
8 implementation and utilization of funds; The Proposed
9 Contract also creates a Technology & Innovation Task
10 Force comprised of Authority and Customer Associations'
11 staff to investigate and pursue, as appropriate,
12 technologies and innovations at the locus of New York
13 State's energy policy, customer needs, and Authority
14 leadership; The full requirement customers, currently
15 comprised of eight municipal electric systems and four
16 rural electric cooperatives that receive all of their
17 power and energy needs from NYPA, agreed to pay the zero
18 emissions credit charge and renewable energy credit
19 charge. This will enable the Authority to recover these
20 costs incurred through the New York Independent System
21 Operator as the Load Serving Entity for the full
22 requirement Muni & Coop Customers. The 39 partial
23 requirement Customers who receive only the hydropower
24 allocation from the Authority, with their remaining
25 power requirements provided by a third-party supplier,

1 will pay the Clean Energy Standard-related charges
2 through such third-party supplier that acts as the load
3 serving entity for such partial requirement Muni & Coop
4 Customers; The allocations will continue to be sold
5 pursuant to existing tariffs, No. 38A in the case of
6 full requirement customers and No. 39A in the case of
7 partial requirement customers. While there are no
8 changes to preference power rates contained in the
9 tariffs, certain non-relate related provisions of the
10 tariffs have been modified to ensure their language
11 comports with the Proposed Contract language. Customers
12 have reviewed and accepted the modified tariffs, which
13 would become effective on the effective date of the
14 Proposed Contract; The Proposed Contract clarifies the
15 Authority's obligations to supply substitute energy in
16 the event of adverse water conditions that impacts
17 Niagara Power Project's operations and continues to
18 maintain the Authority's right to curtail hydropower
19 sales in such an event; The Proposed Contract contains
20 updated provisions to address a number of matters,
21 including customer metering arrangements, scheduling and
22 settlement procedures, and early outreach concerning
23 future allocation extensions; Customers would be able to
24 utilize, at their option and at no cost, a base level of
25 service of the Authority's New York Energy Manager. The

1 Customers could participate at higher levels of the New¹⁰
2 York Energy Manager service provided that any service
3 fees and associated equipment costs would be paid for by
4 the individual customer.

5 As Ms. Delince stated earlier, the Authority will
6 accept your comments on the proposed contract until the
7 close of business on Tuesday, June 11, 2019.

8 I will now turn the hearing back to Ms. Delince.
9 Thank you.

10 MS. DELINCE: Thank you, Mr. Work.

11 At this point, I will call on speakers who have
12 signed in starting with Ken Podolny. Please start by
13 stating your full name and affiliation for the record.

14 MR. POLOLNY: Good Afternoon. My name is
15 Konstantin Podolny from the firm of Read and Laniado.
16 We represent the Municipal Electric Utilities
17 Association of New York State, MEUA.

18 On behalf of the MEUA I would like to thank the
19 Authority for this opportunity to submit comments in
20 support of the Contract Extensions for the sale of
21 hydropower to 51 municipal electric utility and rural
22 electric cooperative systems.

23 The MEUA is an association of 40 New York municipal
24 electric utilities. It was formed in 1930 to represent
25 its members' interest with respect to efficient and

1 cost-effective provision of electric services to its
2 members' community customers. All MEUA members are
3 entitled to a portion of the Niagara Power Project,
4 Niagara Project, by federal and state statute, and
5 contract.

6 The MEUA supports the extension of the Niagara
7 Project Purchase Power Agreements.

8 The present Agreements between MEUA members and NYPA
9 are due to expire in 2025. The current extension would
10 extend the term to 2040, ensuring continued supply of
11 hydropower to these communities for decades to come.

12 The contract extensions are legally justified and in
13 the public interest. The MEUA worked closely with the
14 Authority to negotiate this extension for months. The
15 parties took great care to ensure that the extension
16 includes a commitment to advancing the state's energy
17 policy goals, such as REV and the CES. The extension of
18 the Agreements is critical to the economic and social
19 vitality of the forty MEUA member communities. Now is
20 the perfect time to see these contracts extended. New
21 York's energy policy is undergoing an unprecedented
22 shift, and through this extension MEUA members are
23 formally committing to support the State's ambitious
24 objectives.

25 Municipal systems are owned and operated by the

1 people of their communities. All but one of these
2 systems predate the creation of the Authority, and the
3 construction of the Niagara Project. As public power
4 systems, they have a community legacy and, in turn, a
5 responsibility for the future. MEUA members are forty
6 of the fifty-one in-state preference customers of NYPA's
7 Niagara Project. The MEUA represents the bulk of the
8 public power systems in New York State.

9 Over 100 years ago, Village fathers showed great
10 foresight when they chose public power. At the time,
11 these small communities were not served by private
12 utilities and the Villages were forced to meet the needs
13 of their communities. In 1956, the MEUA endorsed the
14 Lehman-Roosevelt bill that created the NRA and allowed
15 the construction of the Niagara Project.

16 In 1961, these Villages entered their public power
17 partnership for Niagara hydropower. The MEUA continued
18 its support for the Authority, signing power purchase
19 agreements before the Niagara Project was completed, at
20 a time the Project was unpopular. That decision showed
21 great foresight, as it was not an obvious choice at the
22 time. When MEUA members entered into their Niagara
23 contracts in 1961, they had many options and it was not
24 clear that Niagara hydropower was, or would be, less
25 costly than other available alternatives. Many

1 communities chose not to purchase this renewable
2 resource and it was not until the early to mid-1970s
3 that Niagara hydropower was recognized as a prized
4 commodity. In order to support public power, however,
5 the MEUA members had the foresight and courage to sign
6 those contracts with NYPA. Over the years, these
7 contracts have been renewed several times. This latest
8 extension should be approved to preserve this venerable
9 relationship and carry the state and federal guarantee
10 of preference power from the Niagara Project well into
11 the future.

12 The currently existing contracts and these
13 extensions are deeply rooted in federal and state law.
14 On the federal front, the Niagara Redevelopment Act was
15 enacted in 1957 following years of debate. The NRA
16 directed the Federal Power Commission, FPC, the
17 predecessor to FERC, to issue NYPA the license to
18 construct and operate the Niagara Project. Despite much
19 debate, the NRA included the now well known preference
20 clause, In order to assure that at least 50 per centum
21 of the project power shall be available for sale and
22 distribution primarily for the benefit of the people as
23 customers, particularly domestic and rural consumers, to
24 whom such power shall be made available at the lowest
25 rates reasonably possible and in such manner as to

1 encourage the widest possible use, the licensee in
2 disposing of 50 per centum of the project power shall
3 give preference and priority to public bodies and
4 non-profit cooperatives within economic transmission
5 distance.

6 The most recent FERC license for the Niagara Project
7 contains the same directive. In addition, State Law
8 contains the same set aside. Public Authorities Law §
9 1005(5), which guides NYPA in its development and
10 operation of the Niagara Project mandates that in the
11 development of hydro-electric power such projects shall
12 be considered primarily as for the benefit of the people
13 of the State as a whole and that the Authority shall
14 make provision so that municipalities may secure a
15 reasonable share of the power generated by such
16 projects.

17 After years of experience, discussion and occasional
18 disagreement, it is now settled to whom the Niagara
19 power goes. Those are the public bodies and non-profit
20 cooperatives that now have Niagara contracts. They are
21 known as preference customers. There are 51 legally
22 eligible preference customers in New York State. They
23 are the 40 MEUA members, the four co-ops, and a handful
24 of others. It is now settled, beyond debate, that these
25 51 entities are the ones entitled to New York's share of

1 the 50 per centum of the project power. There is simply¹⁵
2 no question but that the MEUA members, and the others I
3 mentioned, are as a matter of law entitled to Niagara
4 project power contracts.

5 The current extension of the Agreements is valuable
6 to preference power communities and to the people of New
7 York State as a whole. In particular, the value comes
8 in the form of energy efficiency, environmental
9 protection, economic development, and system
10 reliability.

11 MEUA members have long been at the vanguard of
12 long-term investment in energy efficiency. Having
13 recognized Niagara hydropower as a precious state
14 resource, the members have invested heavily in
15 efficiency measures to conserve it. Through their
16 participation in an energy efficiency program, MEUA
17 members have invested millions in energy efficiency for
18 both system-wide and customer specific applications.
19 The MEUA's recent successes include increasing the use
20 of energy efficient LED technologies; developing a pilot
21 program to promote the use of renewable energy through
22 financial incentives; and providing non-energy benefits
23 like improved reliability, emissions reductions, and
24 increased productivity to customers.

25 Since 2003, MEUA members and NYPA have had a hybrid

1 and electric vehicle program that allows members to
2 experiment, share information, and plan and implement
3 individual programs and projects. These efforts include
4 electrifying local fleets through replacing members'
5 bucket trucks with hybrid technologies and installing
6 public and private charging infrastructure to ensure the
7 success of increased electric vehicle use.

8 MEUA members pride themselves on the extraordinary
9 reliability of their systems. Member communities work
10 hard and plan consistent, cost-effective maintenance to
11 ensure reliability. Some systems are in areas where
12 conditions can be rough, and reliability is a constant
13 challenge. These communities meet that challenge with
14 creativity and long-term investment. For example, one
15 MEUA municipality, Rouses Point, has invested in an
16 extensive and expensive undergrounding project to
17 counter ferocious weather and frequent icing. They,
18 like all the MEUA communities, are constantly building
19 for the future.

20 Economic development is another product of the MEUA's
21 Niagara power contracts. The purchase of Niagara power
22 by MEUA members allows them to provide low-cost power to
23 their citizens and businesses. Energy conservation
24 programs show this power is used wisely. The Niagara
25 power contracts are crucial to the vitality of these

1 communities as some of the member communities are
2 economically challenged or are in rural areas that have
3 lost population and need economic growth.

4 MEUA members have set aside 54 MW of their Niagara
5 allocation to be used for strategic economic
6 development. To date, about one-third of that 54
7 Megawatts of power has been allocated to stimulate
8 economic development in these communities. Dozens of
9 businesses have relied on that program and the MEUA
10 estimates that thousands of jobs have been created or
11 saved by that one program alone. In short, the MEUA has
12 had, and continues to have, aggressive energy
13 conservation and economic development programs to spread
14 the benefits gained from the Agreements.

15 Against this background, extension of the Niagara
16 power contracts makes sense at this time. The current
17 contracts were last extended in 2003. Those contracts
18 extended the 1991 Agreement. The 1986 contracts were
19 scheduled to expire in 2001. The 1991 amendment and the
20 2003 extension collectively extended the term an
21 additional twenty-four years, both times a decade in
22 advance of the end of the contract.

23 NYPA and the MEUA are in the same situation today.
24 The 2003 contract extension is due to expire in six
25 years. By extending the contract to 2040, the parties

1 will be repeating the highly successful course set in
2 1991 and 2003. And like in 1991 and 2003, the MEUA and
3 NYPA have addressed contract extension in a broader
4 context that includes policy objectives, energy
5 conservation, environmental protection, economic
6 development, and system reliability.

7 The MEUA recognizes that the safety and reliability
8 of the electric power system are paramount. MEUA
9 members need this contract extension to plan for the
10 future and to assure system reliability. The member
11 communities need the extension for their economic and
12 social vitality. Most importantly, the Agreement should
13 be approved because it gives these public power
14 communities the power they are entitled to under the
15 NRA. In conclusion, the MEUA urges the trustees to
16 endorse the Agreements as presently proposed and urges
17 the Governor to approve them.

18 MS. DELINCE: Thank you, Mr. Podolny.

19 Next on my list I have Mark Schneider.

20 Mr. Schneider, you have the floor.

21 MR. SCHNEIDER: Thank you, Madam Corporate
22 Secretary.

23 My name is Mark Schneider. I am the General Manager
24 of the Delaware County Electric Cooperative,
25 Incorporated.

1 Today, I am appearing in support of the proposed
2 contract extensions for hydroelectric power and energy
3 between the New York Power Authority, NYPA, and the 51
4 municipally and cooperatively-owned utilities in New
5 York State. I represent the New York Association of
6 Public Power, NYAPP, which is one of the two
7 associations that negotiated with NYPA representatives
8 over several years to develop the contract that is the
9 subject of this public hearing. NYAPP is composed of
10 all the rural electric cooperatives in New York, the
11 generating municipal electric utilities and other
12 municipal electric utilities.

13 NYAPP and its members strongly endorse the proposed
14 contract, which has been approved by the NYPA Trustees.
15 There are several key elements to this contract which
16 are worth stressing at this public hearing.

17 First of all, the contract would extend the
18 hydroelectric power supply contracts from NYPA to each
19 of the municipally and cooperatively-owned utilities
20 from 2025 to September 1, 2040. The hydroelectric power
21 is supplied pursuant to the Niagara Redevelopment Act,
22 NRA, a federal statute that was enacted in 1957, 16
23 U.S.C. Section 836. The NRA provides that 40% of the
24 output of the Project must go to so-called preference
25 customers, who are the municipally and

1 cooperatively-owned utilities in New York State that
2 operate their own utility systems. Ten percent of the
3 power is reserved for out-of-state preference customers.
4 The municipally and cooperatively-owned utilities began
5 receiving this power under contract in 1961, and those
6 contracts have been extended several times. This
7 hydropower is supplied to the 51 municipally and
8 cooperatively-owned utilities all over New York State.
9 In my community in upstate New York, the low-cost
10 hydroelectric power is really the lifeblood of our
11 community. It allows our residences, farms and
12 businesses to survive. The extension of the power
13 supply contract to 2040 will allow these businesses to
14 plan for the future.

15 Second, the NYAPP members and members of the
16 Municipal Electric Utilities Association of New York
17 State, MEUA, have agreed to support the long-term clean
18 energy goals of New York State, including support for
19 the goals of New York's innovative state energy plan, as
20 well as the Clean Energy Standard.

21 Third, the NYAPP and MEUA members have agreed to
22 contribute at least 1 mil/kilowatt hour to energy
23 efficiency programs within their service territories.
24 The systems are presently engaged in many innovative
25 energy efficiency and renewable energy programs. This

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agreement will ensure that the NYAPP and MEUA members
will expand that work.

Fourth, NYPA, NYAPP and MEUA will work collectively
to examine the potential role of new technology and will
look for ways to ensure that cost-effective new
technologies are introduced into the systems. In
addition, where funds can be obtained for more
innovative projects and economic development
initiatives, they will be pursued.

Finally, I would be remiss if I did not clearly state
our support for NYPA's efforts to bring this contract to
a mutually beneficial conclusion. Support for this
effort came from Gil Quinones as President of NYPA, but
also from Keith Hayes of the NYPA staff and his legal
and technical team. The cooperative working
relationship has been critical. We have an excellent
working partnership with NYPA and we look forward to
achieving our mutual goals for the benefit of our
citizens.

NYAPP supports the new long-term contract extensions
to 2040 and we look forward to answering any questions.

Thank you.

MS. DELINCE: Thank you Mister Schneider.

Please remember to live a copy of your statement with
the reporter and if you don't have an extra copy, please

1 email it to me at secretaries@nypa.gov.

2 Is there anyone else present who wishes to make a
3 statement?

4 MR. WORK: There is not anybody else present.

5 MS. DELINCE: Okay, well, having heard all the
6 speakers who signed up to speak, we were recess now and
7 reconvene when additional speakers are here. Thank you.

8 (There was a recess of the proceedings and
9 recommencement immediately after.)

10 The June 10, 2019 public hearing on the proposed
11 contract extension from the sale of hydropower 251
12 municipal electric utility and rural collective
13 cooperatives is now officially closed. As I previously
14 stated, the record of the hearing will remain open for
15 additional comments and will close on Tuesday, June 11,
16 2019.

17 Thank you and good day.

18 (Whereas the above entitled proceeding was concluded at
19 6:00 p.m.)
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CERTIFICATION

I, NANCY L. STRANG, Shorthand Reporter and Notary
Public in and for the State of New York, hereby CERTIFY
that the record taken by me at the time and place noted
in the heading hereof is a true and accurate transcript
of same, to the best of my ability and belief.

NANCY L. STRANG
Legal Transcription
2420 Troy Schenectady Road
Niskayuna, New York 12309

Dated _____

**STATEMENT IN SUPPORT OF CONTRACT EXTENSIONS OF THE
MUNICIPAL ELECTRIC UTILITIES ASSOCIATION OF NEW YORK STATE**

Pursuant to the Notice of Public Hearing issued by the Power Authority of the State of New York (“NYPA” or the “Authority”) on May 8, 2019, the Municipal Electric Utilities Association of New York State (“MEUA”) submits the following comments in support of the Contract Extensions for the sale of hydropower to fifty-one municipal electric utility and rural electric cooperative systems.

The MEUA is an association of forty New York municipal electric utilities. The MEUA was formed in 1930 to represent its members’ interest with respect to efficient and cost-effective provision of electric services to its members’ community customers. All MEUA members are entitled to a portion of the Niagara Power Project (“Niagara Project”) by federal and state statute, and contract.¹ The MEUA supports the extension of the Niagara Project Purchase Power Agreements (“the Agreements”). The present Agreements between MEUA members and NYPA run until 2025. The contracts at issue would extend the present term from 2025 to 2040.

These contract extensions are legally justified and in the public interest and should be endorsed by NYPA’s trustees and approved by the Governor. Reasons including federal and state law, public policy, energy conservation, system reliability, and economic development support the extension of these contracts. Additionally, extension of the Agreements is critical to the economic and social vitality of the forty MEUA member communities. The Niagara Redevelopment Act (“NRA”) and New York State Public Authority Law (“PAL”) entitle these public power communities to the Niagara power.² Now is the perfect time to see these contracts

¹ 16 U.S.C. §§ 836, 836a (2018), N.Y. Pub. Auth. Law § 1005(5) (McKinney 2019).

² *Id.*

extended. New York's energy policy is undergoing an unprecedented shift, and through this extension MEUA members are formally committing to support the State's ambitious objectives.

Municipal systems are owned and operated by the people of their communities. All but one of these systems predate the creation of the Authority, and the construction of the Niagara Project. As public power systems, they have a community legacy and, in turn, a responsibility for the future. MEUA members are forty of the fifty-one in-state "preference customers" of NYPA's Niagara Project. The MEUA represents the bulk of the public power systems in New York State.

Over a hundred years ago, Village fathers showed great foresight when they chose public power. At the time, these small communities were not served by private utilities, and the Villages were forced to meet the needs of their communities. In 1956, the MEUA endorsed the Lehman-Roosevelt bill that created the NRA and allowed the construction of the Niagara Project.

In 1961, these Villages entered their public power partnership for Niagara hydropower. The MEUA continued its support for the Authority, signing power purchase agreements before the Niagara Project was completed, at a time the Project was unpopular. That decision showed great foresight, as it was not an obvious choice at the time. When MEUA members entered into their Niagara contracts in 1961, they had many options and it was not clear that Niagara hydropower was, or would be, less costly than other available alternatives. Many communities chose not to purchase this renewable resource, and it was not until the early to mid-1970s that Niagara hydropower was recognized as a prized commodity. However, the MEUA members had the foresight and courage to sign those contracts with NYPA. Over the years, these contracts have been renewed several times. This latest extension should be approved to preserve this

venerable relationship and carry the state and federal guarantee of preference power from the Niagara Project well into the future.³

The current contracts here have been negotiated pursuant to both state and federal law. On the federal front, the NRA was enacted in 1957. The NRA directed the Federal Power Commission (“FPC”) (the predecessor to FERC) to issue NYPA the license to construct and operate the Niagara Project.⁴ Despite much debate, the NRA included the now well-known “preference clause”:

In order to assure that at least 50 per centum of the project power shall be available for sale and distribution primarily for the benefit of the people as customers, particularly domestic and rural consumers, to whom such power shall be made available at the lowest rates reasonably possible and in such manner as to encourage the widest possible use, the licensee in disposing of 50 per centum of the project power shall give preference and priority to public bodies and non-profit cooperatives within economic transmission distance.⁵

The most recent FERC license for the Niagara Project contains the same directive. In addition, State Law contains the same set aside. PAL § 1005(5), which guides NYPA in its development and operation of the Niagara Project, mandates that “in the development of hydro-electric power . . . such projects shall be considered primarily as for the benefit of the people of the State as a whole” and that “the [A]uthority shall . . . make provision so that municipalities . . . may secure a reasonable share of the power generated by such projects.”⁶ The “preference power” at issue in the current extensions is deeply rooted in federal and state legislation, and the long history of cooperation between the MEUA and the Authority.

³ *Id.*

⁴ *Power Auth. of the State of New York*, 19 F.P.C. 186, 193 (Jan. 30, 1958).

⁵ *Id.*

⁶ N.Y. Pub. Auth. Law § 1005(5) (McKinney 2019).

Interestingly, at the time the NRA was being debated in Congress, then-NYPA head Robert Moses testified that NYPA would never sell a bond if the preference clause was included, and the Niagara Project would never be built. More recently, in the 1970s and 1980s, the MEUA successfully defended its members' hydroelectric allocations. After years of experience, cooperation, and occasional disagreement, NYPA and the MEUA members continue to thrive, and the preference clause continues to provide MEUA members with their power.

The current extension of the Agreements is valuable to preference power communities and to the people of New York State as a whole. In particular, the value comes in the form of energy efficiency, environmental protection, economic development, and system reliability.

MEUA members have long been at the vanguard of long-term investment in energy efficiency. Having recognized Niagara hydropower as a precious state resource, the members have invested heavily in efficiency measures to conserve it. Currently, several MEUA members participate in the Independent Energy Efficiency Program ("IEEP"). Through 2017, over \$33 million was invested through the IEEP in energy efficiency for both system-wide and customer specific applications. The MEUA and IEEP's recent successes include increasing the use of energy efficient LED technologies; developing a pilot program to promote the use of renewable energy through financial incentives; and providing non-energy benefits like improved reliability, emissions reductions, and increased productivity to customers.

Since 2003, MEUA members and NYPA have had a hybrid and electric vehicle program that allows members to experiment, share information, and plan and implement individual programs and projects. These efforts include electrifying local fleets through replacing members' bucket trucks with hybrid technologies, and installing public and private charging infrastructure to ensure the success of increased electric vehicle use.

MEUA members pride themselves on the extraordinary reliability of their systems. Member communities work hard and plan consistent, cost-effective maintenance to ensure reliability. Some systems are in areas where conditions can be rough, and reliability is a constant challenge. These communities meet that challenge with creativity and long-term investment. For example, one MEUA municipality, Rouses Point, has invested in an extensive and expensive undergrounding project to counter ferocious weather and frequent icing. They, like all the MEUA communities, are constantly building for the future.

Economic development is also a product of the MEUA's Niagara power contracts. The purchase of Niagara power by MEUA members allows them to provide low-cost power to their citizens and businesses. Energy conservation programs show this power is used wisely. The Niagara power contracts are crucial to the vitality of these communities as some of the member communities are economically challenged or are in rural areas that have lost population and need economic growth.

Instead of merely relying on their Niagara power, MEUA members have set aside 54 MW of that power for allocation to customers for strategic economic development. To date, about one-third of that 54 MW of power has been allocated to stimulate economic development in these communities. Dozens of businesses have relied on that program, and the MEUA estimates that thousands of jobs have been created (or saved) by that one program alone. In short, the MEUA has had, and continues to have, aggressive energy conservation and economic development programs to spread the benefits gained from the Agreements.

Against this background, extension of the Niagara power contracts makes sense at this time. The current contracts were last extended in 2003. Those contracts extended the 1991 Agreement. The 1986 contracts were scheduled to expire in 2001. The 1991 amendment and the

2003 extension collectively extended the term an additional twenty-four years, both times a decade in advance of the end of the contract.

NYPA and the MEUA are in the same situation today. The 2003 contract extension is due to expire in six years. By extending the contract to 2040, the parties will be repeating the highly successful course set in 1991 and 2003. And like in 1991 and 2003, the MEUA and NYPA have addressed contract extension in a broader context that includes policy objectives, energy conservation, environmental protection, economic development, and system reliability.

The MEUA recognizes that the safety and reliability of the electric power system are paramount. MEUA members need this contract extension to plan for the future and to assure system reliability. The member communities need the extension for their economic and social vitality. Most importantly, the Agreement should be approved because it gives these public power communities the power they are entitled to under the NRA. In conclusion, the MEUA urges the trustees to endorse the Agreements as presently proposed and urges the Governor to approve them.



COMMENTS OF

MARK SCHNEIDER

GENERAL MANAGER

Of the

DELAWARE COUNTY ELECTRIC COOPERATIVE, INC.

On Behalf of the

NEW YORK ASSOCIATION OF PUBLIC POWER

In support of

LONG-TERM CONTRACT EXTENSION FOR USE OF NIAGARA PROJECT

HYDROPOWER FOR

MUNICIPALLY AND COOPERATIVELY-OWNED UTILITIES IN NEW YORK STATE

June 10, 2019

My name is Mark Schneider. I am the General Manager of the Delaware County Electric Cooperative, Inc. Today, I am appearing in support of the proposed contract extensions for hydroelectric power and energy between the New York Power Authority (“NYPA”) and the 51 municipally and cooperatively-owned utilities in New York State. I represent the New York Association of Public Power (“NYAPP”), which is one of the two associations that negotiated with NYPA representatives over several years to develop the contract that is the subject of this public hearing. NYAPP is composed of all the rural electric cooperatives in New York, the generating municipal electric utilities and other municipal electric utilities.

NYAPP and its members strongly endorse the proposed contract, which has been approved by the NYPA Trustees. There are several key elements to this contract which are worth stressing at this public hearing.

First of all, the contract would extend the hydroelectric power supply contracts from NYPA to each of the municipally and cooperatively-owned utilities from 2025 to September 1, 2040. The hydroelectric power is supplied pursuant to the Niagara Redevelopment Act (“NRA”), a federal statute that was enacted in 1957 (16 U.S.C. Section 836). The NRA provides that 40% of the output of the Project must go to so-called “preference customers,” who are the municipally and cooperatively-owned utilities in New York State that operate their own utility systems (10% of the power is reserved for out-of-state “preference customers”). The municipally and cooperatively-owned utilities began receiving this power under contract in 1961, and those contracts have been extended several times. This hydropower is supplied to the 51 municipally and cooperatively-owned utilities all over New York State. In my community in upstate New York, the low-cost hydroelectric power is really the lifeblood of our community. It allows our residences, farms and businesses to survive. The extension of the power supply contract to 2040 will allow these businesses to plan for the future.

Second, the NYAPP members and members of the Municipal Electric Utilities Association of New York State (“MEUA”) have agreed to support the long-term clean energy goals of New York State, including support for the goals of New York’s innovative state energy plan, as well as the Clean Energy Standard.

Third, the NYAPP and MEUA members have agreed to contribute at least 1 mil/kilowatthour to energy efficiency programs within their service territories. The systems are presently engaged in many innovative energy efficiency and renewable energy programs. This agreement will ensure that the NYAPP and MEUA members will expand that work.

Fourth, NYPA, NYAPP and MEUA will work collectively to examine the potential role of new technology and will look for ways to ensure that cost-effective new technologies are introduced into the systems. In addition, where funds can be obtained for more innovative projects and economic development initiatives, they will be pursued.

Finally, I would be remiss if I did not clearly state our support for NYPA’s efforts to bring this contract to a mutually beneficial conclusion. Support for this effort came from Gil Quinones as President of NYPA, but also from Keith Hayes of the NYPA staff and his legal and technical team. The cooperative working relationship has been critical. We have an excellent working partnership with NYPA and we look forward to achieving our mutual goals for the benefit of our citizens.

NYAPP supports the new long-term contract extensions to 2040 and we look forward to answering any questions.

Thank you.

New York Power Authority
Extension Recommendations - RNY Power Allocations for Retention Purposes (Large Businesses, Small Business, and/or NFP Corporations)

Exhibit "A"
July 30, 2019

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	Current kW Amount	kW Recommendation	Job Commitments	Capital Investment Commitment (\$)		Contract Term (years)
1	Amneal Pharmaceuticals of New York, LLC	Hauppauge	Suffolk	Long Island	LIPA	Manufactures pharmaceuticals	250	246	349	\$350,000	(1)	7
2	Amneal Pharmaceuticals of New York, LLC	Brookhaven	Suffolk	Long Island	LIPA	Manufactures pharmaceuticals	346	346	590	\$30,000,000		7
3	Arnot Ogden Medical Center	Elmira	Chemung	Southern Tier	NYSEG	Hospital	910	910	1,950	\$15,000,000		7
4	BASF Corporation	East Setauket	Suffolk	Long Island	LIPA	Supplies products to the chemicals and plastics industries	126	126	20	\$250,000		7
5	Battistoni Italian Specialty Meats, LLC	Buffalo	Erie	Western New York	NGRID	Manufacturer of Italian meat products	216	216	27	\$200,000		7
6	Cannon Industries, Inc.	Rochester	Monroe	Finger Lakes	RGE	Fabrication and powder coating services	190	190	78	\$500,000		7
7	CPP-Syracuse, Inc.	Chittenango	Madison	Central New York	NGRID	Metal casting foundry for turbine parts	906	906	270	\$10,000,000		7
8	D'Addario & Company, Inc.	Farmingdale	Suffolk	Long Island	LIPA	Manufacturer of musical instrument strings	800	800	821	\$13,300,000		7
9	Geneva General Hospital	Geneva	Ontario	Finger Lakes	NYSEG	Hospital & healthcare center	470	416	653	\$16,000,000	(1)	7
10	International Controls & Measurements Corp.	Syracuse	Onondaga	Central New York	NGRID	Manufacturer of electronic HVAC controls	386	386	180	\$3,500,000		7
11	International Paper Company	Ticonderoga	Essex	North Country	NGRID	Manufactures paper	5,600	1,600	620	\$25,000,000	(2)	7
12	Jetro Cash and Carry Enterprises, LLC	Bronx	New York	New York City	CONED	Wholesale groceries, food & restaurant supplies	206	206	123	\$150,000		7
13	Jetro Cash and Carry Enterprises, LLC	Queens	Queens	New York City	CONED	Wholesale groceries, food & restaurant supplies	186	186	82	\$150,000		7
14	Jetro Cash and Carry Enterprises, LLC	Brooklyn	Kings	New York City	CONED	Wholesale groceries, food & restaurant supplies	216	216	97	\$150,000		7
15	Jetro Cash and Carry Enterprises, LLC	Brooklyn	Kings	New York City	CONED	Wholesale groceries, food & restaurant supplies	226	226	130	\$150,000		7
16	JPMorgan Chase Bank, National Association ("JPMC")	Brooklyn & New York	Kings & New York	New York City	CONED	Financial services for global bank	18,666	18,666	22,196	\$1,200,000,000	(3)	7
17	L.N.K. International Inc.	Hauppauge	Suffolk	Long Island	LIPA	Manufactures pharmaceuticals	1,400	1,400	1,583	\$8,000,000		7
18	Life Technologies Corporation	Grand Island	Erie	Western New York	NGRID	Research & development in the life sciences	506	506	554	\$5,000,000		7
19	Maimonides Medical Center	Brooklyn	Kings	New York City	CONED	Medical center	1,500	1,500	5,622	\$125,000,000		7
20	Mohawk Fine Papers Inc.	Cohoes & Waterford	Albany & Saratoga	Capital District	NGRID	Manufactures paper products	3,536	3,536	312	\$17,500,000	(3)	7
21	Mold-A-Matic Corporation	Oneonta	Otsego	Mohawk Valley	NYSEG	Manufacturer of plastic components	166	166	45	\$250,000		7
22	Northrop Grumman Systems Corporation	Bethpage	Nassau	Long Island	LIPA	R&D, engineering, and design	420	420	321	\$100,000		7

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	Current kW Amount	kW Recommendation	Job Commitments	Capital Investment Commitment (\$)	Contract Term (years)
23	O.W. Hubbell & Sons, Inc.	Yorkville	Oneida	Mohawk Valley	NGRID	Galvanizing facility	100	100	65	\$100,000	7
24	RD America, LLC	Garden City	Suffolk	Long Island	LIPA	Wholesale groceries, food & restaurant supplies	230	230	78	\$150,000	7
25	Restaurant Depot, LLC	Maspeth	Queens	New York City	LIPA	Wholesale groceries, food & restaurant supplies	216	216	99	\$150,000	7
26	Restaurant Depot, LLC	Bohemia	Suffolk	Long Island	LIPA	Distributes wholesale groceries	150	150	53	\$150,000	7
27	Steinway and Sons	Astoria	New York	New York City	CONED	Manufactures and sells pianos	580	500	336	\$7,000,000	(1) 7
28	The Indium Corporation of America	Clinton, Rome, & Utica	Oneida	Mohawk Valley	NGRID	Manufacturer of electronic assembly materials	760	760	459	\$10,650,000	(3) 7

Totals

39,264	35,126	37,713	\$1,488,750,000

(1) The customer is being recommended for an RNY Power extension recommendation at a decreased kW amount due to their reduced level of extension jobs committed as compared to their current contractual employment commitment.

(2) The customer requested an RNY Power extension recommendation at a lower kW amount as compared to their current RNY award. The remaining amount associated with their current award will be relinquished.

(3) The customer is being recommended for an RNY Power extension as a campus setting to accommodate multiple facilities. Their original RNY Power allocations were awarded separately for multiple locations. The extension-related campus setting structure will provide more flexibility to these customers in terms of shifting employment and/or capital spending levels across their facilities.

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	Final kW Recommendation	Final Job Commitments	Final Capital Investment Commitment (\$)		Contract Term (years)
1	CBS Broadcasting Inc.	New York	New York	New York City	CONED	Broadcasts radio and television	7,350	3,400	\$200,000,000	(1)	7
2	Kraft Heinz Foods Company	Avon	Livingston	Finger Lakes	NGRID	Manufactures packaged food products	1,920	220	\$10,000,000	(2)	7
3	Tessy Plastics Corp.	Elbridge	Onondaga	Central New York	NYSEG	Manufacturer of plastic parts	2,530	630	\$200,000	(3)	7

(1) Since its existing allocation was conditionally extended, CBS Broadcasting Inc. has asked to reduce its employment commitment from 3,479 to 3,400 jobs. Given the relatively modest amount of this reduction, a corresponding reduction in the company's Extended Allocation of 7,350 kW is not being recommended.

(2) Since its existing allocation was conditionally extended, Kraft Heinz Food Company has asked to reduce its employment commitment from 332 to 220 jobs. Staff is recommending a reduction in the company's Extended Allocation from 2,520 kW to 1,920 kW to reflect this revised employment commitment.

(3) Since its existing allocation was conditionally extended, Tessy Plastics Corp. has asked to reduce its employment commitment from 700 to 630 jobs. At this time, no reduction is being recommended to the Extended Allocation amount of 2,530 kW. Given the relatively modest amount of this reduction, a corresponding reduction in the company's Extended Allocation of 2,530 is not being recommended.

(Statutory Criteria – RNY Power Program)

- the significance of the cost of electricity to the applicant's overall cost of doing business, and the impact that a Recharge New York power allocation will have on the applicant's operating costs;
- the extent to which a Recharge New York power allocation will result in new capital investment in the state by the applicant;
- the extent to which a Recharge New York power allocation is consistent with any regional economic development council strategies and priorities;
- the type and cost of buildings, equipment and facilities to be constructed, enlarged or installed if the applicant were to receive an allocation;
- the applicant's payroll, salaries, benefits and number of jobs at the facility for which a Recharge New York power allocation is requested;
- the number of jobs that will be created or retained within the state in relation to the requested Recharge New York power allocation, and the extent to which the applicant will agree to commit to creating or retaining such jobs as a condition to receiving a Recharge New York power allocation;
- whether the applicant, due to the cost of electricity, is at risk of closing or curtailing facilities or operations in the state, relocating facilities or operations out of the state, or losing a significant number of jobs in the state, in the absence of a Recharge New York power allocation;
- the significance of the applicant's facility that would receive the Recharge New York power allocation to the economy of the area in which such facility is located;
- the extent to which the applicant has invested in energy efficiency measures, will agree to participate in or perform energy audits of its facilities, will agree to participate in energy efficiency programs of the authority, or will commit to implement or otherwise make tangible investments in energy efficiency measures as a condition to receiving a Recharge New York power allocation;
- whether the applicant receives a hydroelectric power allocation or benefits supported by the sale of hydroelectric power under another program administered in whole or in part by the New York Power Authority;
- the extent to which a Recharge New York power allocation will result in an advantage for an applicant in relation to the applicant's competitors within the state; and

- in addition to the foregoing criteria, in the case of a not-for-profit corporation, whether the applicant provides critical services or substantial benefits to the local community in which the facility for which the Recharge New York power allocation is requested is located.

EXHIBIT A (6 customers)

**NON-COMPLIANCE WITH JOB COMMITMENTS; RECOMMENDED FOR (1) REDUCTIONS
IN ALLOCATIONS/CONTRACT DEMANDS, AND (2) ADJUSTMENTS TO JOB
COMMITMENTS¹**

Automotive Corporation (Batavia, Genesee County) Application ID 3845

Allocation: 226 kW
Contract Demand: 226 kW
Power Utilization: 100%
5 year Capital Investment Commitment: Not Required per Contract
Job Commitment: 160 jobs
Jobs Reported: 136 jobs or 85%

Background: Automotive Corporation, Inc. manufactures automotive components. The company stated that some customer programs ended due to expired contracts which in turn resulted in labor reductions. The company was approved for an allocation extension with associated commitments at the March 26, 2019 Trustee meeting. If Staff's recommendation is accepted, Staff will issue a modified contract for the customer's extension allocation that will align the reported job figures listed above with new job commitments.

Recommendation: Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 216 kW, and authorize an adjustment to the job commitment to not less than 136 jobs.

Glens Falls Hospital (Glens Falls, Warren County) Application ID 50805

Allocation: 580 kW
Contract demand; 580 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$6,000,000
Cumulative Capital Spending: \$11,280,000 or 188%
Job Commitment: 2,344 jobs
Jobs Reported: 2,042 jobs or 87% (confirmed by audit)

Background: Glens Falls Hospital is an acute healthcare hospital. This customer was selected through the New York Power Authority ("NYPA" or "Authority") auditing program for an audit of its employment records. The company was found to be non-compliant with its employment commitment. The company informed the Authority that the change in the healthcare environment related to health management, reimbursement trends, and the shifting of services from hospital-based to outpatient care have had an impact on overall hospital volume, especially in-patient, hospital-based volume. As a result of the decrease in patient discharges and visits, in order to be financially sustainable, the hospital modified certain staff resources. The company provided job counts for the period of July 2018 through October 2018 that indicated no additional job growth.

¹ Unless otherwise indicated or apparent, the discussion in "Background" sections is based on information supplied by the customer.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 560 kW, and authorize an adjustment to the job commitment to not less than 2,042 jobs.*

Highstreet IT Solutions, LLC (Islandia, Suffolk County) Application ID 38161

Allocation: 170 kW
Contract Demand: 170 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$3,233,705 or 323%
Job Commitment: 80 jobs
Jobs Reported: 56 jobs or 70%

Background: Highstreet IT Solutions, LLC is a provider of cloud services and IT infrastructure management. The company reported that it has had difficulty hiring and retaining trained professionals due to the nature of the job market in its business sector.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 140 kW, and authorize an adjustment to the job commitment to not less than 56 jobs.*

HSBC Bank USA, National Association (Buffalo, Erie County) Application ID 45608

Allocation: 440 kW
Contract Demand: 440 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,400,000
Cumulative Capital Spending: \$440,927 or 31% (confirmed by audit)
Job Commitment: 1,454 jobs
Jobs Reported: 1,205 jobs or 83% (confirmed by audit)

Background: HSBC Bank USA, National Association provides banking and financial services. This customer was selected through NYPA's auditing program for an audit of its employment records and capital spending records. The company was found to be non-compliant with its employment commitment.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 410 kW, and authorize an adjustment to the job commitment to not less than 1,205 jobs.*

Saint-Gobain Abrasives, Inc. (Watervliet, Albany County) Application ID 10243

Allocation: 1,140 kW
Contract Demand: 1,140 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$6,920,000
Cumulative Capital Spending: 9,058,207 or 131%
Job Commitment: 145 jobs
Jobs Reported: 119 jobs or 82%

Background: Saint-Gobain Abrasives, Inc. manufactures reinforcement fabrics. The company did not provide an explanation regarding its job shortfall. This allocation and associated commitments expired on June 30, 2019. The company was approved for an allocation extension with revised commitments at the October 2, 2018 Trustee meeting. If Staff's recommendation is accepted, Staff will issue a modified contract for the customer's extension allocation that will align the reported job figures listed above with new job commitments.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 1050 kW, and authorize an adjustment to the job commitment to not less than 119 jobs.*

Surmet Ceramics Corporation (Buffalo, Erie County) Application ID 48386

Allocation: 300 kW
Contract Demand: 300 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$100,000
Cumulative Capital Spending: \$14,565 or 15%
Job Commitment: 19 jobs
Jobs Reported: 14 jobs or 74%

Background: Surmet Ceramics Corporation is a ceramics processing facility. The company did not provide an explanation regarding its job shortfall.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 250 kW, and authorize an adjustment to the job commitment to not less than 14 jobs.*

EXHIBIT B (16 customers)

**NON-COMPLIANCE WITH JOB COMMITMENTS; RECOMMENDED FOR ADJUSTMENTS
TO JOB COMMITMENTS**

Advanced Interconnect Manufacturing (Victor, Ontario County) Application ID 38115

Allocation: 80 kW
Contract Demand: 80 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$250,000
Cumulative Capital Spending: \$1,014,955 or 406%
Job Commitment: 62 jobs
Jobs Reported: 52 jobs or 84%

Background: Advanced Interconnect Manufacturing produces wire harnesses and cable assemblies. The company stated that the job shortfall was due to difficulty in hiring experienced operators. Given the amount of the allocation and degree of shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 52 jobs.*

Agrana Fruit US, Inc. (Baldwinsville, Onondaga County) Application ID 22920

Allocation: 910 kW
Contract Demand: 450 kW
Power Utilization: 100%
5 year Capital Investment Commitment: Not Required per Contract
Job Commitment: 120 jobs
Jobs Reported: 66 jobs or 55%

Background: Agrana Fruit US, Inc. is a fruit processing plant for yogurt products. The company states that concerns about naturalness and sugar content of fruit preparation has had a negative impact on sales. The company also reported that staff level requirements have been offset by increases in efficiency in business operations. The company recently provided job counts for the period of July 2018 through October 2018, which indicates an average job level of 74 jobs, or 62% of its job commitment.

Recommendation: *Given that the shortfall in jobs is due to efficiency improvements, Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 74 jobs.*

AlSCO Inc. (Rochester, Monroe County) Application ID 44595

Allocation: 270 kW
Contract Demand: 270 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$3,937,500
Cumulative Capital Spending: \$3,461,262 or 88%
Job Commitment: 185 jobs

Background: Alsco Inc. is a linen and uniform rental company. The company states that it has become more efficient in its production and operations. As its sales continue to grow, the company projects adding an additional night shift that might allow it to achieve its job commitment. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Given that the shortfall in jobs is due to efficiency improvements, Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 165 jobs.*

BASF Corporation (Peekskill, Westchester County) Application ID 9726

Allocation: 1,250 kW
Contract Demand: 1,250 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$19,000,000
Cumulative Capital Spending: \$ \$19,677,386 or 104% (confirmed by audit)
Job Commitment: 210 jobs
Jobs Reported: 183 jobs or 87% (confirmed by audit)

Background: BASF Corporation is a research and development lab. This customer was selected through NYPA's auditing program for an audit of its employment and capital spending records. The company was found to be non-compliant in its employment commitment. The company indicated that a reason for its employment shortfall is operational efficiency. Presently, the company is attempting to fill 14 open positions.

Recommendation: *Given that the shortfall in jobs is due to efficiency improvements, Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 183 jobs.*

Celmet Electronics Company, Inc. (Rochester, Monroe County) Application ID 9939

Allocation: 96 kW
Contract Demand: 96 kW
Power Utilization: 100%
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,500,000
Cumulative Capital Spending: \$3,864,116 or 258%
Job Commitment: 52 jobs
Jobs Reported: 42 jobs or 81%

Background: Celmet Electronics Company, Inc. ("CEC") produces electronic products. The company indicated that employee retention in CEC facility has been difficult and it has struggled to find qualified applicants. Given the amount of the allocation and the degree of job shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 42 jobs.*

CPI Aerostructures, Inc. (Edgewood, Suffolk County) Application ID 34227

Allocation: 130 kW
Contract Demand: 130 kW
Power Utilization: 100%
5 Year Capital Investment Commitment: \$4,000,000
Cumulative Capital Spending: \$1,952,126 or 49%
Job Commitment: 268 jobs
Jobs Reported: 228 jobs or 85%

Background: CPI Aerostructures, Inc. is a manufacturer of aircraft component parts. The company did not provide an explanation regarding its job shortfall. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction. During the reporting period reviewed, the company was in its fourth year of RNY electric service.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 228 jobs.*

Dab-O-Matic Corp. (Mount Vernon, Westchester County) Application ID 10043

Allocation: 130 kW
Contract Demand: 130 kW
Power Utilization: 100%
1 Year Capital Investment Commitment: \$391,000
Cumulative Capital Spending: \$304,732 or 134%
Job Commitment: 78 jobs
Jobs Reported: 66 jobs or 85%

Background: Dab-O-Matic Corporation is a producer of control flow applicators and caps for the pharmaceutical industry. The company stated that due to increased labor and raw materials costs, its profit margins were off target. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction. The allocation associated with the commitment under review expired as of June 30, 2019. The company was approved for an allocation extension at the December 11, 2018 Trustee meeting. Staff expects the new allocation and associated commitments to take effect October 1, 2019.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 66 jobs.*

Globe Grinding Corp. (Copiague, Suffolk County) Application ID 45701

Allocation: 36 kW
Contract Demand: 36 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$ 650,000
Cumulative Capital Spending: \$1,912,090 or 294%
Job Commitment: 13 jobs

Background: Globe Grinding Corp. is a precision grinding facility. The company indicated that employee retention in the facility has been difficult and it has struggled to find qualified applicants. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 11 jobs.*

Mountainside Residential Care Center (Margaretville, Delaware County) Application ID 10000

Allocation: 40 kW
Contract Demand: 40 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$750,000
Cumulative Capital Spending: \$1,084,102 or 145% (confirmed based on audit)
Job Commitment: 68 jobs
Jobs Reported: 52 jobs or 76% (confirmed based on audit)

Background: Mountainside Residential Care Center provides healthcare services. This customer was selected through NYPA's auditing program for an audit of its employment and capital investment records and was found to be non-compliant in its job commitment for the reporting year. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation. The allocation associated with the commitment under review is due to expire effective October 31, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting.

If Staff's recommendation is accepted, Staff will issue a modified contract for the customer's extension allocation that will align the reported job figures listed above with new job commitments.

Recommendation: *Staff recommends no reduction to the contract demand/allocation and that the Trustees authorize an adjustment to the customer's job commitment to not less than 52 jobs.*

Nastra Automotive Industries Inc. (Lindenhurst, Suffolk County) Application ID 31547

Allocation: 86 kW
Contract Demand: 86 kW
Power Utilization: 100%
5 year Capital Investment Commitment: Not required per contract
Job Commitment: 75 jobs
Jobs Reported: 58 jobs or 77%

Background: Nastra Automotive Industries, Inc. is a re-manufacturer of alternators, starters and disc brake calipers. The company did not provide an explanation regarding its employment shortfall. The company recently provided job counts for the period July 2018 through October 2018, which indicated an average job level of 60 jobs, or 80% of its job commitment. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential

reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 60 jobs.*

Pall Corporation (Hauppauge, Suffolk County) Application ID 11465

Allocation: 580 kW
Contract Demand: 580 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$4,770,383 or 477%
Job Commitment: 91 jobs
Jobs Reported: 81 jobs or 89%

Background: Pall Corporation sells water filtration systems. The company did not provide an explanation regarding its job shortfall. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 81 jobs.*

Polygen Pharmaceuticals, Inc. (Edgewood, Suffolk County) Application ID 62982

Allocation: 30 kW
Contract Demand: 30 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$5,000,000
Cumulative Capital Spending: \$954,000 19%
Job Commitment: 26 jobs
Jobs Reported: 21 jobs or 81%

Background: Polygen Pharmaceuticals, Inc. is a manufacturer of generic pharmaceuticals. The company has filed for approval of two of its new products with the FDA and is waiting for such approval to start commercial activity. As a pharmaceutical manufacturer, it must wait for FDA approval before starting any commercial activities related to the products. The start of commercial manufacturing is anticipated for later in 2019 and the company expects to add 5 to 10 new employees. Given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 21 jobs.*

Red Barn Technology Group, Inc. (Binghamton, Broome County) Application ID 36168

Allocation: 10 kW
Contract Demand: 10 kW
Power Utilization: 100%

New York Power Authority
Annual Compliance Review - Recharge New York
5 year Capital Investment Commitment: \$350,000
Cumulative Capital Spending: 322,322 or 92%
Job Commitment: 14 jobs
Jobs Reported: 12 jobs or 86%

July 30, 2019

Background: Red Barn Technology Group, Inc. is a high-tech business technology provider. The company did not provide an explanation regarding its job shortfall. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 12 jobs.*

TMP Technologies, Inc. (Buffalo, Erie County) Application ID 4497

Allocation: 60 kW
Contract Demand: 60 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$1,338,027 or 134%
Job Commitment: 30 jobs
Jobs Reported: 25 jobs or 83%

Background: TMP Technologies, Inc. manufactures foam and plastic products. The company did not provide an explanation regarding its employment shortfall. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

The company recently provided job counts for the period July 2018 through October 2018, which indicate a job level of 26 jobs, or 87% of its job commitment. The allocation associated with the commitment under review is due to expire effective August 31, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting. Staff expects the new allocation and associated commitments to take effect October 1, 2019.

If Staff's recommendation below is accepted, Staff will issue a modified contract for the customer's extension allocation that will reflect revised job commitments that will align with reported job figures listed above.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 26 jobs.*

US Nonwoven Corp. (Brentwood, Suffolk County) Application ID 11609

Allocation: 56 kW (Expansion)
Contract Demand: 56 kW (Expansion)
Power Utilization: 100%
5 year Capital Investment Commitment: not required per contract
Job Commitment: 280 jobs

Background: US Nonwoven Corp. manufactures nonwoven products. The company recently provided job counts for the period July 2018 through October 2018, which indicates an average job level of 244 jobs, or 87% of its job commitment. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 244 jobs.*

Veeco Instruments, Inc. (Plainview, Nassau County) Application ID 4982

Allocation: 476 kW
Contract Demand: 476 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,350,000
Cumulative Capital Spending: \$2,420,652 or 145%
Job Commitment: 192 jobs
Jobs Reported: 152 jobs or 79%

Background: Veeco Instruments, Inc. manufactures technological equipment. The company stated it hired additional engineers/scientists in August 2018. Because of a reduced revenue forecast, the company has had to seek efficiencies in order to continue to compete. These efficiencies resulted in a reduction of the company's higher skilled employee base. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The allocation associated with the commitment under review expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the December 11, 2018 Trustee meeting.

If Staff's recommendation below is accepted, Staff will issue a modified contract for the customer's extension allocation that will reflect revised job commitments that will align with reported job figures listed above.

Recommendation: *Given that the shortfall in jobs is due to efficiency improvements, Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 152 jobs.*

EXHIBIT C (1 customer)
**NON-COMPLIANCE WITH JOB COMMITMENTS AND POWER UTILIZATION
COMMITMENTS; RECOMMENDED FOR ADJUSTMENT TO JOB COMMITMENT**

K&N's Foods USA, LLC (Fulton, Oswego County) Application ID 14735

Allocation: 3,150 kW

Contract Demand: 1,800 kW

Power Utilization: 1,040 kW or 58%

5 year Capital Investment Commitment: Not Required per Contract

Job Commitment: 103 jobs

Jobs Reported: 41 jobs or 40%

Background: K&N's Foods USA, LLC processes frozen food. The company stated that it had difficulty in 2018 procuring new contracts for its products in the U.S. The company has indicated that it has signed contracts that will generate new orders in 2019. Based on current NYPA billing data, K&N's Foods remains below the compliance threshold for power utilization. The customer has voluntarily returned 2,524 kW of its allocation, reducing the allocation down to 626 kW. This reduction took effect April 1, 2019.

Recommendation: *Given the customer's relinquishment of part of its original allocation, Staff recommends that the Trustees authorize an adjustment to the job commitment to not less than 41 jobs.*

EXHIBIT D (1 customer)

**NONCOMPLIANCE WITH JOB COMMITMENTS AND CAPITAL INVESTMENT
COMMITMENTS; RECOMMENDED FOR ADJUSTMENT TO JOB COMMITMENTS**

Flagpoles, Incorporated. / P&K Tubular (East Setauket, Suffolk County) Application ID 11414

Allocation: 100 kW

Contract demand; 100 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$2,200,000

Cumulative Capital Spending: \$1,834,172 or 83% (confirmed based on audit)

Job Commitment: 80 jobs

Jobs Reported: 59 jobs or 74% (confirmed based on audit)

Background: Flagpoles, Inc. manufactures poles for tented structures and flags. This is the second reporting period in which the company did not meet its capital spending commitment. NYPA's auditing program selected this customer for an audit of its employment records and capital investment spending records. The company was found to be non-compliant in both its employment and capital investment commitments. The company stated that it continues to automate processes which has contributed to an employment reduction. The company also indicated that current tariffs in the steel and aluminum markets, a lack of orders and contracts in its military hardware department, and out of state competition have led to reduced capital spending. The allocation associated with the commitments under review expired on June 30, 2019. The company was approved for an allocation extension with modified job commitments at the March 26, 2019 Trustee meeting. Staff expects the new allocation and associated commitments to take effect October 1, 2019.

If Staff's recommendation below is accepted, Staff will issue a modified contract for the customer's extension allocation that will that will reflect revised job commitments that will align with reported job figures listed above.

Recommendation: *Given that the shortfall in jobs is due to efficiency improvements, Staff recommends no reduction to the contract demand/allocation, and that the Trustees authorize an adjustment to the customer's job commitment to not less than 59 jobs.*

EXHIBIT E (1 customer)

**NONCOMPLIANCE WITH JOB COMMITMENTS AND CAPITAL INVESTMENT
COMMITMENTS; RECOMMENDED FOR (1) REDUCTIONS IN ALLOCATION/CONTRACT
DEMAND, AND (2) ADJUSTMENTS TO JOB COMMITMENT (3) ADJUSTMENTS TO
CAPITAL INVESTMENT COMMITMENTS**

Mount St. Mary's Hospital of Niagara Falls (Lewiston, Niagara County) Application ID 5421

Allocation: 330 kW

Contract demand; 330 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$44,826,000

Cumulative Capital Spending: \$16,554,531 or 37% (confirmed based on audit)

Job Commitment: 725 jobs

Jobs Reported: 528 jobs or 73% (confirmed based on audit)

Background: This customer was selected through NYPA's auditing program for an audit of its employment records and capital investment spending records. The company was found to be non-compliant with both its employment and capital investment commitments. The company did not provide an explanation for either shortfall. The commitments under review expired on June 30, 2019. The company was approved for an allocation extension with associated commitments at the December 11, 2018 Trustee meeting. Staff expects the new allocation and associated commitments to take effect October 1, 2019.

If Staff's recommendation below is accepted, Staff will issue a modified contract for the customer's extension allocation that will reflect revised commitments that will align with reported job figures and capital investment figures listed above.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 270 kW, authorize an adjustment to the job commitment to not less than 528 jobs, and authorize a reduction to the 5-year capital investment to not less than \$16,554,531.*

EXHIBIT F (1 customer)

**NONCOMPLIANCE WITH POWER UTILIZATION COMMITMENTS; RECOMMENDED
FOR (1) REDUCTIONS IN ALLOCATION/CONTRACT DEMAND, AND (2) ADJUSTMENTS
TO JOB COMMITMENT**

Barnes & Noble, Inc. (Westbury, Nassau County) Application ID 9482

Allocation: 630 kW

Contract Demand: 630 kW

Power Utilization: 547 kW or 87%

1 year Capital Investment Commitment: \$2,500,000

Cumulative Capital Spending: \$14,751,000 or 178%

Job Commitment: 195 jobs

Jobs Reported: 178 jobs or 91%

Background: Barnes and Noble is a business center for bookstore retail businesses. The company attributes the reduction in power utilization to increases in energy efficiency such as utilizing LED bulbs and upgrading the AC units in the facility. Based on recent NYPA billing data, Barnes and Noble remains below the compliance threshold for power utilization. The company's current allocation is due to expire effective October 31, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting.

If Staff's recommendation below is accepted, Staff will issue a modified contract for the customer's extension allocation that will reflect revised job commitments that will align with reported job figures listed above and a revised allocation.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 610 kW, and authorize an adjustment to the job commitment to not less than 189 jobs.*

EXHIBIT G (72 customers)

NON-COMPLIANT WITH SUPPLEMENTAL COMMITMENTS; RECOMMENDED FOR NO COMPLIANCE ACTION AT THIS TIME

1. Job Commitments (34 customers)

Air Products and Chemicals, Inc. (Glenmont, Albany County) Application ID 4184

Allocation: 6,000 kW
Contract Demand: 6,000 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$2,050,000
Cumulative Capital Spending: \$4,603,171 or 225%
Job Commitment: 56 jobs
Jobs Reported: 42 jobs or 75%

Background: Air Products and Chemicals, Inc. manufactures industrial gases. Many of the jobs at this facility were relocated to other facilities due to construction work at the plant. A new plant was borne out of a joint venture that involved Linde LLC (discussed below). The new joint venture company, “East Coast Nitrogen,” was approved for an RNY allocation at the December 11, 2018 Trustee meeting. The existing facility in Glenmont will close in 2019 when the new joint venture facility begins operations. Staff expects that the current contract/allocation for the Glenmont facility will be either modified or terminated when the new joint venture facility begins operations.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Air Products and Chemicals, Inc. (Medina, Orleans County) Application ID 10270

Allocation: 190 kW
Contract Demand: 190 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$500,000
Cumulative Capital Spending: \$468,219 or 94%
Job Commitment: 7 jobs
Jobs Reported: 6 jobs or 86%

Background: Air Products and Chemicals, Inc. manufactures purified liquid carbon dioxide. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Amneal Pharmaceuticals of New York, LLC (Hauppauge, Suffolk County) Application ID 9374

Allocation: 250 kW
Contract Demand: 250 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$9,000,000

New York Power Authority
Annual Compliance Review - Recharge New York
Cumulative Capital Spending: \$21,584,019 or 240%
Job Commitment: 393 jobs
Jobs Reported: 337 jobs or 86%

July 30, 2019

Background: Amneal Pharmaceuticals of New York, LLC manufactures pharmaceuticals. The company did not provide an explanation regarding its job shortfall. This allocation and commitments have expired and the company was approved at the July 30, 2019 Trustee meeting for an allocation extension at a reduced level with a commitment of 349 jobs.

Recommendation: *No compliance action is required at this time.*

Applied Energy Solutions, LLC. (Caledonia, Livingston County) Application ID 9103

Allocation: 76 kW
Contract Demand: 76 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$201,000
Cumulative Capital Spending: \$993,953 or 495%
Job Commitment: 40 jobs
Jobs Reported: 35 jobs or 88%

Background: Applied Energy Solutions, LLC is a battery charger manufacturer. The company has recently ceased business operations. The customer's allocation was terminated as of October 2018.

Recommendation: *No compliance action is required at this time.*

Autronic Plastics, Inc. (Central Islip, Suffolk County) Application ID 25096

Allocation: 190 kW (Expansion)
Contract Demand: 190 kW (Expansion)
Power Utilization: 100%
5 year Capital Investment Commitment: Not Required per Contract
Job Commitment: 106 jobs
Jobs Reported: 92 jobs or 87%

Background: Autronic Plastics, Inc. is a custom plastic injection molding company. The company recently provided employment counts for the period of July 2018 through October 2018, which indicated an employment level of 126 jobs, or 119% of its job commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Citigroup Global Markets Inc. (390 Greenwich St., New York, New York County) Application ID 10274

Allocation: 5,726 kW
Contract Demand: 5,726 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$231,000,000

New York Power Authority
Annual Compliance Review - Recharge New York
Cumulative Capital Spending: \$396,973,414 or 172%
Job Commitment: 3,172 jobs
Jobs Reported: 2,459 jobs or 78%

July 30, 2019

Background: The customer provides banking services. The company states that it has temporarily relocated jobs from its current location due to a planned construction project. The company anticipates increasing its employment levels at the facility after the project is completed. Staff will monitor the customer's compliance during the next reporting period. The allocation associated with the commitment under review expired on June 30, 2019. NYPA received an extension application which proposed consolidating the New York City locations into one contract. If staff finds the proposal acceptable, a revised allocation and commitment offer will be presented to the Board of Trustees for its consideration at a future Trustee meeting.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Citigroup NA (Long Island City, Queens County) Application ID 5919

Allocation: 3,340 kW
Contract Demand: 3,340 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$191,000,000
Cumulative Capital Spending: \$557,381,984 or 292%
Job Commitment: 4,541 jobs
Jobs Reported: 3,605 jobs or 79%

Background: Citigroup NA provides banking services. The company advised that it plans to vacate the building in the near future. The commitments under review expired on June 30, 2019. This allocation will be terminated.

Recommendation: *No compliance action is required at this time.*

Computer Task Group, Incorporated (Buffalo, Erie County) Application ID 8992

Allocation: 120 kW
Contract Demand: 120 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$500,000
Cumulative Capital Spending: \$3,342,330 or 668%
Job Commitment: 126 jobs
Jobs Reported: 108 jobs or 86%

Background: Computer Task Group, Incorporated offers technology services. The company did not provide an explanation regarding its job shortfall. The company opted out of the ReCharge NY program as of November 2018, and the allocation has been terminated as of November 2018.

Recommendation: *No compliance action is required at this time.*

ConMed Corporation (Utica, Oneida County) Application ID 5408

**New York Power Authority
Annual Compliance Review - Recharge New York**

July 30, 2019

Allocation: 1,410 kW (Effective 11/1/18)
Contract Demand: 1,410 kW (Effective 11/1/18)
Power Utilization: 100%
5 year Capital Investment Commitment: \$3,000,000
Cumulative Capital Spending: \$16,541,116 or 551%
Job Commitment: 645 jobs (Effective 11/1/18)
Jobs Reported: 533 jobs or 83%

Background: ConMed Corporation manufactures medical technology equipment. This is the second reporting period in which the company did not meet its job commitment. The company's job commitment was reduced during the previous reporting period due to job shortfall. The company stated the employment shortfall was due to the attrition of employees through retirements, resignations, consolidations and increased efficiency in its business operations. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. Given that the current reported employment figures are in compliance with current commitments, Staff recommends no action at this time.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Contract Pharmacal Corporation (Hauppauge, Suffolk County) Application ID 36619

Allocation: 156 kW
Contract Demand: 156 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$1,150,000 or 115%
Job Commitment: 125 jobs
Jobs Reported: 82 jobs or 66%

Background: Contract Pharmacal Corporation is a manufacturer of contract pharmaceuticals. The customer has two other RNY allocations associated with nearby facilities that have met or exceeded job commitments. The company has requested a contract modification that would allow employment levels from all of its facilities within close proximity to be counted toward the total employment commitments. Staff expects to request Trustee approval of revised contract terms in the near future to accommodate this request.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Contract Pharmacal Corporation (Hauppauge, Suffolk County) Application ID 37414

Allocation: 386 kW
Contract Demand: 386 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$3,000,000
Cumulative Capital Spending: \$2,015,836 or 68%
Job Commitment: 270 jobs
Jobs Reported: 209 jobs or 77%

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

ESCO Turbine Technologies - Syracuse (Chittenango, Madison County) Application ID 3670

Allocation: 906 kW
Contract Demand: 906 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$2,983,000
Cumulative Capital Spending: \$6,331,213 or 212%
Job Commitment: 300 jobs
Jobs Reported: 265 jobs or 88%

Background: ESCO Turbine Technologies - Syracuse produces metal casting foundries for turbine parts. The company stated that it experienced a decline in sales volume in 2018. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The current allocation and commitments are due to expire effective October 31, 2019. NYPA has not received a request for an extension from this company so the contract will expire and the allocation will be terminated as of such date.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Fermer Precision, Inc. (Ilion, Herkimer County) Application ID 10095

Allocation: 160 kW
Contract Demand: 160 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$420,000
Cumulative Capital Spending: \$3,127,256 or 745%
Job Commitment: 63 jobs
Jobs Reported: 55 jobs or 87%

Background: Fermer Precision, Inc. provides machining applications for the metals and plastics industries. The company did not provide an explanation regarding its job shortfall. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction. This current allocation and commitments are due to expire effective September 30, 2019. NYPA has not received a request for an extension from this company so the contract will expire and the allocation will be terminated as of such date.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

General Electric Company (Schenectady, Schenectady County) Application ID 9159

Allocation: 10,000 kW
Contract Demand: 10,000 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$60,000,000
Cumulative Capital Spending: \$194,889,294 or 325%
Job Commitment: 3,923 jobs
Jobs Reported: 3,236 jobs or 82%

Background: General Electric Company manufactures turbine components. The company stated that the employment shortfall was due to curtailment and attrition because of lower than expected sales. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The commitments under review expired on June 30, 2019. The company was approved for an allocation extension with associated commitments at the December 11, 2018 Trustee meeting which took effect July 1, 2019. Given that reported job numbers are in compliance with current commitments, Staff recommends no action at this time.

Recommendation: *Staff recommends no additional action required at this time.*

Geneva General Hospital (Geneva, Ontario County) Application ID 5482

Allocation: 470 kW
Contract Demand: 470 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$63,356,213
Cumulative Capital Spending: \$66,301,003 or 105%
Job Commitment: 834 jobs
Jobs Reported: 650 jobs or 78% (confirmed based on audit)

Background: This is the sixth year Geneva General Hospital reported employment levels below the compliance threshold. The company's allocation and job commitment was reduced the previous reporting period due to job shortfall. NYPA's auditing program selected this customer for an audit of its employment records and was found to be non-compliant with its job commitments for the reporting year. The hospital employs over 1,900 employees between various other hospitals, nursing homes, surgical centers, and multiple lab/physician centers encompassing several counties. The hospital has stated that the movement of employees between these facilities accounts for its job shortfall at the subject facility. The current allocation and associated commitments are due to expire effective August 31, 2019. The company was approved for an allocation extension with new commitments at the June 30, 2019 Trustee meeting. Given the revised commitments, Staff recommends no action at this time.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Granny's Kitchens, LLC (Frankfort, Herkimer County) Application ID 9590

Allocation: 1,006 kW
Contract Demand: 1,006 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$ 15,000,000
Cumulative Capital Spending: \$18,818,063 or 125%
Job Commitment: 258 jobs
Jobs Reported: 221 jobs or 86% (confirmed by audit)

Background: Granny's Kitchens, LLC produces baked goods. The company did not provide an explanation regarding its job shortfall. NYPA's auditing program selected this customer for an audit of its employment and capital spending records. The company was found to be non-compliant in its employment commitment. The commitments under review expired on June 30, 2019. NYPA has not received a request for an extension from this company so the contract will be terminated.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Indium Corporation of America (Utica, Oneida County) Application ID 8946

Allocation: 120 kW
Contract Demand: 120 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$2,069,672 or 207%
Job Commitment: 40 jobs
Jobs Reported: **29 jobs or 73%**

Background: Indium Corporation of America manufactures electronic assembly materials. Indium has two other RNY allocations associated with facilities that have met or exceeded job commitments. Employees are periodically transferred between other facilities based on business needs. The company has requested a contract modification that would allow employment from other facilities within close proximity to be counted toward the total employment commitments. Staff expects to request Trustee approval of a new contract in the near future to accommodate this request.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

John Hassall, LLC (Westbury, Nassau County) Application ID 5983

Allocation: 320 kW
Contract Demand: 320 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,000,000
Cumulative Capital Spending: \$5,433,323 or 543%
Job Commitment: 94 jobs
Jobs Reported: **72 jobs or 77%**

Background: John Hassall LLC manufactures fasteners. The company informed the Authority that its employment shortfall is due to the restructuring of the plant. The company stated that it plans to add additional employees. The commitments under review expired on June 30, 2019. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. Given that the reported job numbers are in compliance with current commitments, Staff recommends no action at this time.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Joseph L. Mancuso & Sons, Inc. (Batavia, Genesee County) Application ID 7790

Allocation: 46 kW
Contract Demand: 46 kW
Power Utilization: 100%
5 year Capital Investment Commitment: Not Required per Contract
Job Commitment: 278 jobs
Jobs Reported: **244 jobs or 88%**

Background: Joseph L. Mancuso & Sons, Inc. is an office, industrial, and commercial property leasing company. The company stated that its employment shortfall is due to staff reductions at three of its largest clients. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction. This current allocation and commitments are due to expire effective August 31, 2019. NYPA has not received a request for an extension from this company so the contract will expire and the allocation will be terminated.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Kaleida Health - DeGraff Memorial Hospital (North Tonawanda, Niagara County) Application ID

9687

Allocation: 336 kW
Contract Demand: 336 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$4,128,620
Cumulative Capital Spending: \$10,986,737 or 266%
Job Commitment: 378 jobs
Jobs Reported: 303 jobs or 80%

Background: Kaleida Health is a not-for-profit healthcare network that manages five hospitals in the Buffalo-Niagara Falls metropolitan area. Many of its locations operate as a campus-style facility with staff movement among the various locations. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The company's current allocation and commitments are due to expire effective October 31, 2019. Staff expects to request Trustee approval of the new contract in the near future to accommodate this request.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Kaleida Health-Millard Fillmore Suburban Hospital (Williamsville, Erie County) Application ID

9686

Allocation: 570 kW
Contract Demand: 570 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$16,535,507
Cumulative Capital Spending: \$56,277,617 or 340% (confirmed by audit)
Job Commitment: 1,456 jobs
Jobs Reported: 967 jobs or 66% (confirmed by audit)

Background: See previous background description.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Kraft Foods Group, Inc. (Avon, Livingston County) Application ID 9347

Allocation: 2,520 kW
Contract Demand: 2,520 kW
Power Utilization: 98%

Annual Compliance Review - Recharge New York

5 year Capital Investment Commitment: \$10,000,000

Cumulative Capital Spending: \$ \$27,046,572 or 270%

Job Commitment: 332 jobs

Jobs Reported: 269 jobs or 81%

Background: Kraft Foods Group, Inc. manufactures packaged food products. The company stated that market conditions for the products produced at the facility have led to some full-time employees becoming part-time. In addition, overall employee numbers have been adjusted to right size the employee base to lower product volume requirements. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The company was approved for an allocation extension at a reduced level with new commitments at the July 30, 2019 Trustee meeting. Given that reduction, Staff recommends no action at this time.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

LNK International, Inc. (Hauppauge, Suffolk County) Application ID 3724

Allocation: 1,400 kW

Contract Demand: 1,400 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$13,500,000

Cumulative Capital Spending: \$25,196,297 or 187% (confirmed based on audit)

Job Commitment: 1,759 jobs

Jobs Reported: 1,472 jobs or 84% (confirmed based on audit)

Background: LNK International, Inc. manufactures pharmaceuticals. NYPA's auditing program selected this customer for an audit of its employment and capital investment records and the customer was found to be non-compliant in its employment commitment for the reporting year. The current allocation and commitments are due to expire effective August 31, 2019.

Under a separate item submitted to the Trustees today, Staff is recommending that this customer be approved for an allocation extension with revised commitments. Contingent upon acceptance of this recommendation, Staff recommends that no compliance action be taken at this time.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

NYCO Minerals, Inc., (Willsboro, Essex County) Application ID 7037

Allocation: 1,400 kW

Contract Demand: 1,400 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$4,500,000

Cumulative Capital Spending: \$11,659,666 or 259% (confirmed based on audit)

Job Commitment: 104 jobs

Jobs Reported: 75 jobs or 72% (confirmed based on audit)

Background: NYCO Minerals, Inc. is a producer of minerals. IMERYS purchased NYCO Minerals in 2015 and many efficiency improvements have been implemented regarding equipment and synergies with IMERYS's corporate office. As a result, headcount has been reduced since the start of the RNY allocation. NYPA's auditing program selected this customer for an audit of its employment and capital

investment records, and the company was found to be non-compliant for the reporting year. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. Reported job figures are in compliance with current job commitments.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Pall Corporation (Port Washington, Nassau County) Application ID 11455

Allocation: 1,410 kW (Effective 11-1-2018)
Contract Demand: 1,410 kW (Effective 11-1-2018)
Power Utilization: 100%
5 year Capital Investment Commitment: not required by contract
Job Commitment: 442 jobs (Effective 11-1-2018)
Jobs Reported: 310 jobs or 70%

Background: Pall Corporation sells water filtration systems. The company did not provide an explanation regarding its job shortfall. This location did not meet its employment commitment level in the previous reporting period and its allocation and job commitment was reduced in the previous reporting period due to its employment shortfall. The company stated that it sold the building housing its operations and now leases a portion of the building. The company has voluntarily returned 1,184 kW of its allocation reducing the allocation down to 226 kW. This reduction took effect May 1, 2019.

Staff expects to recommend at a future Trustee meeting that this customer be approved for an allocation extension at a reduced amount with revised commitments. Contingent upon acceptance of this recommendation, Staff recommends that no compliance action be taken at this time.

Recommendation: *Staff recommends no action required at this time.*

Pall Corporation (Cortland, Cortland County) Application ID 11464

Allocation: 1,770 kW
Contract Demand: 1,770 kW
Power Utilization: 100%
5 year Capital Investment Commitment: not required
Job Commitment: 624 jobs
Jobs Reported: 555 jobs or 89% (confirmed based on audit)

Background: Pall Corporation sells water filtration systems. NYPA's auditing program selected this customer for an audit of its employment records, and the company was found to be non-compliant for the reporting year. The company was approved for an allocation extension with revised commitments at the October 2018 Trustee meeting. Reported job figures are in compliance with current job commitments.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Pivot Punch Corporation (Lockport, Niagara County) Application ID 6781

Allocation: 176 kW
Contract Demand: 176 kW
Power Utilization: 100%

Annual Compliance Review - Recharge New York

5 year Capital Investment Commitment: \$1,350,000

Cumulative Capital Spending: \$3,833,601 or 284%

Job Commitment: 78 jobs

Jobs Reported: 59 jobs or 76%

Background: Pivot Punch Corporation manufactures precision tools and components. The company stated that the munitions industry, which is 50% of its business, has been negatively affected resulting in a decline in the number of employees at its facility. In addition, its continued investment in equipment has enabled employees to operate multiple machinery simultaneously. This has resulted in efficiencies and has reduced the jobs at the facility. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. Reported job figures are in compliance with current job commitments.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Samaritan-Keep Nursing Home, Inc. (Watertown, Jefferson County) Application ID 9076

Allocation: 210 kW

Contract Demand: 210 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$2,500,000

Cumulative Capital Spending: \$2,417,411 or 97%

Job Commitment: 362 jobs

Jobs Reported: 309 jobs or 85%

Background: Samaritan Keep Nursing Home (“SKNH”) provides healthcare services. SKNH has experienced a high number of position vacancies, due primarily to a shortage of certified nursing assistants (CNAs). In response to the shortage, SKNH adjusted its CNA recruitment and retention strategies by moving to a paid training program which involved placing trainees on payroll and guaranteeing job placement upon successful completion of training. The company recently provided job counts for the period July 2018 through October 2018, which indicates an employment level of 334 jobs, or 92% of its job commitment. The company was approved for an allocation extension with new commitments at the October 2, 2018 Trustee meeting.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

SCA Tissue North America LLC (Saratoga Springs, Saratoga County) Application ID 3902

Allocation: 80 kW

Contract Demand: 80 kW

Power Utilization: 100%

5 year Capital Investment Commitment: not required per contract

Job Commitment: 21 jobs

Jobs Reported: 18 jobs or 86%

Background: SCA Tissue North America LLC manufactures tissue products. The company did not provide an explanation regarding its job commitment shortfall. However, given the amount of the customer's allocation and the degree of jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction of the contract demand and allocation. The company was approved for an allocation extension with new commitments at the March 26, 2019 Trustee meeting. Reported job figures are in compliance with current job commitments.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Steel Treaters, Inc. (Oriskany, Oneida County) Application ID 3851

Allocation: 200 kW
Contract Demand: 200 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$323,000
Cumulative Capital Spending: \$2,880,413 or 892%
Job Commitment: 24 jobs
Jobs Reported: 20 jobs or 83%

Background: Steel Treaters, Inc. is a commercial heat-treating facility. The company stated that an ownership change and business downturn have been the major contributors to its failure to meet its employment commitments. Its business downturn has been driven by a general reduction in manufacturing regionally. The company also stated it has been negatively impacted by the downsizing of some customers. NYPA has not received a request for an extension from this company so the allocation will expire and be terminated.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Steinway, Inc. (Long Island City, Queens County) Application ID 8643

Allocation: 580 kW
Contract Demand: 580 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$7,000,000
Cumulative Capital Spending: \$13,239,066 or 189%
Job Commitment: 440 jobs
Jobs Reported: 347 jobs or 79%

Background Steinway, Inc. manufactures and sells pianos. The company stated that employment numbers fell short due to lack of growth in Steinway's U.S. market as well as competition with older Steinway instruments on the used market. The company recently provided job counts for the period July 2018 through October 2018, which indicates an average job level of 351 jobs, or 80% of its job commitment.

Under a separate item submitted to the Trustees today, Staff is recommending that this customer be approved for an allocation extension at a reduced amount with revised commitments. Contingent upon acceptance of this recommendation, Staff recommends that no compliance action be taken at this time.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

L. & J. G. Stickley Incorporated (Manlius, Onondaga County) Application ID 5276

Allocation: 910 kW
Contract Demand: 910 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$15,000,000
Cumulative Capital Spending: \$18,387,704 or 123%
Job Commitment: 695 jobs
Jobs Reported: 584 jobs or 84%

Background: L. & J. G. Stickley, Inc. manufactures furniture. The company stated it continues to struggle due to lower than expected consumer spending on high-end home furnishings. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. During the reporting period review, the company was in its sixth year of RNY electric service. The job commitment under review expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the March 26, 2019 Trustee meeting. The new allocation and associated commitments took effect July 1, 2019. Reported job figures are in compliance with current job commitments.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Sutherland Global Services Inc. (Rochester, Monroe County) Application ID 11380

Allocation: 50 kW (Effective 11-1-2018)
Contract Demand: 50 kW (Effective 11-1-2018)
Power Utilization: 100%
5 year Capital Investment Commitment: \$4,095,000
Cumulative Capital Spending: \$4,095,000 or 100%
Job Commitment: 1,811 jobs (Effective 11-1-2018)
Jobs Reported: 674 jobs or 37% (confirmed by audit)

Background: Sutherland Global Services Inc. is a provider of analytics-driven business solutions. NYPA's auditing program selected this customer for an audit of its employment and capital investment records, and the company was found to be non-compliant in its job commitment for the reporting year. The company's job commitment was reduced the previous reporting period due to an employment shortfall. The customer's allocation and associated commitments are due to expire effective September 30, 2019. NYPA has not received a request for an extension from this company so the contract will expire and the allocation will be terminated as of such date.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

The New York Times Company, Inc. (New York, New York County) Application ID 6756

Allocation: 4,150 kW
Contract Demand: 4,150 kW

Power Utilization: 100%
5 year Capital Investment Commitment: \$11,500,000
Cumulative Capital Spending: \$40,000,013 or 348% (confirmed based on audit)
Job Commitment: 588 jobs
Jobs Reported: **467 jobs or 79% (confirmed based on audit)**

Background: The New York Times Company, Inc. is a newspaper printing and distribution company. NYPA's auditing program selected this customer for an audit of its employment and capital investment records, and the company was initially found to be non-compliant in its job commitment for the reporting year. After staff visited the customer's facility, it was determined that there was a discrepancy between customer jobs reported and the audit findings. This was largely due to employee shifts at the customer premises that were not fully captured by the audit.

As a result, Staff determined under special circumstance that the company was in compliance and that the revised contractual commitments below would take effect with the extension contract. This current allocation and associated commitments expired on June 30, 2019. The company was approved for an allocation extension with new associated commitments at the October 2, 2018 Trustee meeting. The new allocation and commitments took effect July 1, 2019. Reported job figures are in compliance with current job commitments.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

2. Power Utilization Commitments (3 Customers)

Empire Merchants, LLC (Astoria, Queens County) Application ID 3957

Allocation: 220 kW
Contract Demand: 220 kW
Power Utilization: 192 kW or 87%
5 year Capital Investment Commitment: \$395,000
Cumulative Capital Spending: \$1,410,084 or 357%
Job Commitment: 590 jobs
Jobs Reported: 635 jobs or 108% (confirmed by audit)

Background: Empire Merchants, LLC is a wine and spirits distributor. The company reported that due to energy efficiency measures it implemented, the company's energy usage has decreased. Based on an analysis of recent NYPA billing data, Empire Merchants remains below the compliance threshold for power utilization. The allocation associated with the commitments under review expired on June 30, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting. Since that time, the customer has returned 20 kW of its extended allocation, reducing its current allocation to 200 kW. The new allocation and associated commitments will take effect September 1, 2019.

Due to the customer's voluntary reduction of the contract demand and allocation, the reported power utilization is in compliance with the current allocation amount.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Morgan Stanley & Co. LLC (New York, New York County) Application ID 26223

Allocation: 520 kW

Contract Demand: 520 kW

Power Utilization: 446 kW or 86%

5 year Capital Investment Commitment: \$2,500,000

Cumulative Capital Spending: \$56,997,938 or 2,280% (confirmed based on audit)

Job Commitment: 1,042 jobs

Jobs Reported: 1,887 jobs or 181% (confirmed based on audit)

Background: Morgan Stanley & Co. LLC is a global financial services firm. The company stated that several floors at this site were undergoing renovations during the reporting period, and as a result, the company's power usage has gone down temporarily. Staff will monitor the customer's power usage and reassess compliance during the next reporting period action.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

S. Howes, LLC (Silver Creek, Chautauqua County) Application ID 10387

Allocation: 20 kW

Contract Demand: 20 kW

Power Utilization: 14 kW or 70%

5 year Capital Investment Commitment: \$350,000

Cumulative Capital Spending: \$1,430,137 or 409%

Job Commitment: 13 jobs

Jobs Reported: 21 jobs or 162% (confirmed based on audit)

Background: S. Howes, Inc. manufactures and designs process equipment. The company decided to opt out of the RNY Power program, and its allocation was terminated effective April 30, 2019.

Recommendation: No action is required at this time.

3) Capital Investment Commitments (28 Customers)

499 Syracuse City Centre, LLC (Syracuse, Onondaga County) Application ID 10117

Allocation: 30 kW

Contract Demand: 30 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$1,000,000

Cumulative Capital Spending: \$692,350 or 69%

Job Commitment: 2 jobs

Jobs Reported: 2 jobs or 100%

Background: 499 Syracuse City Centre restores and renovates buildings. The company provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$15,862 for a cumulative spend of \$708,212 or 71% -- up 2% from the level for reporting period, but still below its

commitment. However, given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Brooks Memorial Hospital (Dunkirk, Chautauqua County) Application ID 10047

Allocation: 226 kW
Contract Demand: 226 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$15,000,000
Cumulative Capital Spending: \$7,319,330 or 49%
Job Commitment: 2 jobs
Jobs Reported: 307 jobs or 15,350%

Background: Brooks Memorial Hospital is a medical care facility. The company states that it has refrained from spending to upgrade its current building because it plans to vacate the building soon and will construct a new facility. The customer's allocation expired on June 30, 2019, and NYPA has not received a request for an extension. Accordingly, the allocation will be treated as terminated. The company may reapply for RNY Power at a later time.

Recommendation: *No action is required at this time.*

Jain Irrigation, Inc. (Watertown, Jefferson County) Application ID 9820

Allocation: 320 kW
Contract Demand: 320 kW
Power Utilization: 100%
Power Utilization: 100%
5 year Capital Investment Commitment: \$2,000,000
Cumulative Capital Spending: \$1,497,113 or 75%
Job Commitment: 90 jobs
Jobs Reported: 103 jobs or 114%

Background: Jain Irrigation, Inc. is a manufacturer of drip irrigation hoses. The company did not provide an explanation regarding its capital investment shortfall. The current allocation will expire on August 31, 2019, and the customer has not filed an application for an extension. Accordingly, the allocation will be terminated as of this date.

Recommendation: *No compliance action is required at this time.*

Cliffstar LLC (Dunkirk, Chautauqua County) Application ID 9969

Allocation: 1,000 kW
Contract Demand: 1,000 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$28,000,000
Cumulative Capital Spending: \$12,186,120 or 44% (confirmed based on audit)
Job Commitment: 460 jobs
Jobs Reported: 416 jobs or 91% (confirmed based on audit)

Background: Cliffstar LLC is a maker of juices, sports drinks, teas, and private-label beverages. NYPA's auditing program selected this customer for an audit of its employment records and capital investment spending records, and the company was found to be non-compliant with its capital investment commitment. The company stated that it overestimated planned capital spending.

The company has reported that it is pursuing capital investment projects to reach its capital investment commitment by the end of 2021. The company provided additional capital spending for the period of July 2018 and December 2018 in the amount of \$1,432,065 for a cumulative capital spend of \$13,618,185 or 49% of the commitment.

Staff will continue to monitor the company's capital spending and reassess compliance during the next compliance period. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. The new allocation and associated commitments will take effect October 1, 2019. Reported capital spending levels are in compliance with the current capital investment commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Dayton T. Brown, Inc. (Bohemia, Suffolk County) Application ID 9603

Allocation: 100 kW
Contract Demand: 100 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$7,350,000
Cumulative Capital Spending: \$5,705,562 or 78%
Job Commitment: 180 jobs
Jobs Reported: 167 jobs or 93%

Background: The company provides engineering and testing services for the industrial, commercial and military industries. The company indicated that defense budget sequestration played a role in reported operational losses during the 2013 and 2014 periods. According to the company, capital expenditures returned to normal levels in 2015 as business demand increased and continued to trend upwards. The company provided proof of additional capital spending for the period of July 2018 through October 2018 in the amount of \$270,062 for a cumulative spending of \$5,975,624 or 81%. The current allocation and associated commitments are due to expire effective September 30, 2019.

The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting. The new allocation and associated commitments will take effect October 1, 2019. Reported capital spending levels are in compliance with the new capital investment commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

ENNOVEA, LLC (Rochester, Monroe County) Application ID 9823

Allocation: 616 kW
Contract Demand: 616 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$14,400,000
Cumulative Capital Spending: \$9,440,103 or 66%

Background: ENNOVEA, LLC is a custom injection molder of thermoplastic materials. The company stated that it has been re-positioning its business, which will ultimately drive capital expenditures higher over the next two years. During this review period, the company was in its sixth year of electric service. This allocation and associated commitments are due to expire effective July 31, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting. The new allocation and commitment will take effect August 1, 2019. Reported capital spending levels are in compliance with the customer's new commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Flower City Printing, Inc. (Rochester, Monroe County) Application ID 10028

Allocation: 300 kW
Contract Demand: 300 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$4,200,000
Cumulative Capital Spending: \$2,604,913 or 62%
Job Commitment: 82 jobs
Jobs Reported: 173 jobs or 211% (confirmed based on audit)

Background: Flower City Printing, Inc. offers printing services. The company did not provide an explanation regarding its capital investment shortfall. During this review period, the company was in its sixth year of electric service. The company's current allocation and commitments are due to expire effective September 30, 2019. The company was approved for an allocation extension with associated commitments at the March 26, 2019 Trustee meeting which will take effect October 1, 2019. Reported capital spending levels are in compliance with the customer's new commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Ginsberg's Institutional Foods, Inc. (Hudson, Columbia County) Application ID 3966

Allocation: 276 kW
Contract Demand: 276 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$20,000,000
Cumulative Capital Spending: \$3,844,066 or 19%
Job Commitment: 225 jobs
Jobs Reported: 255 jobs or 113%

Background: Ginsberg's Institutional Foods is a food producer. Upon review of the company's application, staff discovered an error regarding Ginsberg's capital investment commitment. The \$20 million level was incorrectly associated with the company's expansion and retention awards. This allocation and commitment expired on June 30, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting that took effect on July 1, 2019. Reported capital spending levels are in compliance with the new commitment which corrects the error.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Guardian Industries, LLC (Geneva, Ontario County) Application ID 10314

Allocation: 4,150 kW

Contract Demand: 4,150 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$60,000,000

Cumulative Capital Spending: \$47,647,260 or 79% (confirmed by audit)

Job Commitment: 295 jobs

Jobs Reported: 270 jobs or 92% (confirmed by audit)

Background: Guardian Industries Corp. manufactures high performance glass for architectural, residential, interior, transportation and technical glass applications. NYPA's auditing program selected this customer for an audit of its employment records and capital investment spending. The company was found to be non-compliant with its capital investment commitment. The company provided evidence of additional capital spending for the period of July 2018 through December 2018 in the amount of \$43,300,568 for a cumulative spend of \$90,947,828 or 152%.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Hardinge Inc. (Elmira, Chemung County) Application ID 3998

Allocation: 996 kW

Contract Demand: 996 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$5,000,000

Cumulative Capital Spending: \$3,440,187 or 69%

Job Commitment: 385 jobs

Jobs Reported: 361 jobs or 94%

Background: Hardinge Inc. manufactures precision machine tools. The company reported plans to pursue a capital project in 2019 that will cost \$2.2 million. The company provided evidence of additional capital spending for the period of July 2018 through December 2018 in the amount of \$8,219 for a cumulative spend of \$3,448,406 or 69%.

This current allocation and associated commitments are due to expire effective July 31, 2019. The company was approved for an allocation extension with new commitments at the October 2, 2018 Trustee meeting. The new allocation and associated commitments will take effect August 1, 2019. Reported capital spending levels are in compliance with the customer's new commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

ICM Controls Corporation (Cicero, Onondaga County) Application ID 9868

Allocation: 386 kW

Contract Demand: 386 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$11,000,000

Cumulative Capital Spending: \$ \$3,933,894 or 36%

Job Commitment: 180 jobs

Jobs Reported: 246 jobs or 137%

Background: ICM Controls Corporation manufactures HVAC products. The company stated that it experienced a fire event related to a significant production process. As a result, the process has been outsourced and the company is working with the insurance carrier on restoration. A restored process is expected to return to operational status in Q2 of fiscal year 2019. The company provided additional capital spending for the period of July 2018 through November 2018 in the amount of \$5,901,235 for a cumulative spend of \$9,835,129 or approximately 90%.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Intrepid Museum Foundation (New York, New York County) Application ID 9085

Allocation: 290 kW

Contract Demand: 290 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$93,294,272

Cumulative Capital Spending: \$29,739,941 or 32%

Job Commitment: 190 jobs

Jobs Reported: 261 jobs or 137% (confirmed by audit)

Background: Intrepid Museum Foundation is a not-for-profit educational institution. NYPA's auditing program selected this customer for an audit of its employment records by NYPA's third party auditing firm and was found to be compliant in its employment commitment for the reporting year.

This current allocation and associated commitments are due to expire effective July 31, 2019. The company was approved for an allocation extension with new commitments at the October 2, 2018 Trustee meeting. Staff recommends no action at this time. The new allocation and associated commitments will take effect August 1, 2019. Reported capital spending levels are in compliance with the customer's new commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Jetro Cash & Carry Enterprises, LLC (Brooklyn, Kings County) Application ID 9591

Allocation: 226 kW

Contract Demand: 226 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$3,500,000

Cumulative Capital Spending: \$2,272,414 or 65%

Job Commitment: 130 jobs

Jobs Reported: 162 jobs or 125%

Background: Jetro Cash & Carry Enterprises, LLC offers wholesale groceries, food & restaurant supplies. The company did not provide an explanation regarding its capital investment shortfall. The current allocation is due to expire August 31, 2019. The company has not applied for an extension of its allocation, so the allocation will expire and terminate as of such date.

Recommendation: *No compliance action is required at this time.*

RD America, LLC (Garden City, Nassau County) Application ID 9609

Allocation: 230 kW
Contract Demand: 230 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$5,000,000
Cumulative Capital Spending: \$932,366 or 19%
Job Commitment: 78 jobs
Jobs Reported: 149 jobs or 191% (under audit review)

Background: RD America, LLC sells wholesale groceries, food & restaurant supplies. The company stated that a permitting delay regarding its planned expansion project resulted in a shortfall of capital spending. The current allocation is due to expire effective August 31, 2019. NYPA has not received a request for an extension from this company so the allocation will terminate as of such date.

Recommendation: *No compliance action is required at this time.*

Klein Steel Service Inc. (Rochester, Monroe County) Application ID 9632

Allocation: 250 kW
Contract Demand: 250 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$4,800,000
Cumulative Capital Spending: \$2,477,368 or 52%
Job Commitment: 149 jobs
Jobs Reported: 168 jobs or 113%

Background: Klein Steel Service Inc. is a steel service center. The company informed the Authority that the reason for the capital investment shortfall was due to spending approximately \$2.8 million on a project at a building one mile from the facility on the NYPA contract. The building at which the funds were spent, served as a warehouse to accommodate a large customer order. The company provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$52,124 for a cumulative spend of \$2,529,492 or 53%. This current allocation and associated commitments expired on June 30, 2019. The company was approved for an allocation extension with associated commitments at the October 2, 2018 Trustee meeting. The new allocation and associated commitments took effect July 1, 2019. The Authority has credited the customer for the entirety of the capital spending at these facilities for the reporting period under review. The Authority is considering whether to require the customer to apply for a separate RNY Power Allocation for the warehouse that is not currently receiving RNY Power.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Linde LLC (Feura Bush, Albany County) Application ID 6332

Allocation: 6,750 kW
Contract Demand: 6,750 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$10,000,000

Cumulative Capital Spending: \$936,000 or 9% (YR6)

Job Commitment: 28 jobs
Jobs Reported: 26 jobs or 93%

Background: Linde LLC produces atmospheric gases. Linde is spending \$63 million to build a new plant to replace its existing facility which is expected to be operational in 2019. A new plant borne out of a joint venture with Air Products and Chemicals is replacing the current facility. Due to this development, no substantial capital investment has been made at the current facility. Staff expects that the current allocation for the Feura Bush facility will be modified or terminated when the new joint venture facility begins operations. This current allocation expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the October 2, 2018 Trustee meeting. However, the customer has elected not to accept an RNY Power extension at this time, and the allocation has been terminated.

Recommendation: *No compliance action is required at this time.*

New York-Presbyterian Healthcare System, Inc. (New York, New York County) Application ID 9526

Allocation: 5,000 kW
Contract Demand: 5,000 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$280,603,094
Cumulative Capital Spending: \$142,574,719 or 51% (YR6)
Job Commitment: 209 jobs
Jobs Reported: 9,537 jobs or 4,563%

Background: New York Presbyterian Hospital provides healthcare and medical services. The company stated that it had inadvertently missed some capital expenditures over the past several years that should have been reported as part of its total spending for compliance purposes. The company provided the additional capital spending levels in the amount of \$146,851,906, for a cumulative spend of \$289,424,625 or 103%, thus exceeding the commitment.

Recommendation: *No compliance action is required at this time.*

Norampac New York City Inc. (Maspeth, Queens County) Application ID 9534

Allocation: 450 kW
Contract Demand: 450 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$3,000,000
Cumulative Capital Spending: \$624,341 or 21% (YR6)
Job Commitment: 151 jobs
Jobs Reported: 142 jobs or 94%

Background: Norampac New York City, Inc. manufactures paper products. The company did not provide an explanation for its capital investment shortfall. This allocation and associated commitments are due to expire effective July 31, 2019. However, the company provided notice that it has vacated this location

effective December 31, 2018 and has requested a termination of its RNY power allocation. Authority Staff has processed the termination request.

Recommendation: *No compliance action is required at this time.*

Pfudler, Inc. (Rochester, Monroe County) Application ID 9944

Allocation: 820 kW
Contract Demand: 820 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$10,000,000
Cumulative Capital Spending: \$3,178,641 or 32% (YR6)
Job Commitment: 160 jobs
Jobs Reported: 190 jobs or 119%

Background: Pfudler, Inc. manufactures glass-lined equipment. Pfudler was sold to NOV Corporation in 2013 and then split from NOV Corporation in 2015 as a stand-alone entity, with private investors based in Germany. The company stated that the transition has made it difficult to increase capital spending as it has been adapting to ownership changes. The company anticipates a capital spending budget of \$1 million for 2019. The allocation under review expired on June 30, 2019. The company was approved for a allocation extension with a new capital investment commitment at the March 26, 2019 Trustee meeting. The new allocation and associated commitments took effect July 1, 2019. Reported capital spending levels are in compliance with the customer's new commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Providential Foods Corp (Buffalo, Erie County) Application ID 3613

Allocation: 216 kW
Contract Demand: 216 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,500,000
Cumulative Capital Spending: \$788,345 or 53% (YR6)
Job Commitment: 27 jobs
Jobs Reported: 33 jobs or 122%

Background: Providential Foods Corp. produces Italian-style meat products. The company stated that a business reorganization in April 2017 resulted in a delay in the implementation of its capital plans. The corporate restructuring has limited the company's financial resources and the purchase of additional equipment, resulting in the capital spending shortfall. Plans for additional equipment purchases are still being developed. The company provided evidence of additional capital spending for the period of July 2018 through December 2018 in the amount of \$236,000 for a cumulative spend of \$1,024,345 or 68%. This current allocation and associated commitments expired on June 30, 2019. Staff will present the allocation extension along with a modified capital commitment to the Trustees at the July 30, 2019 meeting. Reported capital spending levels are in compliance with the customer's proposed new commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Revere Copper Products, Inc. (Rome, Oneida County) Application ID 3653

Allocation: 6,600 kW
Contract Demand: 6,600 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$42,150,000

Cumulative Capital Spending: \$37,334,350 or 89% (confirmed based on audit)

Job Commitment: 348 jobs
Jobs Reported: 315 jobs or 91% (confirmed based on audit)

Background: Revere Copper Products, Inc. manufactures copper and brass products. NYPA's auditing program selected this customer for an audit of its employment and capital investment records, and the company was found to be non-compliant in its capital spending commitment for the reporting year. The allocation associated with the commitment under review expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the December 11, 2018 Trustee meeting. The new allocation and associated commitments will take effect on July 1, 2019. The company provided evidence of additional capital spending for the period of July 2018 through November 2018 in the amount of \$3,223,510, resulting in a cumulative spend of \$40,557,860 or 96% of its current commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

SCA Tissue North America LLC (Greenwich, Washington County) Application ID 3901

Allocation: 540 kW
Contract Demand: 540 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$12,506,000

Cumulative Capital Spending: \$4,772,541 or 38% (YR6)

Job Commitment: 83 jobs
Jobs Reported: 84 jobs or 101%

Background: SCA Tissue North America LLC manufactures tissue products. The company spent less capital than it originally forecasted. The allocation associated with the commitments under review is due to expire effective September 30, 2019. The company was approved for a allocation extension with new commitments at the March 26, 2019 Trustee meeting. The extended allocation and new commitments will take effect October 1, 2019. Staff expects that customer will be able to meet the new capital spending commitment.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Silicon Carbide Products, Inc. (Horseheads, Chemung County) Application ID 4092

Allocation: 196 kW
Contract Demand: 196 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$1,250,000

Cumulative Capital Spending: \$260,780 or 21% (YR 6)

Job Commitment: 20 jobs

Background: Silicon Carbide Product, Inc. (“SCP”) manufactures ceramic products. SCP went through a management buyout in early 2018. Capital investment by the prior ownership was limited as the impending sale was imminent. The allocation tied to the commitment under review is due to expire effective August 31, 2019. The company’s new ownership has applied for an extension of the customer’s allocation and has submitted revised capital spending and staffing commitments. The company was approved for a allocation extension with new commitments at the October 2, 2018 Trustee meeting. The extended allocation and associated commitments will take effect September 1, 2019. Reported capital spending levels are in compliance with the customer’s new commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Southside Hospital (Bay Shore, Suffolk County) Application ID 5466

Allocation: 330 kW
Contract Demand: 330 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$334,394,000
Cumulative Capital Spending: \$253,936,625 or 76% (YR6)
Job Commitment: 1,887 jobs
Jobs Reported: 2,735 jobs or 145%

Background: Southside Hospital is a healthcare facility. Southside Hospital is one of six Northwell hospitals that receive RNY power and all six are owned and controlled financially by Northwell Health. Collectively, these six hospitals have exceeded capital expenditures across all of the locations. Plans and capital expenditure decisions at one Northwell hospital are impacted by the overall Northwell Health plans at other hospitals within the healthcare system.

The company provided additional capital spending for the period of July 2018 through October 2018 in the amount of \$42,478,353 for a cumulative spend of \$296,414,978 or 89%.

The allocation subject to review expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the December 11, 2018 Trustee meeting. The new allocation and associated commitments took effect July 1, 2019.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Special Metals Corporation (New Hartford, Oneida County) Application ID 9717

Allocation: 4,900 kW
Contract Demand: 4,900 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$43,159,000
Cumulative Capital Spending: \$35,028,061 or 81% (confirmed based on audit)
Job Commitment: 360 jobs
Jobs Reported: 353 jobs or 98% (confirmed based on audit)

Background: Special Metals Corporation (“SMC”) produces super alloys. NYPA’s auditing program selected this customer for an audit of its employment and capital investment records and the company was found to be non-compliant in capital investment for the reporting year. The company provided the additional capital spending levels in the amount of \$3,408,522, for a cumulative spend of \$38,436,583 or 89%. The allocation associated with the commitment under review expired on June 30, 2019. The company was approved for an allocation extension with new commitments at the October 2, 2018 Trustee meeting. The new allocation and associated commitments took effect on July 1, 2019. Reported capital spending levels are in compliance with the customer’s new commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Suit-Kote Corporation (Cortland, Cortland County) Application ID 11646

Allocation: 410 kW (Effective 11-1-2018)

Contract Demand: 410 kW (Effective 11-1-2018)

Power Utilization: 100%

5 year Capital Investment Commitment: \$4,095,000

Cumulative Capital Spending: \$3,536,458 or 86% (YR6)

Job Commitment: 170 jobs (Effective 11-1-2018)

Jobs Reported: 189 jobs or 111%

Background: Suit-Kote Corporation manufactures asphalt. The company stated there were some projects listed in its original capital investment plan that were not pursued. The allocation tied to the capital commitment under review is due to expire effective December 31, 2019. NYPA has not received a request for an extension from this company. Therefore, the allocation will be terminated on such date.

Recommendation: *No compliance action is required at this time.*

Upstate Niagara Cooperative, Inc. (West Seneca, Erie County) Application ID 4721

Allocation: 190 kW

Contract Demand: 190 kW

Power Utilization: 100%

5 year Capital Investment Commitment: \$15,000,000

Cumulative Capital Spending: \$12,537,867 or 84% (YR6)

Job Commitment: 181 jobs

Jobs Reported: 176 jobs or 97%

Background: Upstate Niagara Cooperative, Inc. produces dairy products. The company provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$1,010,605 for a cumulative spend of \$13,548,472 or 90% of the commitment level. In addition, the company has plans to invest an additional \$1.1 million in 2019.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

Yeshiva University (New York, New York County) Application ID 7104

Allocation: 90 kW

Contract Demand: 90 kW

Power Utilization: 100%
5 year Capital Investment Commitment: \$2,500,000
Cumulative Capital Spending: \$402,529 or 16% (YR6)
Job Commitment: 147 jobs
Jobs Reported: 150 jobs or 102%

Background: Yeshiva University provides higher education. It provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$210,944 for a cumulative spend of \$613,473 or 25%. In addition, the company stated that it plans to invest an additional \$410,000 in 2019. This allocation associated with the commitment under review expired on June 30, 2019. The University was approved for an allocation extension with revised commitments at the October 2, 2018 Trustee meeting. The extended allocation and new commitments took effect July 1, 2019. Staff expects that customer will be able to meet the new capital spending commitment.

Recommendation: *Staff recommends that the Trustees take no compliance action at this time.*

4) Capital Investment Commitments and Job Commitments (7 Customers)

Alken Industries Inc. (Ronkonkoma, Suffolk County) Application ID 9616

Allocation: 80 kW
Contract Demand: 80 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$ 3,947,000
Cumulative Capital Spending: \$581,042 or 15%
Job Commitment: 50 jobs
Jobs Reported: 43 jobs or 86%

Background: Alken Industries Inc. manufactures and assembles aircraft parts. The company did not provide an explanation regarding its job shortfall. However, given the amount of the allocation and degree of shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

The company's allocation is due to expire effective August 31, 2019. NYPA has not received a request for an extension from this company. Therefore, the allocation will expire and be terminated on such date.

Recommendation: *No compliance action is required at this time.*

D-K Manufacturing Corporation (Fulton, Oswego County) Application ID 9860

Allocation: 36 kW
Contract Demand: 36 kW
Power Utilization: 100%
Power Utilization: 100%
5 year Capital Investment Commitment: \$752,500
Cumulative Capital Spending: \$430,867 or 57%
Job Commitment: 22 jobs
Jobs Reported: 16 jobs or 73%

Background: D-K Manufacturing Corp. is a precision machine shop and metal stamping facility. The company provided job counts for the period July 2018 through October 2018, which indicated no additional job growth. Given the amount of the allocation, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction.

Moreover, the current allocation is due to expire effective August 31, 2019. NYPA has not received a request for an extension from this company so the allocation will expire and be terminated as of such date.

Recommendation: *No compliance action is required at this time.*

Sanmina-SCI (Owego, Tioga County) Application ID 9057

Allocation: 1,250 kW
Contract Demand: 1,250 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$10,129,000
Cumulative Capital Spending: \$7,506,398 or 74% (YR6)
Job Commitment: 375 jobs
Jobs Reported: 251 jobs or 67%

Background: Sanmina-SCI manufactures circuit boards. Employment has steadily declined over the last several reporting periods culminating in the eventual announcement in December 2017 that the facility would close. The allocation tied to the commitment under review is due to expire effective July 31, 2019. The Authority has not received a request for an extension from this company. Therefore, the allocation will be terminated on such date.

Recommendation: *No compliance action is required at this time.*

Schneider Packaging Equipment Company, Inc. (Brewerton, Onondaga County) Application ID 9408

Allocation: 120 kW
Contract Demand: 120 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$2,500,000
Cumulative Capital Spending: \$1,662,130 or 66% (YR6)
Job Commitment: 151 jobs
Jobs Reported: 118 jobs or 78%

Background: Schneider Packing Equip. Co., Inc. manufactures packaging machinery. In 2016, Schneider had a workforce reduction of about 30%, which the company states was necessary to align workforce numbers with the company's revenue stream. The company provided job counts for the period July 2018 through November 2018 which indicates a level of 126 jobs or 83% of its commitment for this period. The company also provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$145,620 for a cumulative spend of \$1,807,750 or 72%. The allocation associated with the commitments under review expired on June 30, 2019. The company was conditionally approved for an allocation extension, and the allocation was subsequently modified based on revised commitments that the company proposed for the extension term. The new allocation and associated commitments took

effect on July 1, 2019. Reported capital spending and job levels are in compliance with the customer's new extension commitments.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

Olbrych Realty Inc. (Gloversville, Fulton County) Application ID 3761

Allocation: 160 kW
Contract Demand: 160 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$4,250,000
Cumulative Capital Spending: \$23,320 or 1% (YR6)
Job Commitment: 173 jobs
Jobs Reported: 124 jobs or 72%

Background: Olbrych Realty Inc. operates as a commercial warehouse. The company stated that it lost a major customer in 2018 and lost a tenant, which resulted in a drop in the employee headcount. The company did not provide an explanation regarding its capital investment shortfall. The allocation tied to the commitments under review expired on June 30, 2019. However, the company has withdrawn from the RNY program and staff terminated the allocation effective January 1, 2019.

Recommendation: No compliance action is required at this time.

The Indium Corporation of America (Rome, Oneida County) Application ID 8944

Allocation: 150 kW
Contract Demand: 150 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$10,000,000
Cumulative Capital Spending: \$6,017,968 or 60% YR6
Job Commitment: 24 jobs
Jobs Reported: 16 jobs or 67%

Background: The Indium Corporation of America manufactures electronic assembly materials. The Indium Corporation has two other power allocations associated with facilities that have met or exceeded job commitments. Employees are periodically transferred between other facilities based on business needs. The company has requested a contract modification that would allow employment from other facilities within close proximity to be counted toward the total employment commitments. Under a separate item submitted to the Trustees today, Staff is recommending that the Trustee approve a contract modification to accommodate this request.

Recommendation: Staff recommends that the Trustees take no compliance action at this time.

XLI Corporation (Rochester, Monroe County) Application ID 7576

Allocation: 100 kW
Contract Demand: 100 kW
Power Utilization: 100%
5 year Capital Investment Commitment: \$2,500,000
Cumulative Capital Spending: \$650,537 or 26% (YR6)

Background: XLI Corporation manufactures machine components. The company stated it was not able to satisfy its job and capital expense commitments during the reporting period due to adverse business conditions that reduced sales revenue and profitability. The company provided job counts for the period of July 2018 through October 2018, which indicated no additional job growth. The company provided additional capital spending for the period of July 2018 through December 2018 in the amount of \$68,121 for a cumulative spend of \$718,658 or 29%. The allocation tied to the commitments under review is due to expire effective August 31, 2019. NYPA has not received a request for an extension. Therefore, the allocation expire and be terminated on such date.

Recommendation: *No compliance action is required at this time.*

Exhibit H (Summary of Exhibit A)

Customer	Allocation (kW)	Employment Commitment	Jobs Reported	Jobs Compliance	Revised Allocations/Commitments		Reductions		City	County	Region
					(kW)	Jobs	(kW)	Jobs			
Automotive Corporation, Inc.	226	160	136	85%	216	136	10	24	Batavia	Genesee	Finger Lakes
Glens Falls Hospital	580	2,344	2,042	87%	560	2,042	20	302	Glens Falls	Warren	Capital District
Highstreet IT Solutions, LLC	170	80	56	70%	140	56	30	24	Islandia	Suffolk	Long Island
HSBC Bank USA, National Association - Buffalo	440	1,454	1,205	83%	410	1,205	30	249	Buffalo	Erie	Western New York
Saint-Gobain Abrasives, Inc.	1,140	145	119	82%	1,050	119	90	26	Watervliet	Albany	Capital District
Surmet Ceramics Corporation	300	19	14	74%	250	14	50	5	Buffalo	Erie	Western New York
					Total Reduction: Exhibit A		230	630			

Exhibit H (Summary of Exhibit B)

Customer	Allocation (kW)	Contract Demand	Employment Commitment	Jobs Reported	Jobs Compliance %	Revised Allocations/Commitments		Reductions		City	County	Region
						(kW)	Jobs	(kW)	Jobs			
Advanced Interconnect Manufacturing	80	80	62	52	84%	N/A	52	N/A	10	Victor	Ontario	Finger Lakes
Agrana Fruit US, Inc.	910	450	120	66	55%	N/A	66	N/A	54	Baldwinsville	Onondaga	Central New York
AlSCO, Inc.	270	270	185	165	89%	N/A	165	N/A	20	Rochester	Monroe	Finger Lakes
BASF Corporation	1250	1250	210	183	87%	N/A	183	N/A	27	Peekskill	Westchester	Mid-Hudson
Celmet Electronics Company, Inc.	96	96	52	42	81%	N/A	42	N/A	10	Rochester	Monroe	Finger Lakes
CPI Aerostructures, Inc.	130	130	268	228	85%	N/A	228	N/A	40	Edgewood	Suffolk	Long Island
Dab-O-Matic Corporation	130	130	78	66	85%	N/A	66	N/A	12	Mount Vernon	Westchester	Mid-Hudson
Globe Grinding Corp.	36	36	13	11	85%	N/A	11	N/A	2	Copiague	Suffolk	Long Island
Mountainside Residential Care Center	40	40	68	52	76%	N/A	52	N/A	16	Margaretville	Delaware	Southern Tier
Nastra Automotive Industries Inc	86	86	75	60	80%	N/A	60	N/A	15	Lindenhurst	Suffolk	Long Island
Pall Corporation - APP. ID 11465	580	580	91	81	89%	N/A	81	N/A	10	Hauppauge	Suffolk	Long Island
Polygen Pharmaceuticals, Inc.	30	30	26	21	81%	N/A	21	N/A	5	Edgewood	Suffolk	Long Island
Red Barn Technology Group, Inc.	10	10	14	12	86%	N/A	12	N/A	2	Binghamton	Broome	Southern Tier
TMP Technologies, Inc.	60	60	30	25	83%	N/A	26	N/A	4	Buffalo	Erie	Western New York
US Nonwovens Corp.	56	56	280	244	87%	N/A	244	N/A	36	Brentwood	Suffolk	Long Island
Veeco Instruments, Inc.	476	476	192	152	79%	N/A	152	N/A	40	Plainview	Nassau	Long Island
Total Reduction: Exhibit B								0	303			

Exhibit H (Summary of Exhibit C)

Customer	Allocation (kW)	Employment Commitment	Jobs Reported	Jobs Compliance %	Usage Reported	Usage Compliance %	Revised Allocations/Commitments		Reductions		City	County	Region
							(kW)	Jobs	(kW)	Jobs			
K&N's Foods USA, LLC	1,800	103	41	40%	1040	58%	N/A	41	N/A	62	Fulton	Oswego	Central New York
							Total Reduction: Exhibit C		0	62			

Exhibit H (Summary of Exhibit D)

Customer	Allocation	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Annual Capital Investment Commitment	Annual Capital Investment Reported	Capital Investment % Achieved	Revised Allocations/Commitments			Reductions			City	County	Region
								kW	Jobs	Capital Investment	KW	Jobs	Capital Investment			
Flagpoles, Inc. / P&K Tubular	100	80	59	74%	\$ 2,200,000	\$ 1,834,172	83%	N/A	59	\$ 2,200,000	N/A	21	\$ -	East Setauket	Suffolk	Long Island
									Total Reduction: Exhibit D		0	21	\$ -			

Exhibit H (Summary of Exhibit E)

Customer	Allocation	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Usage Reported	Usage Compliance %	5 Year Capital Investment Commitment	Cumulative Capital Investment Reported	Capital Investment % Achieved	Revised Allocations/Commitments			Reductions			City	County	Region
										kW	Jobs	Capital Investment	KW	Jobs	Capital Investment			
Mount St. Mary's Hospital of Niagara Falls	330	725	528	73%	330	100%	\$ 44,826,000	\$ 16,554,531	37%	270	528	\$ 16,554,531	60	197	\$ 28,271,469	Lewiston	Niagara	Western New York
											Total Reduction: Exhibit E		60	197	\$ 28,271,469			

Exhibit H (Summary of Exhibit F)

Customer	Allocation (kW)	Employment Commitment	Jobs Reported	Jobs Compliance %	Usage Reported	Usage Compliance %	Revised Allocations/Commitments		Reductions		City	County	Region
							(kW)	Jobs	(kW)	Jobs			
Barnes and Noble, Inc.	630	195	178	91%	547	87%	610	189	20	6	Westbury	Nassau	Long Island
Total Reduction: Exhibit F									20	6			

Exhibit H (Summary of Exhibit G)

1. Job Commitment (34)	Allocation (kW)	Employment Commitment	Jobs Reported	Jobs Compliance %	Reductions		City	County	Region
					(kW)	Jobs			
Air Products and Chemicals, Inc.	6,000	56	42	75%	0	0	Glenmont	Albany	Capital District
Air Products and Chemicals, Inc.	190	7	6	86%	0	0	Medina	Orleans	Finger Lakes
Amneal Pharmaceuticals of New York, LLC	250	393	337	86%	0	0	Hauppauge	Suffolk	Long Island
Applied Energy Solutions, LLC	76	40	35	88%	0	0	Batavia	Genesee	Finger Lakes
Autronic Plastics, Inc.	190	106	92	87%	0	0	Westbury	Suffolk	Long Island
Citigroup Global Markets, Inc.	5,726	3,172	2,459	78%	0	0	New York	New York	New York City
Citigroup NA	3,340	4,541	3,605	79%	0	0	Long Island City	Queens	New York City
Computer Task Group, Incorporated	120	126	108	86%	0	0	Buffalo	Erie	Western New York
ConMed Corporation	1,410	645	533	83%	0	0	Utica	Oneida	Mohawk Valley
Contract Pharmacal Corp	156	125	82	66%	0	0	Hauppauge	Suffolk	Long Island
Contract Pharmacal Corp	386	270	209	77%	0	0	Hauppauge	Suffolk	Long Island
ESCO Turbine Technologies - Syracuse	906	300	265	88%	0	0	Chittenango	Madison	Central New York
Ferner Precision, Inc.	160	63	55	87%	0	0	Ilion	Herkimer	Mohawk Valley
General Electric Company	10,000	3,923	3,236	82%	0	0	Schenectady	Schenectady	Capital District
Geneva General Hospital	470	834	650	78%	0	0	Geneva	Ontario	Finger Lakes
Granny's Kitchens, LLC	1006	258	221	86%	0	0	Frankfort	Herkimer	Mohawk Valley
Indium Corporation of America	120	40	29	73%	0	0	Utica	Oneida	Mohawk Valley
John Hassall LLC	320	94	72	77%	0	0	Westbury	Nassau	Long Island
Joseph L. Mancuso & Sons, Inc.	46	278	244	88%	0	0	Batavia	Genesee	Finger Lakes
Kaleida Health - DeGraff Memorial Hospital	336	378	303	80%	0	0	North Tonawanda	Niagara	Western New York
Kaleida Health - Millard Fillmore Suburban Hospital	570	1456	967	66%	0	0	Williamsville	Erie	Western New York
Kraft Foods Group, Inc.	2220	332	269	81%	0	0	Avon	Livingston	Finger Lakes
LNK International, Inc.	1400	1759	1472	84%	0	0	Hauppauge	Suffolk	Long Island
NYCO Minerals, Inc	1400	104	75	72%	0	0	Willsboro	Essex	North Country
Pall Corporation	1410	442	310	70%	0	0	Port Washington	Nassau	Long Island
Pall Corporation	1770	624	555	89%	0	0	Cortland	Cortland	Central New York
Pivot Punch Corporation	176	78	59	76%	0	0	Lockport	Niagara	Western New York
Samaritan-Keep Nursing Home, Inc.	210	362	309	85%	0	0	Watertown	Jefferson	North Country
SCA Tissue North America LLC	80	21	18	86%	0	0	Saratoga Springs	Saratoga	Capital District
Steel Treaters, Inc.	200	24	20	83%	0	0	Oriskany	Oneida	Mohawk Valley
Steinway, Inc.	580	440	347	79%	0	0	Long Island City	Queens	New York City
L. & J.G. Stickley, Inc.	910	695	584	84%	0	0	Manlius	Onondaga	Central New York
Sutherland Global Services Inc.	50	1,811	674	37%	0	0	Rochester	Monroe	Finger Lakes
The New York Times Company, Inc.	4,150	588	467	79%	0	0	New York	New York	New York City

2. Power Utilization Commitment (3)	Allocation (kW)	Employment Commitment	Highest 6 month Average (kW) Reported	Utilization (kW) Compliance %	Reductions		City	County	Region
					(kW)	Jobs			
Empire Merchants, LLC	220	590	192	87%	0	0	Astoria	Queens	New York City
Morgan Stanley & Co. LLC	520	1042	446	86%	0	0	New York	New York	New York City
S. Howes, Inc.	20	13	14	70%	0	0	Westbury	Nassau	Long Island

3. Capital Investment Commitment (28)	Allocation (kW)	Employment Commitment (# of Jobs)	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Reductions					Region
						kW	Jobs	Capital Investment	City	County	
499 Syracuse City Centre	30	2	\$ 1,000,000	\$ 708,212	71%	0	0	0	Syracuse	Onondaga	Central New York
Brooks Memorial Hospital	226	2	\$ 15,000,000	\$ 7,319,330	49%	0	0	0	Dunkirk	Chautauqua	Western New York
Cliffstar LLC	1000	460	\$ 28,000,000	\$ 13,618,185	49%	0	0	0	Dunkirk	Chautauqua	Western New York
Dayton T. Brown, Inc.	100	180	\$ 7,350,000	\$ 5,975,624	81%	0	0	0	Bohemia	Suffolk	Long Island
ENNOVEA, LLC	616	170	\$ 14,400,000	\$ 9,440,103	66%	0	0	0	Rochester	Monroe	Finger Lakes
Flower City Printing, Inc.	300	82	\$ 4,200,000	\$ 2,604,913	62%	0	0	0	Rochester	Monroe	Finger Lakes
Ginsberg's Institutional Foods, Inc.	276	225	\$ 20,000,000	\$ 3,844,066	19%	0	0	0	Hudson	Columbia	Capital District
Guardian Industries Corp.	4150	295	\$ 60,000,000	\$ 90,947,828	152%	0	0	0	Geneva	Ontario	Finger Lakes
Hardinge Inc+	996	385	\$ 5,000,000	\$ 3,448,406	69%	0	0	0	Elmira	Chemung	Southern Tier
ICM Controls Corporation	386	180	\$ 11,000,000	\$ 9,835,129	89%	0	0	0	Cicero	Onondaga	Central New York
Intrepid Museum Foundation	290	190	\$ 93,294,272	\$ 29,739,941	32%	0	0	0	New York	New York	New York City
Jain Irrigation, Inc.	320	90	\$ 2,000,000	\$ 1,497,113	75%	0	0	0	Watertown	Jefferson	North Country
Jetro Cash & Carry Enterprises, LLC	226	130	\$ 3,500,000	\$ 2,272,414	65%	0	0	0	Brooklyn	Kings	New York City
Klein Steel Service Inc.	250	149	\$ 4,800,000	\$ 2,529,492	53%	0	0	0	Rochester	Monroe	Finger Lakes
Linde LLC	6,750	28	\$ 10,000,000	\$ 936,000	9%	0	0	0	Feura-Bush	Albany	Capital District
New York Presbyterian Hospital	5,000	209	\$ 280,603,094	\$ 289,424,625	103%	0	0	0	New York	New York	New York City
Norampac New York City, Inc.	450	151	\$ 3,000,000	\$ 624,341	21%	0	0	0	Maspeth	Queens	New York City
Pfautler, Inc.	820	160	\$ 10,000,000	\$ 3,178,641	32%	0	0	0	Rochester	Monroe	Finger Lakes
Providential Foods Corp	216	27	\$ 1,500,000	\$ 1,024,345	68%	0	0	0	Buffalo	Erie	Western New York
RD America, LLC	230	78	\$ 5,000,000	\$ 932,366	19%	0	0	0	Garden City	Nassau	Long Island
Revere Copper Products, Inc.	6,600	348	\$ 42,150,000	\$ 40,557,860	96%	0	0	0	Rome	Oneida	Mohawk Valley
SCA Tissue North America LLC	540	83	\$ 12,506,000	\$ 4,772,541	38%	0	0	0	Greenwich	Washington	Capital District
Silicon Carbide Product, Inc.	196	20	\$ 1,250,000	\$ 260,780	21%	0	0	0	Horseheads	Chemung	Southern Tier
Southside Hospital	330	1,887	\$ 334,394,000	\$ 296,414,978	89%	0	0	0	Bay Shore	Suffolk	Long Island
Special Metals Corporation	4,900	360	\$ 43,159,000	\$ 38,436,583	89%	0	0	0	New Hartford	Oneida	Mohawk Valley
Suit-Kote Corporation	410	170	\$ 4,095,000	\$ 3,536,458	86%	0	0	0	Cortland	Cortland	Central New York
Upstate Niagara Cooperative, Inc.	190	181	\$ 15,000,000	\$ 13,548,472	90%	0	0	0	West Seneca	Erie	Western New York
Yeshiva University	90	147	\$ 2,500,000	\$ 613,473	25%	0	0	0	New York	New York	New York City

4. Capital Investment and Job Commitment (7)	Allocation (kW)	Employment Commitment	Jobs Reported	Jobs Compliance %	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Reductions					Region
								kW	Jobs	Capital Investment	City	County	
Alken Industries Inc.	80	50	43	86%	\$ 3,947,000	\$ 581,042	15%	0	0	0	Ronkonkoma	Suffolk	Long Island
D-K Manufacturing Corp.	36	22	16	73%	\$ 752,500	\$ 430,867	57%	0	0	0	Fulton	Oswego	Central New York
Sanmina-SCI	1,250	375	251	67%	\$ 10,129,000	\$ 7,506,398	74%	0	0	0	Owego	Tioga	Southern Tier
Schneider Packing Equip. Co., Inc	120	151	118	78%	\$ 2,500,000	\$ 1,807,750	72%	0	0	0	Brewerton	Onondaga	Central New York
Olbrych Realty Inc. (School House Companies)	160	173	124	72%	\$ 4,250,000	\$ 23,320	1%	0	0	0	Gloversville	Fulton	Mohawk Valley
The Indium Corporation of America	150	24	16	67%	\$ 10,000,000	\$ 6,017,968	60%	0	0	0	Rome	Oneida	Mohawk Valley
XLI Corporation	100	54	41	76%	\$ 2,500,000	\$ 718,658	29%	0	0	0	Rochester	Monroe	Finger Lakes

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
BUSINESS SERVICES - TREASURY including an	KYRIBA CORP. San Diego, CA (4500310979)	06/28/19	Treasury workstation software and system implementation services	06/27/24	B/S	\$350,000		\$1,591,849.31*
							*Note: represents total for up to 5-year term interim value of \$350,000	
COMMERICAL OPERATIONS – BUSINESS & PROJECT DEVELOPMENT	SUBMERSIVE MEDIA LLC New York, NY (4500309906)	06/28/19	Provide design, implementation and maintenance of a digital marketing program to promote economic development	06/27/24	B/P	\$150,000		\$500,000*
							*Note: represents total for 5-year term including an interim value of \$150,000	
HUMAN RESOURCES & ADMINISTRATION – RECRUITING	Q18-6581JW; 5 Awards -1. AMPCUS, INC. Chantilly, VA 2. INFOJINI, INC. Columbia, MD 3. JUDGE TECHNICAL SERVICES, INC. dba JUDGE TECHNICAL STAFFING Wayne, PA 4. RANGAM CONSULTANTS, INC. Somerset, NJ 5. ROBERT HALF INTERNATIONAL, INC. Menlo Park, CA	07/30/19 (on or about)	Provide recruitment services for all level of positions due to the recent forthcoming retirement announcements and an emergent need for such services	07/29/22	B/P			\$1 million*
							*Note: represents total aggregate value for up to 3-year term with a 2-year option	

♦ **M / WBE:** New York State-certified Minority / Women-owned Business Enterprise (indicated by the ♦ symbol after the Company Name)
1 **Award Basis:** B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search
2 **Contract Type:** P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

Proc Awards Exh A

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
HUMAN RESOURCES & ADMINISTRATION - TRANSACTIONAL PROCUREMENT	AUCTIONS INTERNATIONAL, INC. - East Aurora, NY (C19-001273MG)	08/01/19	Provide off-site Auctions Services for the sale and disposal of surplus Personal Property for NYPA and Canals	07/31/24	B/S			\$0.00*
*Note: represents total for up to 5-year term								
PUBLIC & REGULATORY AFFAIRS - ENVIRONMENTAL JUSTICE & SUSTAINABILITY	CEC STUYVESANT COVE, INC. dba SOLAR ONE New York, NY (Q19-6672JGM)	07/30/19 (on or about)	Provide energy literacy workshops for the Authority's environmental justice stakeholders	07/29/21	B/P			\$71,000*
*Note: represents total for up to 2-year term								
PUBLIC & REGULATORY AFFAIRS - ENVIRONMENTAL JUSTICE	Q19-6673JGM; 3 Awards 1. CEC STUYVESANT COVE, INC. dba SOLAR & ONE New York, NY	07/30/19 (on or about)	Provide STEM educational programming for the Authority's environmental justice stakeholders	07/29/21	B/P			\$392,000*
SUSTAINABILITY	2. BIOBUS dba CELL MOTION LABORATORIES, dba BIOBASE New York, NY 3. ADELAIDE E. FALCO dba CURIOUS-ON-HUDSON LLC White Plains, NY							
*Note: represents total aggregate value for up to 2-year term								

♦ **M / WBE:** New York State-certified Minority / Women-owned Business Enterprise (indicated by the ♦ symbol after the Company Name)
1 Award Basis: B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search
2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

Proc Awards Exh A

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
STRATEGY PLANNING - STRATEGY PLANNING & DELIVERY	Q19-6694JGM; 2 Awards 1. M. ARTHUR GENSLE JR. & ASSOCIATES, INC. San Francisco, CA (4600003674) 2. THE VISUAL BRAND LLC Westport, CT (4600003675)	07/08/19	Provide EVolve charging station design and fabrication	07/07/22	B/P	\$200,000		\$2.5 million*
							*Note: represents total aggregate value for up to 3-year term including interim value of \$200,000	
UTILITY OPERATIONS – AIR & SUSTAINABILITY PROGRAM	CEMTEK ENVIRONMENTAL, INC. dba CEMTEK KVB-ENERTEC Santa Ana, CA (4600003677)	08/01/19	Provide for the software support and maintenance of the Programmable Logic Controllers ("PLC's") & Continuous Emissions Monitoring Systems (CEM's") at all SENY sites	07/31/22	S/S		*Note: represents total for up to 3-year term	\$577,065*
UTILITY OPERATIONS – ELECTRICAL & CONTROLS (SENY)	BENFIELD CONTROL SYSTEMS, INC. White Plains, NY (A19-001252PH)	08/01/19	Provide metering cabinet fabrication for the Charles Poletti Power Project	07/31/24	B/S		*Note: represents total for up to 5-year term	\$300,000*
UTILITY OPERATIONS – ELECTRICAL MAINTENANCE (NIA)	INDUSTRIAL ELECTRICAL AND TECHNICAL SERVICES, INC. Lima, NY (N19-20135401GJ)	08/01/19	Provide repair, refurbishment, recondition and remanufacture of the NPP 480VAC circuit breakers, on-site pick up, delivery and assistance on diagnosing a breaker during acceptance testing	07/31/22	B/S		*Note: represents total for up to 3-year term	\$750,000*

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2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	HAYES PUMP, INC. Concord, MA (A19-001241DW)	08/01/19	Provide pump services and repairs for the SENY region Power Plants	07/31/24	B/S			\$5 million*
*Note: represents total for up to 5-year term								
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	PRO-QUIP, INC. Kenilworth, NJ (A19-001240DW)	08/01/19	Provide valve actuator services and repairs for the SENY region Power Plants	07/31/24	B/S			\$5 million*
*Note: represents total for up to 5-year term								
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	A19-001294DW; 2 Awards 1. E-J ELECTRIC INSTALLATION CO. Long Island City, NY 2. HAUGLAND ENERGY GROUP LLC Plainview, NY	09/01/19	Provide general electrical services for the SENY facilities	08/31/24	B/S			\$5 million*
*Note: represents total aggregate value for up to 5-year term								
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	A19-001291DW; 2 Awards 1. ACME INDUSTRIAL, INC. Staten Island, NY 2. FRESH MEADOW POWER LLC Fresh Meadows, NY	07/30/19 (on or about)	Provide general maintenance services for the SENY facilities	07/29/24	B/S			\$5 million*
*Note: represents total aggregate value for up to 5-year term								

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Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	H.O. PENN MACHINERY COMPANY, INC. Poughkeepsie, NY (A19-001306DW)	01/01/20	Provide emergency diesel generator and equipment services for SENY region Power Plants	12/31/24	B/S			\$500,000*
*Note: represents total forup to 5-year term								
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	RFJ INSULATION CONTRACTOR, INC. Brightwaters, NY (A19-001243JV)	01/30/20	Provide new insulation and repair existing insulation for the SENY region	01/29/25	B/S			\$5 million*
* Note: represents total for up to 5-year term								
UTILITY OPERATIONS – MAINTENANCE RESOURCE MANAGEMENT (SENY)	(A19-001373DW); 2 Awards 1. VERTICAL ACCESS SOLUTIONS LLC Pittsburgh, PA 2. YORK SCAFFOLD EQUIPMENT CORP. Long Island City, NY	09/01/19	Provide general scaffolding services for the Southeast New York SENY region	08/31/24	B/S			\$5 million*
*Note: represents total aggregate value for up to 5-year term								
UTILITY OPERATIONS – PROJECT MANAGEMENT	MIDAL CABLES LTD. Askar, Bahrain (Q19-6662HM)	07/30/19 (on or about)	Provide furnishing and delivery of Aluminum Conductor Steel Reinforced ("ACSR") for the Moses-Adirondack Smart Path Reliability project	07/29/24	B/E			\$8,314,586*
*Note: represents total for up to 5-year term; \$7,106,484 contract total and \$1,208,102 additional for managing aluminum pricing inflation risks								
UTILITY OPERATIONS – PROJECT MANAGEMENT	ROTUNDO PLUMBING CORP. Putnam Valley, NY (Q18-Q176337JM)	08/01/19	Provide on-call plumbing services for the Clarence D. Rappleyea building	07/31/24	B/S			\$375,000*
*Note: represents total for up to 5-year term								
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2	Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service							

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "A"
July 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
UTILITY OPERATIONS – PROJECT MANAGEMENT	O’CONNELL ELECTRIC COMPANY, INC. Victor, NY (Q19-6666KS)	07/30/19 (on or about)	Provide upgrades to the power circuit breakers, relays, disconnect switches, control cables and the station service equipment for the Plattsburgh Substation Breaker Replacement project	07/29/22	B/C			\$3,166,430*
							*Note: represents total for up to 3-year term	
UTILITY OPERATIONS – PROJECT MANAGEMENT	TRC ENGINEERS, INC. Windsor, CT (4600003672)	06/21/19	Provide design, furnish, deliver, install and maintain a microwave system in the SENY region	06/20/26	B/C	\$1,485,000		\$9,504,654*
							*Note: represents total for up to 7-year term (which includes 5 years of maintenance support) including an interim value of \$1,485,000	
UTILITY OPERATIONS – TECHNOLOGY & INNOVATION	RENSSELAER POLYTECHNIC INSTITUTE Troy, NY (4500310387)	06/24/19	Provide for the research work as part of the NYSERDA funded project entitled “Deep Learning Computer System for Grid Operations”	12/23/20	S/P	\$20,000		\$350,000*
							*Note: represents total for up to 18-month term including an interim value of \$20,000	
UTILITY OPERATIONS – TECHNOLOGY & INNOVATION	RENSSELAER POLYTECHNIC INSTITUTE Troy, NY (4500310386)	06/24/19	Provide for the research work as part of the NYSERDA funded project entitled “Model Translations for SMART Grid Applications Study”	06/23/21	S/P	\$20,000		\$300,000*
							*Note: represents total for up to 24-month term including an interim value of \$20,000	
UTILITY OPERATIONS – TECHNOLOGY & INNOVATION	UNIVERSITY OF WISCONSIN - MADISON Madison, WI (4500310950)	07/09/19	Provide for the performance research work as part of the NYSERDA funded project entitled “Low Frequency Alternating Current Transmission Line Study”	02/08/21	Si/P	\$7,000		\$100,000*
							*Note: represents total for up to 19-month term including an interim value of \$7,000	

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Procurement (Services) Contracts – Extensions and/or Additional Funding
(For Description of Contracts See "Discussion")

EXHIBIT "B"
July 30, 2019

<u>Plant Site/ Bus. Unit</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Authorized Expenditures For Life Of Contract</u>
INFORMATION TECHNOLOGY - APPLICATION DEVELOPMENT	Q15-5841SR; 10 Awards	07/01/15	Provide SAP	06/30/20	B/P		\$23,842,619.69	\$25.5 million*
	1. A-1 TECHNOLOGY, INC. ♦ New York, NY (4600002996)		Consulting Services in four areas: advisory and consulting services, system Integration and implementation services, end-to-end consulting services and turnkey solutions				\$0.00	
	2. ERNST & YOUNG U.S. LLP Secaucus, NJ (4600002987)						\$16,934,978.01	
	3. GROM ASSOCIATES, INC. Flemington, NJ (4600002997)						\$577,710.66	
	4. GYANSYS, INC. Indianapolis, IN (4600003004)						\$0.00	
	5. HEWLETT PACKARD ENTERPRISE COMPANY Palo Alto, CA (4600002998)						\$0.00	
	6. NTT DATA, INC. Albany, NY (4600002999)						\$0.00	
	7. QUINTEL-MC, INCORPORATED Greenwood Village, CO (4600003000)						\$0.00	
	8. SAGE GROUP CONSULTING, INC. Hazlet, NJ (4600003001)						\$0.00	

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2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; L= Legal Service

Procurement (Services) Contracts – Extensions and/or Additional Funding
(For Description of Contracts See "Discussion")

EXHIBIT "B"
July 30, 2019

<u>Plant Site/ Bus. Unit</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Authorized Expenditures For Life Of Contract</u>
	9. SIERRA INFOSYS, INC. Houston, TX (4600003002)						\$0.00	
	10. UTEGRATION LLC Houston, TX (4600003003)						\$6,329,931.02	
						*Note: represents total aggregate value for up to 5-year term; interim extension from 7/1/19-7/30/19 and a full extension until 6/30/20; No additional funding		
LAW - LEGAL SERVICES	HINCKLEY, ALLEN & SNYDER LLP Providence, RI (4500300827)	08/29/18	Provide legal representation to the Authority in connection with a federal government investigation	08/28/21	Si/L		\$2,116	\$50,000*
						*Note: represents total for 3-year term, with no additional funding and 2-year extension requested		
LAW - LEGAL SERVICES	COVINGTON & BURLING LLP Washington, DC (4500304105)	08/01/18	Provide legal representation to the Authority in connection with an environmental Evaluation	07/31/21	Si/L		\$6,250	\$25,000*
						*Note: represents total for 3-year term, with no additional funding and 2-year extension requested		
UTILITY OPERATIONS – PROJECT MANAGEMENT	GENSLER ARCHITECTURE/DESIGN, INC. Morristown, NJ (4500300595)	07/09/18	Provide Engineer/Architect services for the 15 th floor Refresh Construction Project	12/31/19	B/P		\$374,260.67	\$634,255*
						*Note: represents total for up to 17-month term, with no additional funding and a 5-month extension requested		

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President and CEO Report

Gil Quiniones

President & Chief Executive Officer

July 30, 2019

NYPA Overall Performance – May 2019

	YTD Target	YTD Actual
Maintain Infrastructure		
▲ Generation Market Readiness	97.40%	▲ 99.50%
▲ Transmission System Reliability	95.91%	▲ 96.40%
Financial Management		
▲ Debt Coverage Ratio (Q)	2.50	▲ 4.43
▲ O&M Budget Performance (\$M)	\$202.10	▲ \$198.37
Energy Services		
▲ Greenhouse Gas (GHG) Saved (Tons)	14,633	▲ 15,395
▲ Energy Efficiency Investment in State Facilities (\$M)	\$44.99	▲ \$55.26
Workforce Management		
▲ Skilled Workforce: Retention (Q)	440	▲ 541
Safety Leadership		
▲ DART Rate	0.78	▲ 0.75
Environmental Responsibility		
▲ Environmental Incidents	12	▲ 9

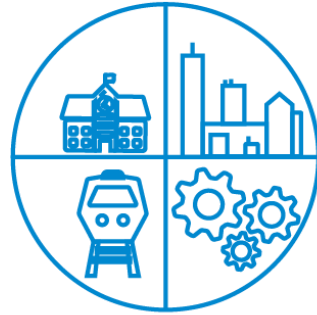
YTD Performance Measure Status

▲	Meeting or exceeding target
■	Missing target
●	Significantly missing target
◆	No updated data

NYPA's Expanded Authority



Off- shore wind
generation projects in
U.S. waters



Statewide authorization to
supply power needs of
NYPA customers, public
entities and CCA's



Finance the development
of renewable energy
generation facilities for
use by NYPA customers,
public entities and CCA's



Design, finance,
construct, install, operate
and maintain EV charging
stations for use by public
– site on private land

Climate and Clean Energy Legislation

Climate Leadership and Community Protection Act (CLCPA)

70 % renewable generation by 2030

100% carbon-free electricity by 2040

Net zero GHG emissions economy wide by 2050



9 GW of OSW by 2035



6 GW of solar DG by 2025
3 GW of energy storage by 2030



Reduce energy consumption
by 185 trillion Btu by 2025



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Chief Financial Officer's Report

Lee Garza

Senior Vice President, Financial Operations

Acting EVP & Chief Financial Officer

July 30, 2019

In \$ Millions			MAY 2019 YTD BUDGET
BUDGETED MAY YTD NET INCOME		\$22.8	
Margins—Generation	(\$21.3)		\$379.9
Margins—Transmission	(1.8)		65.9
Margins—Non-Utility	1.9		8.7
Operating Expenses	25.0		(382.1)
Net Operating Income	3.8	26.6	72.4
Interest Expense, Net		19.1	(49.6)
ACTUAL MAY YTD NET INCOME		\$45.7	\$22.8

In \$ Millions				2019 BUDGET
BUDGETED YEAR-END NET INCOME			\$20.9	
Margins—Generation ¹	\$2.6			\$904.9
Margins—Transmission	6.1			152.8
Margins—Non-Utility	6.7			20.9
Operating Expenses	(15.9)			(939.2)
Net Operating Income	(0.5)	20.4		139.4
Interest Expense, Net		17.9		(118.5)
FORECASTED YEAR-END NET INCOME ¹				\$20.9
		Low Value \$16.9	Forecasted Value \$38.3	
			High Value \$63.2	

1

90% variance range developed by varying hydro generation, fossil dispatch, energy and capacity prices, and ancillary services revenue.



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Exhibit 5c i-A
July 30, 2019

Chief Commercial Officer's Report

Sarah Salati

EVP & Chief Commercial Officer

July 30, 2019

Commercial Operations KPI – May 2019

GOAL	KPI	YTD May 2019			
		Status	Target	Actual	Variance
Wholesale	Customer Usage (twh)		10.1	10.1	0%
	Generation (twh)		11.3	12.0	6%
	Electric Prices (\$/mwh)		\$38.64	\$30.58	-21%
	Fuel Price (\$/mmbtu)		\$5.11	\$3.98	-22%
	Merchant Gross Margin (\$M)*		\$136.9	\$125.5	-8%

Status	
	Within Target (>0%)
	Outside of Target (-1% to -10%)
	Significantly Outside Target range (<-11%)

* Excludes Astoria Energy II and NYPA Zeltman Power Project



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Commercial Operations KPI – May 2019

GOAL	KPI	YTD May 2019			
		Status	Target	Actual	Variance
Economic Development	Recharge NY (MW) Allocated			764/910	
	All Programs - Jobs Retained			407,584	
	Capital Committed (\$B)			\$35.4	
Energy Efficiency	Customer Investments (\$M)		\$83.5	\$95.6	14%
	Non-Utility Revenues (\$M)		\$7.2	\$9.7	35%
	Operating Expenses (\$M)		\$12.8	\$13.6	6%

Status

 Within Target (>0%)

 Outside of Target (-1% to -10%)

 Significantly Outside Target range (<-11%)

NYSERDA Offshore Wind RFP Update

- On November 8, NYSERDA issued its first solicitation for 800 MW or more of new offshore wind projects
- On July 18, Governor Andrew M. Cuomo announced the winners of the nations single largest energy procurement – *Empire Wind and Sunrise Wind* – totaling 1,696 MW combined
- Economic activity expected from projects:
 - \$3.2 billion in private investments
 - Support more than 1,600 jobs in development, manufacturing, installation, operations and maintenance
- NYPA and Con Edison Transmission plan to support the development of the transmission facilities needed to deliver the offshore wind energy to the grid for the 880MW *Sunrise Wind* project, to be located 30 miles off the shore of Long Island

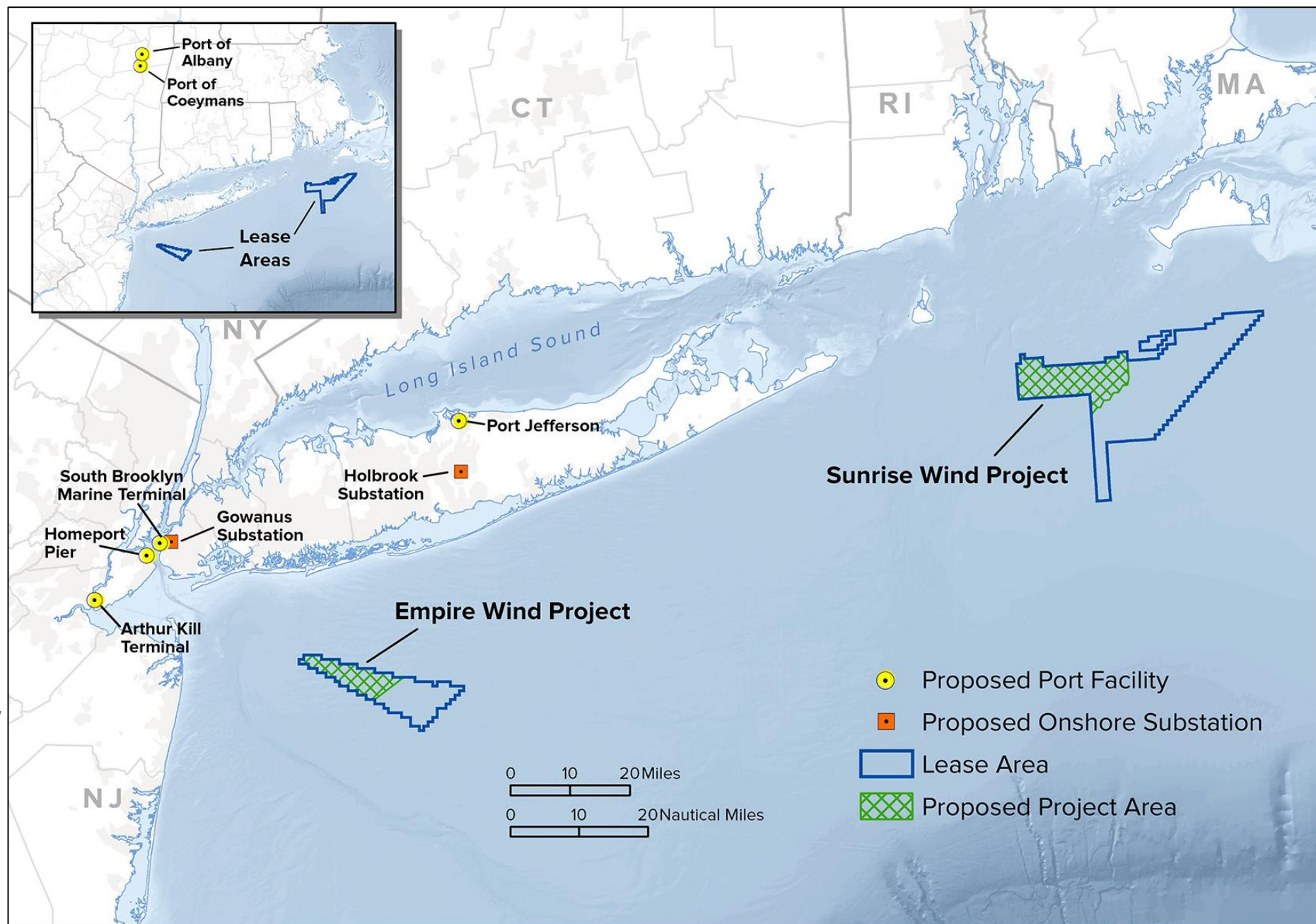
Project Areas

Empire Wind

- Equinor US Holdings, Inc.

Sunrise Wind

- Bay State Wind, a joint venture of Orsted A/S and Eversource Energy





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Economic Development Program Allocations

Keith Hayes

Senior Vice President, Clean Energy Solutions

July 30, 2019

ReCharge New York Power Allocations

Discussion

Out of the 146.1 MW of power remaining in the program:

- 88.1 MW remain for large business expansion projects,
- 56.7 MW remain for large business retention, and
- 1.3 MW are left for small business and not-for-profits.

Requested Trustee Action

As recommended by the Economic Development Power Allocation Board on July 16, 2019, the Trustees are requested to approve:

- Fourteen (14) ReCharge NY Allocations totaling 3.7 MW supporting over 4,500 jobs and capital investment commitments of \$184 MM.

Replacement Power Allocation

Discussion

The recommended allocation will create 165 new jobs and a capital investment commitment of at least \$85 MM.

Requested Trustee Action

- Approve 10,000 kW allocation of Replacement Power to Somerset Operating Company, LLC, which is planning to build a state-of-the-art data center at its soon-to-be-closed coal-fired facility in Barker (Niagara County).
- Authorize a public hearing on the proposed contract for Somerset Operating Company, LLC.



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Line	Company	City	County	Economic Development Region	IOU	Description	kW Request	kW Recommendation	Jobs Retained	Jobs Created	Total Job Commitment	Capital Investment (\$)		Contract Term (years)
1	Forteq North America, Inc.	West Henrietta	Monroe	Finger Lakes	RGE	Manufacturer of automotive system components	797	396	110	0	110	\$4,000,000		7
	Finger Lakes Region Sub-totals:							396	110	0	110	\$4,000,000		
2	Island International Exterior Fabricators LLC	Calverton	Suffolk	Long Island	LIPA	Manufacturer of exterior wall panels	716	356	218	0	218	\$300,000	(1)	7
3	U.S. Alliance Paper, Inc.	Edgewood	Suffolk	Long Island	LIPA	Manufacturer of household paper products	1,040	516	165	0	165	\$1,250,000		7
	Long Island Region Sub-totals:							872	383	0	383	\$1,550,000		
4	Tempco Glass Fabrication LLC	Flushing	Queens	New York City	CONED	Glass tempering & fabrication services	578	286	55	0	55	\$1,100,000		7
	New York City Region Sub-totals:							286	55	0	55	\$1,100,000		

Totals

1,554	548	0	548	\$6,650,000

(1) These companies are also recommended for expansion-related allocations of RNY for separate and distinct job creation and capital investment commitments associated with proposed business expansions.

Line	Company	City	County	Economic Development Region	IOU	Description	kW Request	kW Recommendation ⁽¹⁾	Base Employment ⁽³⁾	Job Creation Commitment	Project Capital Investment (\$)		Contract Term (years)
1	Bausch & Lomb Incorporated	Rochester	Monroe	Finger Lakes	RGE	Manufacturer of contact lenses	860	600	932	100	\$148,020,341	⁽⁴⁾	7
	Finger Lakes Region Sub-totals:							600	0	100	\$148,020,341		
2	LIF Industries, Inc.	Port Washington	Nassau	Long Island	LIPA	Producer & distributor of fireproof doors	225	156	310	20	\$5,000,000	⁽⁴⁾	7
3	Island International Exterior Fabricators LLC	Calverton	Suffolk	Long Island	LIPA	Manufacturer of exterior wall panels	500	350	218	100	\$2,400,000	⁽²⁾	7
	Long Island Region Sub-totals:							506	0	120	\$7,400,000		

Totals

1,106	0	220	\$155,420,341

(1) All expansion-based RNY Power allocations are recommended to be “up to” the amount indicated pending the applicant’s compliance with contractual commitments, including commitments relating to job creation, capital investment spending and power utilization.

(2) These companies are also being recommended for retention-based RNY Power allocations associated with separate and distinct contractual commitments relating to such matters as job retention, capital investment spending, and power utilization associated with an existing business.

(3) The number of new jobs committed will be above a base employment level specified in the power sale contract with the applicant.

(4) This applicant was previously approved for RNY Power allocations. The base employment level refers to the applicant's retained jobs, most of which are already associated with an existing power allocation.

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	kW Request	kW Recommendation	Jobs Retained	Jobs Created	Capital Investment (\$)		Contract Term (years)
1	HealthAlliance Hospital Mary's Avenue Campus	Kingston	Ulster	Mid-Hudson	CHUD	Hospital & healthcare center	923	306	400	0	\$15,000,000		7
	Mid-Hudson Region Sub-totals:							306	400	0	\$15,000,000		
2	Long Island Jewish Medical Center	New Hyde Park	Nassau	Long Island	LIPA	Medical offices facility	307	100	813	0	\$250,000		7
3	North Shore University Hospital	Great Neck	Nassau	Long Island	LIPA	Medical offices & emergency services	120	36	245	0	\$100,000		7
4	Northwell Healthcare, Inc.	Manhasset	Nassau	Long Island	LIPA	Facilities services & corporate healthcare offices	520	170	1,026	0	\$250,000		7
5	Northwell Healthcare, Inc.	New Hyde Park	Nassau	Long Island	LIPA	Corporate healthcare offices facility	374	120	333	0	\$125,000		7
6	Northwell Healthcare, Inc.	Westbury	Nassau	Long Island	LIPA	System data center & corporate healthcare offices	784	260	727	0	\$115,000		7
	Long Island Region Sub-totals:							686	3,144	0	\$840,000		

Retention-Based Totals

992	3,544	0	15,840,000

Expansion-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	kW Request	kW Recommendation (1)	Base Employment	Job Creation Commitment	Project Capital Investment (\$)		Contract Term (years)
7	Fieldtex Products Inc.	Rochester	Monroe	Finger Lakes	RGE	Manufacturer of first aid & medical kits	100	50	180	30	\$6,300,000		7
	Finger Lakes Region Sub-totals:							50	180	30	\$6,300,000		

Expansion-Based Totals

50	180	30	\$6,300,000

Retention & Expansion-Based Totals

1,042	3,724	30	\$22,140,000

(1) All expansion-based RNY Power allocations are recommended to be “up to” the amount indicated pending the applicant’s compliance with contractual commitments, including commitments relating to job creation, capital investment spending and power utilization.

Line	Company	City	County	Economic Development Region	IOU	Description	Reason
1	FreeMoneyClick	Greene	Chenango	Central New York	Unknown	Coffee shop facility	The applicant's business falls within EDPAB's definition of a retail business. Specifically, the applicant operates a business that is primarily used in making retail sales of goods or services to customers who personally visit such facilities to obtain goods or services.

Line	Company	City	County	Economic Development Region	IOU	Description	Reason
1	Bad Drip Inc.	Rochester	Monroe	Finger Lakes	RGE	Distributor of e-juice & vaping products	Specific entities within the facility that would use and receive the benefit of an RNY allocation would not have a utility account or utility grade demand meter, and therefore it would not be possible for the utility to collect demand and usage data from specific users of RNY Power.
2	The Family Resource Center Of Peekskill, Inc.	Peekskill	Westchester	Mid-Hudson	CONED	Family & human services agency	The facility lacks demand metering preventing RNY Power delivery and billing.

Line	Company	City	County	Economic Development Region	IOU	Description	Reason
1	Mason Farms Operating Co., LLC	Williamson	Wayne	Finger Lakes	RGE	Fruit and vegetable farm	Applicant has been unresponsive to requests by staff for additional information, preventing a complete analysis of the application.

(Statutory Criteria – RNY Power Program)

- the significance of the cost of electricity to the applicant's overall cost of doing business, and the impact that a Recharge New York power allocation will have on the applicant's operating costs;
- the extent to which a Recharge New York power allocation will result in new capital investment in the state by the applicant;
- the extent to which a Recharge New York power allocation is consistent with any regional economic development council strategies and priorities;
- the type and cost of buildings, equipment and facilities to be constructed, enlarged or installed if the applicant were to receive an allocation;
- the applicant's payroll, salaries, benefits and number of jobs at the facility for which a Recharge New York power allocation is requested;
- the number of jobs that will be created or retained within the state in relation to the requested Recharge New York power allocation, and the extent to which the applicant will agree to commit to creating or retaining such jobs as a condition to receiving a Recharge New York power allocation;
- whether the applicant, due to the cost of electricity, is at risk of closing or curtailing facilities or operations in the state, relocating facilities or operations out of the state, or losing a significant number of jobs in the state, in the absence of a Recharge New York power allocation;
- the significance of the applicant's facility that would receive the Recharge New York power allocation to the economy of the area in which such facility is located;
- the extent to which the applicant has invested in energy efficiency measures, will agree to participate in or perform energy audits of its facilities, will agree to participate in energy efficiency programs of the authority, or will commit to implement or otherwise make tangible investments in energy efficiency measures as a condition to receiving a Recharge New York power allocation;
- whether the applicant receives a hydroelectric power allocation or benefits supported by the sale of hydroelectric power under another program administered in whole or in part by the New York Power Authority;
- the extent to which a Recharge New York power allocation will result in an advantage for an applicant in relation to the applicant's competitors within the state; and

- in addition to the foregoing criteria, in the case of a not-for-profit corporation, whether the applicant provides critical services or substantial benefits to the local community in which the facility for which the Recharge New York power allocation is requested is located.

APPLICATION SUMMARY
Replacement Power

Company:	Somerset Operating Company, LLC (“SOC”)
Project Location:	Town of Barker
County:	Niagara
IOU:	National Grid
Business Activity:	Creation of large data center hub.
Project Description:	As part of repurposing the Somerset coal-fired plant site, SOC is proposing to develop the Empire State Data Hub which would focus on artificial intelligence, machine learning and other computationally intensive processes. SOC plans to initially construct three server buildings at the site with operations to begin in the summer of 2020.
Existing Allocation(s):	None
Power Request:	100,000 kW
Power Recommended:	10,000 kW
Job Commitment:	
Current:	0 jobs
New:	165 new, permanent, full time jobs at the Data Hub for the term of the allocation
New Jobs/Power Ratio:	17 jobs/MW
New Jobs - Avg. Wage and Benefits:	\$61,496
Capital Investment:	At least \$85 million
Capital Investment/MW:	\$8.5 MM/MW
Other ED Incentives:	Support from Empire State Development.
Summary:	With the 690 megawatt coal plant at the site due to close in 2020, SOC is proposing to transition a portion of the facility into a data center hub to support companies in the information and technology sectors. A goal of the project is to create as many jobs as possible and operate the new data hub using clean energy.

Exhibit B
July 30, 2019

POWER AUTHORITY

OF THE

STATE OF NEW YORK

30 South Pearl Street
10th Floor
Albany, New York 12207-3425

AGREEMENT FOR THE SALE
OF EXPANSION POWER AND/OR REPLACEMENT POWER

Somerset Operating Company, LLC

The POWER AUTHORITY OF THE STATE OF NEW YORK (“Authority”), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law (“PAL”), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for the Sale of Expansion Power and/or Replacement Power (“Agreement”) with Somerset Operating Company, LLC (“Customer”) with offices and principal place of business at 7725 Lake Road, Barker, New York 14012. The Authority and the Customer are from time to time referred to in this Agreement as “Party” or collectively as “Parties” and agree as follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the Niagara Power Project, Federal Energy Regulatory Commission (“FERC”) Project No. 2216, including hydropower known as Expansion Power (“EP”) and Replacement Power (“RP”) to qualified businesses in accordance with PAL § 1005(5) and (13);

WHEREAS, the Customer has applied for an allocation of EP and/or RP, or for an extension of an existing allocation of EP or RP, for use at facilities defined in this Agreement as the “Facility”;

WHEREAS, the Customer has offered to make specific commitments relating to, among other things, the creation and/or retention of jobs, capital investments, power usage and energy efficiency measures at the Facility;

WHEREAS, the Authority’s Board of Trustees approved an allocation of EP and/or RP to the Customer;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the EP and/or RP for a term provided in this Agreement;

WHEREAS, the Authority’s provision of Electric Service under this Agreement is an unbundled service separate from (i) the transmission of the allocation, and (ii) the delivery of the Allocation;

WHEREAS, electric service to be provided hereunder shall be subject to the rates and other terms and conditions contained in the Service Tariff No. WNY-2 as provided in this Agreement;

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement; and

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement.

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

ARTICLE I

DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined in schedules or appendices to this Agreement shall have the meanings set forth in such schedules or appendices.

“Adverse Water Condition” means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers who are served by the Project.

“Agreement” means this Agreement, and unless otherwise indicated herein, includes all schedules, appendices and addenda thereto, as the same may be amended from time to time.

“Allocation” refers to the allocation(s) of EP and/or RP awarded to the Customer as specified in Schedule A.

“Alternative REC Compliance Program” has the meaning provided in Schedule E.

“Annual Capital Investment Commitment” has the meaning set forth in Schedule B.

“Annual CI Expenditures” has the meaning set forth in Schedule B.

“Base Employment Level” has the meaning set forth in Schedule B.

“Contract Demand” is as defined in Service Tariff No. WNY-2.

“Customer-Arranged Energy” means energy that the Customer procures from sources other than the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Planned Hydropower Curtailment.

“Effective Date” means the date that this Agreement is fully executed by the Parties.

“Electric Service” is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, Service Tariff No. WNY-2 and the Rules.

“Energy Services” has the meaning set forth in Article V of this Agreement.

“Expansion Power” (or “EP”) is 250 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(13).

“Expansion Project” has the meaning set forth in Section IV.3.a of this Agreement.

“Expansion Project Capital Investment Commitment” has the meaning set forth in Schedule B.

“Facility” means the Customer’s facilities as described in Schedule A to this Agreement.

“Firm Power” is as defined in Service Tariff No. WNY-2.

“Firm Energy” is as defined in Service Tariff No. WNY-2.

“FERC” means the Federal Energy Regulatory Commission (or any successor organization).

“FERC License” means the first new license issued by FERC to the Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act, which became effective September 1, 2007 after expiration of the Project’s original license which became effective in 1957.

“Hydro Projects” is a collective reference to the Project and the Authority’s St. Lawrence-FDR Project, FERC Project No. 2000.

“International Joint Commission” or “IJC” refers to the entity with responsibility to prevent and resolve disputes between the United States of America and Canada under the *1909 Boundary Waters Treaty* and pursues the common good of both countries as an independent and objective advisor to the two governments. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects.

“Load Reduction” has the meaning set forth in Section IX.6 of this Agreement.

“Load Serving Entity” (or “LSE”) means an entity designated by a retail electricity customer (including the Customer) to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.

“Metering Arrangement” has the meaning set forth in Section II.8 of this Agreement.

“NYEM” means the New York Energy Manager, an energy management center owned and operated by the Authority.

“NYEM Agreement” means a written agreement between the Authority and the Customer providing for the Facility’s enrollment and Customer’s participation in NYEM.

“NYEM Participation” has the meaning specified in Schedule B of this Agreement.

“NYISO” means the New York Independent System Operator or any successor organization.

“NYISO Charges” has the meaning set forth in Section VII.3 of this Agreement.

“NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

“Planned Hydropower Curtailment” means a temporary reduction in Firm Energy to which the Customer is entitled to receive under this Agreement made by the Authority in response to an anticipated or forecasted Adverse Water Condition.

“Physical Energy Audit” or “Audit” means a physical evaluation of the Facility in a manner approved by the Authority that includes at a minimum the following elements: (a) an assessment of the Facility’s energy use, cost and efficiency which produces an energy utilization index for the Facility (such as an Energy Use Intensity or Energy Performance Indicator); (b) a comparison of the Facility’s index to indices for similar buildings/facilities; (c) an analysis of low-cost/no-cost measures for improving energy efficiency; (d) a listing of potential capital improvements for improving energy consumption; and (e) an initial assessment of potential costs and savings from such measures and improvements.

“Project” means the Niagara Power Project, FERC Project No. 2216.

“Replacement Power” (or “RP”) is 445 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(13).

“Reporting Year” means the yearly interval that the Authority uses for reporting, compliance and other purposes as specified in this Agreement. The Reporting Year for this Agreement is from January 1 through December 31, subject to change by the Authority without notice.

“Rolling Average” has the meaning set forth in Schedule B.

“Rules” are the applicable provisions of Authority’s rules and regulations (Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as may be modified from time to time by the Authority.

“Service Information” has the meaning set forth in Section II.12 of this Agreement.

“Service Tariff No. WNY-2” means the Authority’s Service Tariff No. WNY-2, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

“Schedule A” refers to the Schedule A entitled “Expansion Power and/or Replacement Power Allocations” which is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Supplemental Expansion Power and/or Replacement Power Commitments” which is attached to and made part of this Agreement, including any appendices attached thereto.

“Schedule C” refers to the Schedule C entitled “Takedown Schedule” which is attached to and made part of this Agreement.

“Schedule D” refers to the Schedule D entitled “Zero Emission Credit Charge” which is attached to and made part of this Agreement.

“Schedule E” refers to the Schedule E entitled “Monthly Renewable Energy Credit Charge” which is attached to and made part of this Agreement.

“Substitute Energy” means energy that is provided to the Customer by or through the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Planned Hydropower Curtailment or an Unplanned Hydropower Curtailment.

“Takedown” means the portion of the Allocation that Customer requests to be scheduled for a specific period as provided for in Schedule C, if applicable.

“Taxes” is as defined in Service Tariff No. WNY-2.

“Unforced Capacity” (or “UCAP”) means the electric capacity required to be provided by LSEs to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

“Unplanned Hydropower Curtailment” means a temporary reduction in the amount of Firm Energy to which the Customer is entitled to receive under this Agreement due to Adverse Water Condition that the Authority did not anticipate or forecast.

“Utility Tariff” means the retail tariff(s) of the Customer’s local electric utility filed and approved by the PSC applicable to the delivery of EP and/or RP.

ARTICLE II

ELECTRIC SERVICE

1. The Authority shall make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, Service Tariff No. WNY-2 and the Rules.
2. The Customer shall not be entitled to receive Electric Service under this Agreement for any EP and/or RP allocation unless such EP and/or RP allocation is identified in Schedule A.
3. The Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation specified in Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
4. The Authority shall provide UCAP in amounts necessary to meet the Customer’s NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with Service Tariff No. WNY-2.

5. The provision of Electric Service associated with the Allocation is an unbundled service separate from the transmission and delivery of power and energy to the Customer. The Customer acknowledges and agrees that Customer's local electric utility, not the Authority, shall be responsible for delivering the Allocation to the Facility specified in Schedule A in accordance with the applicable Utility Tariff(s).
6. The Contract Demand for the Customer's Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as EP or RP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all EP and RP customers, as applicable, based on the terms of such ruling, order, or decision.
7. The Contract Demand may not exceed the Allocation.
8. The Customer's Facility must be metered by the Customer's local electric utility in a manner satisfactory to the Authority, or another metering arrangement satisfactory to the Authority must be provided (collectively, "Metering Arrangement"). A Metering Arrangement that is not satisfactory to the Authority shall be grounds, after notice to the Customer, for the Authority to modify, withhold, suspend, or terminate Electric Service to the Customer. If a Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination that it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. After commencement of Electric Service, the Customer shall notify the Authority in writing within thirty (30) days of any alteration to the Facility's Metering Arrangement, and provide any information requested by the Authority (including Facility access) to enable the Authority to determine whether the Metering Arrangement remains satisfactory. If an altered Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. The Authority may, in its discretion, waive any of the requirements provided for in this Section in whole or in part where in the Authority's judgment, another mechanism satisfactory to the Authority can be implemented to enable the Authority to receive pertinent, timely and accurate information relating to the Customer's energy consumption and demand and render bills to the Customer for all fees, assessments and charges that become due in accordance with this Agreement, Service Tariff No. WNY-2, and the Rules.
9. The Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that such parties determine is necessary to provide for the allocation, sale and delivery of the Allocation to the Customer, the proper and efficient implementation of the EP and/or RP program, billing related to Electric Service, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters. In addition, the Customer agrees to complete such forms and consents that the Authority determines are necessary to effectuate such exchanges of information.

10. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement between the Authority and the Customer's local electric utility providing for the delivery of the Allocation on terms and conditions that are acceptable to the Authority.
11. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, execute consents, and provide information (collectively, "Service Information") that the Authority determines is necessary for the provision of Electric Service, the delivery of the Allocation, billing related to Electric Service, the effective administration of the EP and/or RP programs, and/or the performance of contracts or other arrangements between the Authority and the Customer's local electric utility. The Customer's failure to provide Service Information on a timely basis shall be grounds for the Authority in its discretion to modify, withhold, suspend, or terminate Electric Service to the Customer.

ARTICLE III

RATES, TERMS AND CONDITIONS

1. Electric Service shall be sold to the Customer in accordance with the rates, terms and conditions provided for in this Agreement, Service Tariff No. WNY-2 and the Rules. The Authority agrees to waive the Minimum Monthly Charge set forth in Service Tariff No. WNY-2 for a period up to one (1) year upon written request from the Customer that is accompanied by information that demonstrates to the Authority's satisfaction a short-term reduction or interruption of Facility operations due to events beyond the Customer's control. The Customer shall provide such information that the Authority requests during the period of any such waiver to enable the Authority to periodically evaluate the ongoing need for such waiver.
2. If the Authority at any time during the term of this Agreement enters into an agreement with another customer for the sale of EP or RP at power and energy rates that are more advantageous to such customer than the power and energy rates provided in this Agreement and Service Tariff No. WNY-2, then the Customer, upon written request to the Authority, will be entitled to such more advantageous power and energy rates in the place of the power and energy rates provided in this Agreement and Service Tariff No. WNY-2 effective from the date of such written request, provided, however, that the foregoing provision shall not apply to:
 - a. any agreement for the sale of EP and/or RP with an Authority customer whose purchase of EP and/or RP is associated with an Authority service tariff other than Service Tariff No. WNY-2, including Authority Service Tariff No. WNY-1; or
 - b. any agreement for the sale of EP and/or RP with an Authority customer which is associated with such customer's participation in an Alternative REC Compliance Program provided for in Schedule E of this Agreement.
3. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates for Electric Service shall be subject to increase by Authority at any time upon 30 days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with

respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.

4. In addition to all other fees, assessments and charges provided for in the Agreement, Service Tariff WNY-2 and the Rules, the Customer shall be responsible for payment of the Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge provided for in Schedule D and Schedule E, respectively, of this Agreement.

ARTICLE IV

SUPPLEMENTAL COMMITMENTS

1. Supplemental Commitments. Schedule B sets forth the Customer's "Supplemental Expansion Power and/or Replacement Power Commitments" ("Supplemental Commitments"). The Authority's obligation to provide Electric Service under this Agreement is expressly conditioned upon the Customer's timely compliance with the Supplemental Commitments described in Schedule B as further provided in this Agreement. The Customer's Supplemental Commitments are in addition to all other commitments and obligations provided in this Agreement.
2. *[Intentionally Left Blank]*
3. Special Provisions Relating to a New or Expanded Facility.

- a. Proposed New or Expanded Facility; Failure to Complete.

If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, "Expansion Project"), and the Customer fails to complete the Expansion Project by the date specified in Schedule B, the Authority may, in its discretion, (a) cancel the Allocation, or (b) if it believes that the Expansion Project will be completed in a reasonable time, agree with the Customer to extend the time for completion of the Expansion Project.

- b. Proposed New or Expanded Facility; Partial Performance.

If the Expansion Project results in a completed Facility that is only partially operational, or is material different than the Expansion Project agreed to in Schedule B (as measured

by such factors as size, capital investment expenditures, capital improvements, employment levels, estimated energy demand and/or other criteria determined by the Authority to be relevant), the Authority may, in its discretion, on its own initiative or at the Customer's request, make a permanent reduction to the Allocation and Contract Demand to an amount that the Authority determines to fairly correspond to the completed Facility.

c. Notice of Completion; Commencement of Electric Service.

- (i) The Customer shall give the Authority not less than ninety (90) days' advance written notice of the anticipated date of completion of an Expansion Project. The Authority will inspect the Expansion Project for the purpose of verifying the status of the Expansion Project and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time subject to the other provisions of this Agreement based on applicable operating procedures of the Authority, Customer's local electric utility and NYISO.
- (ii) In the event of an Expansion Project being completed in multiple phases, at the Customer's request the Authority may, in its discretion, allow commencement of part of the Allocation upon completion of any such phase, provided the Authority will similarly inspect the Expansion Project for the purpose of verifying the status of the completed phase of the Expansion Project. Upon such verification by the Authority of any such completed phase, the Authority, in its discretion, will determine an amount of kW that fairly corresponds to the completed phase of the Expansion Project, taking into account relevant criteria such as any capital expenditures, increased employment levels, and/or increased electrical demand associated with the completed phase of the Expansion Project.

d. Other Rights and Remedies Unaffected.

Nothing in this Article is intended to limit the Authority's rights and remedies provided for in the other provisions of this Agreement, including without limitation the provisions in Schedule B of this Agreement.

ARTICLE V
ENERGY-RELATED PROJECTS, PROGRAMS AND SERVICES

The Authority shall periodically communicate with the Customer for the purpose of informing the Customer about energy-related projects, programs and services ("Energy Services") offered by the Authority that in the Authority's view could provide value to the Customer and/or support the State's Clean Energy Standard. The Customer shall review and respond to all such offers in good faith, provided, however, that, except as otherwise provided for in this Agreement, participation in any such Energy Services shall be at the Customer's option, and subject to such terms and conditions agreed to by the Parties in one or more definitive agreements.

ARTICLE VI
SERVICE TARIFF; CONFLICTS

1. A copy of Service Tariff No. WNY-2 in effect upon the execution of this Agreement is attached to this Agreement as Exhibit 1, and will apply under this Agreement with the same force and effect as if fully set forth herein. The Customer consents to the application of Service Tariff WNY-2. Service Tariff No. WNY-2 is subject to revision by the Authority from time to time, and if revised, the revised provisions thereof will apply under this Agreement with the same force and effect as if set forth herein. The Authority shall provide the Customer with prior written notice of any revisions to Service Tariff No. WNY-2.
2. In the event of any inconsistencies, conflicts, or differences between the provisions of Service Tariff No. WNY-2 and the Rules, the provisions of Service Tariff No. WNY-2 shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and Service Tariff No. WNY-2 or the Rules, the provisions of this Agreement shall govern.

ARTICLE VII
TRANSMISSION AND DELIVERY

1. The Customer shall be responsible for:
 - a. complying with all requirements of its local electric utility (including any other interconnecting utilities) that are necessary to enable the Customer to receive delivery service for the Allocation. Delivery of the Allocation shall be subject to the Utility Tariff;
 - b. paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff, and if the Authority incurs any charges associated with such delivery service, reimbursing the Authority for all such charges; and
 - c. obtaining any consents and agreements from any other person that are necessary for the delivery of the Allocation to the Facility, and complying with the requirements of any such person, provided that any such consents, agreements and requirements shall be subject to the Authority's approval.
2. The Authority will use good faith efforts to provide the Customer with at least one year's advance notice of the scheduled expiration of Historic Fixed Price Transmission Congestion Contracts. After issuance of any such notice, the Authority will make itself available at reasonable times to collaborate with the Customer and other EP and RP customers to discuss potential risk-hedging options that might be available following expiration of such contracts.
3. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in Service

Tariff No. WNY-2 or any successor service tariff, regardless of whether such NYISO Charges are transmission-related.

4. The Authority will consider opportunities to assist the Customer concerning actions, practices, or procedures of the Customer's local electric utility identified by the Customer that could adversely impact the implementation and effectiveness of the EP and RP programs, provided that whether or not to take any action or adopt any position on any issue, including any adverse position, is within the Authority's discretion and further subject to applicable laws, regulations and existing legal obligations.

ARTICLE VIII

BILLING AND BILLING METHODOLOGY

1. The billing methodology for the Allocation shall be determined on a "load factor sharing" basis in a manner consistent with the Utility Tariff and any agreement between the Authority and the Customer's local electric utility. An alternative basis for billing may be used provided the Parties agree in writing and the local electric utility provides its consent if such consent is deemed necessary.
2. All other provisions with respect to billing are set forth in Service Tariff No. WNY-2 and the Rules.
3. The rights and remedies provided to the Authority in this Article are in addition to any and all other rights and remedies available to Authority at law or in equity.

ARTICLE IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. The Customer shall, on a form provided by the Authority, elect to either (a) purchase Substitute Energy from the Authority, or (b) rely on Customer-Arranged Energy, for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Planned Hydropower Curtailment. The Customer shall make its election in accordance with the time period and other requirements prescribed in such form. The election shall apply for the entire calendar year identified in the form.
2. The Customer may change its election on a form provided by the Authority by giving the Authority notice of such change no later than the first day of November preceding the calendar year to which the Customer intends such change to become effective. Such change shall be effective on the first day of January following the Authority's receipt the Customer's notice and shall remain in effect unless it is changed in accordance with the provisions of Section IX.1.
3. In the event of an anticipated or planned Adverse Water Condition, the Authority will have the right in its discretion to implement Planned Hydropower Curtailments. The Authority will implement Planned Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project. The Authority will provide the Customer with advance notice of Planned Hydropower Curtailments that in the Authority's judgment will impact Electric Service to the Customer no later than the tenth business day of the month

prior to the month in which the Planned Hydropower Curtailment is expected to occur unless the Authority is unable to provide such notice due to the circumstances that impede such notice, in which case the Authority will provide such advance notice that is practicable under the circumstances.

4. If the Customer elected to purchase Substitute Energy from the Authority, the Authority shall provide Substitute Energy to the Customer during all Planned Hydropower Curtailments. Unless otherwise agreed upon by the Parties in writing, Substitute Energy shall be sourced from markets administered by the NYISO. The Authority may require the Customer to enter into one or more separate agreements to facilitate the provision of Substitute Energy to the Customer.
5. If the Customer elected to rely on Customer-Arranged Energy, the Authority shall have no responsibility to provide the Customer with Substitute Energy during any Planned Hydropower Curtailment, and the Customer shall be responsible for the procurement, scheduling, delivery and payment of all costs associated with Customer-Arranged Energy.
6. The Customer shall have the right to reduce its load in response to a Planned Hydropower Curtailment (a "Load Reduction"), provided, however, that the Customer shall, on an Authority form, provide the Authority with no less than seven (7) days' advance notice of the time period(s) during when the Load Reduction will occur, the estimated amount of the Load Reduction (demand and energy), and all other information required by such form. The Authority will confirm whether the notice provides the required information and proposed Load Reduction has been accepted. The Customer shall reimburse the Authority for all costs that the Authority incurs as a result of the Customer's failure to provide such notice.
7. In the event of an Adverse Water Condition that the Authority did not anticipate or forecast, the Authority shall have the right in its discretion to implement Unplanned Hydropower Curtailments. The Unplanned Hydropower Curtailments will be implemented on a non-discriminatory basis as to all Authority customers that are served by the Project.
8. The Authority will provide the Customer with notice of Unplanned Hydropower Curtailments that in the Authority's judgment will impact Electric Service to the Customer within five (5) business days after the first occurrence of an Unplanned Hydropower Curtailment that occurs within a month, and thereafter will provide the Customer with reasonable notice under the circumstances of the potential for any other Unplanned Hydropower Curtailments that are expected to occur within such month or beyond. The Authority will give the Customer notice of any Unplanned Hydropower Curtailments that the Authority believes are likely to exceed forty-eight (48) continuous hours in duration.
9. Notwithstanding the Customer's election pursuant to Section IX.1, the Authority shall provide the Customer with Substitute Energy during Unplanned Hydropower Curtailments.
10. For each kilowatt-hour of Substitute Energy provided by the Authority during a Planned Hydropower Curtailment, the Customer shall pay the Authority directly during the billing month: (1) the difference between the market cost of the Substitute Energy and the charge for firm energy as provided for in this Agreement; and (2) any NYISO charges and taxes the Authority incurs in connection with the provision of such Substitute Energy. Unless

otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Planned Hydropower Curtailments shall be governed by the provisions of Service Tariff WNY-2 relating to the rendition and payment of bills for Electric Service.

11. The Customer shall be responsible for all costs associated with the Authority's provision of Substitute Energy during Unplanned Hydropower Curtailments. Unless otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Unplanned Hydropower Curtailments shall be governed by the provisions of Service Tariff WNY-2 relating to the rendition and payment of bills for Electric Service.
12. The Authority shall be under no obligation to deliver and will not deliver any such curtailed energy to the Customer in later billing periods.

ARTICLE X

EFFECTIVENESS, TERM AND TERMINATION

1. This Agreement shall become effective and legally binding on the Parties on the Effective Date.
2. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (a) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (b) termination by the Authority pursuant to this Agreement, Service Tariff No. WNY-2, or the Rules; or (c) expiration of the Allocation by its own term as specified in Schedule A.
3. The Customer may exercise a partial termination of the Allocation upon at least sixty (60) days' prior written notice to the Authority. The Authority will effectuate the partial termination as soon as practicable after receipt of such notice taking account of the Authority's internal procedures and requirements of the Customer's local electric utility.
4. The Authority may cancel service under this Agreement or modify the quantities of Firm Power and Firm Energy associated with the Allocation: (1) if such cancellation or modification is required to comply with any final ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, Service Tariff No. WNY-2, or the Rules.

ARTICLE XI

EXTENSIONS OF ALLOCATION; AWARD OF ADDITIONAL ALLOCATIONS

1. The Customer may apply to the Authority for an extension of the term of the Allocation identified in Schedule A:
 - a. during the thirty-six (36) month period immediately preceding the scheduled expiration of the Allocation;

- b. pursuant to any other process that the Authority establishes; or
 - c. with the Authority's written consent.
- 2. Upon proper application by the Customer, the Authority may in accordance with applicable law and Authority procedures award additional allocations of EP and/or RP to the Customer at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (a) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (b) produce a modified Appendix to Schedule B, as the Authority determines to be appropriate. The Authority will furnish the Customer with any such modified Schedule A, supplemental schedule, and/or a modified Appendix to Schedule B, within a reasonable time after commencement of Electric Service for any such additional allocation.
- 3. In addition to any requirements imposed by law, the Customer hereby agrees to furnish such documentation and other information as the Authority requests to enable the Authority to evaluate any requests for extension of the Allocation or additional allocations and consider the terms and conditions that should be applicable of any extension or additional allocations.

ARTICLE XII

NOTICES

- 1. Notices, consents, authorizations, approvals, instructions, waivers or other communications provided in this Agreement shall be in writing and transmitted to the Parties as follows:

To: The Authority

New York Power Authority
123 Main Street
White Plains, New York 10601

Email:

Facsimile: _____

Attention: Manager – Business Power Allocations and Compliance

To: The Customer

Somerset Operating Company, LLC
7725 Lake Road Barker, New York 14012

Email:

Facsimile:

Attention:

- 2. The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XII.1.
- 3. Except where otherwise herein specifically provided, any notice, communication or request required or authorized by this Agreement by either Party to the other shall be deemed properly given: (a) if sent by U.S. First Class mail addressed to the Party at the address set

forth above; (b) if sent by a nationally recognized overnight delivery service, two (2) calendar days after being deposited for delivery to the appropriate address set forth above; (c) if delivered by hand, with written confirmation of receipt; (d) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (e) on the date of transmission if sent by electronic communication to the appropriate address as set forth above, with confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

ARTICLE XIII

SUCCESSORS AND ASSIGNS; RESALE OF HYDROPOWER

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto, provided that no assignment by either Party or any successor or assignee of such Party of its rights and obligations hereunder shall be made or become effective without the prior written consent of the other Party, which consent shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing sentence, the Authority may require such approvals, and such consents and other agreements from the Customer and other parties, that the Authority determines are necessary in order to effectuate any such assignment.
2. The Customer may not transfer any portion of the Allocation to any other person, or a location different than the Facility, unless: (a) the Authority in its discretion authorizes the transfer Authority; (b) all other requirements applicable to a transfer, including board approvals, are satisfied; and (c) the transfer is effectuated in a form and subject to such terms and conditions approved by the Authority. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service or terminate the Allocation and/or this Agreement.
3. The Customer may not sell any portion of the Allocation to any other person. Any purported sale shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service, or terminate the Allocation and/or this Agreement.

ARTICLE XIV

MISCELLANEOUS

1. Choice of Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a) and rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

The Parties: (a) consent to the exclusive jurisdiction and venue of any state court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any

claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement; (b) agree to accept service of process; and (c) will not raise any argument of inconvenient forum.

3. Previous Agreements; Modifications; and Interpretation

- a. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation and the subject matter of the Agreement, and supersedes all previous communications and agreements between the Parties, oral or written, with reference to the sale of the Allocation.
- b. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.
- c. No provision shall be construed against a Party on the basis that such Party drafted such provision.

4. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

5. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof. Notwithstanding the preceding sentence, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

ARTICLE XV
EXECUTION

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the

respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

[SIGNATURES FOLLOW ON NEXT PAGE]

AGREED:

SOMERSET OPERATING COMPANY, LLC

By: _____

Title: _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____
John R. Koelmel, Chairman

Date: _____

SCHEDULE A
EXPANSION POWER AND/OR REPLACEMENT POWER ALLOCATIONS

Customer: Somerset Operating Company, LLC	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Type of Allocation				
RP	10,000 kW	7725 Lake Road Barker, New York 14012	July 30, 2019	Ten (10) years from the date of commencement of Electric Service

SCHEDULE B
**SUPPLEMENTAL EXPANSION POWER AND/OR REPLACEMENT POWER
COMMITMENTS**

ARTICLE I
SPECIFIC SUPPLEMENTAL COMMITMENTS

1. Employment Commitments

- a. The Customer shall create and maintain the employment level set forth in the Appendix to this Schedule B (the “Base Employment Level”). Such Base Employment Level shall be the total number of full-time positions held by: (a) individuals who are employed by the Customer at Customer’s Facility identified in the Appendix to this Schedule, and (b) individuals who are contractors or who are employed by contractors of the Customer and assigned to the Facility identified in such Appendix (collectively, “Base Level Employees”). The number of Base Level Employees shall not include individuals employed on a part-time basis (less than 35 hours per week); provided, however, that two individuals each working 20 hours per week or more at such Facility shall be counted as one Base Level Employee.
- b. The Base Employment Level shall not be created or maintained by transfers of employees from previously held positions with the Customer or its affiliates within the State of New York, except that the Base Employment Level may be filled by employees of the Customer laid off from other Customer facilities for *bona fide* economic or management reasons.
- c. The Authority may consider a request to change the Base Employment Level based on a claim of increased productivity, increased efficiency or adoption of new technologies or for other appropriate reasons as determined by the Authority. Any such change shall be within Authority’s discretion.

2. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule B.

3. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Billing Demand (as such term is described in Service Tariff No. WNY-2), provided, however, that if only part of the Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such partial amount of the Allocation.

4. Energy Efficiency and Conservation Program

- a. The Customer shall implement an energy efficiency and conservation program at the Facility through either (a) enrollment of the Facility and participation in NYEM in accordance with a NYEM Agreement, or (b) one or more Physical Energy Audits of the Facility, or (c) a combination of such measures, in accordance with the provisions of this Article.
- b. The Authority shall transmit to the Customer a NYEM Agreement and an election form. The Customer shall elect to either (a) enroll the Facility and participate in NYEM for a three-year term (“NYEM Participation”) in accordance with the NYEM Agreement, or (b) perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority’s communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit within three (3) years of the Effective Date of this Agreement, at its own expense.
- c. The Authority shall, on or before the expiration of the three-year term of the NYEM Agreement, transmit to the Customer a NYEM Agreement specifying the terms and conditions that would apply to NYEM participation for a second term, and an election form. The Customer shall elect either (a) NYEM Participation for a second term, or (b) to perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority’s communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit during the calendar year that begins six years after of the Effective Date of this Agreement, at its own expense.
- d. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited energy audit of the Facility, where it determines that the Physical Energy Audit is unnecessary based on the age of the Facility, energy efficiency and conservation improvements made at the Facility, the length of the Allocation, or other considerations the Authority determines to be relevant.

ARTICLE II
RECORDKEEPING, REPORTING AND FACILITY ACCESS

1. Employment

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Base Level Employees who are employed at or assigned to the Customer's Facility identified in the Appendix to this Schedule, as reported to the United States Department of Labor (or as reported in such other record as agreed upon by the Authority and the Customer). Such report shall separately identify the individuals who are employed by the Customer, and the individuals who are contractors or who are employed by contractors of the Customer, and shall be certified to be correct by an officer of the Customer, plant manager or such other person authorized by the Customer to prepare and file such report and shall be provided to the Authority on or before the last day of February following the end of the most recent calendar year. The Authority shall have the right to examine and audit on reasonable advance written notice all non-confidential written and electronic records and data concerning employment levels including, but not limited to, personnel records and summaries held by the Customer and its affiliates relating to employment in New York State.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in the Appendix to this Schedule B.

3. Power Usage

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority on or before the last day of February following the end of the most recent calendar year, of the maximum demand utilized each month in the Facility receiving the power covered by the Agreement.

4. Energy Efficiency and Conservation Program

Upon the Authority's request, the Customer shall provide the Authority with (a) a copy of the results of any Physical Energy Audit performed at the Facility (or, at the Authority's option, a report describing the results), performed pursuant to this Article; and (b) a description of any energy efficiency or conservation measures that the Customer has implemented at the Facility in response to any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access

Notwithstanding any other provision of the Agreement, the Customer shall provide the Authority with such access to the Facility, and such documentation, as the Authority deems necessary to determine the Customer's compliance with the Customer's Supplemental Commitments specified in this Schedule B.

ARTICLE III

COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in the Appendix to this Schedule B for the subject calendar year, the Authority may reduce the Contract Demand in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

2. Capital Investment Commitment

The Authority may reduce the Contract Demand as provided in the Appendix to this Schedule B if the Customer does not comply with the Capital Investment Commitment.

3. Power Utilization Level

If the average of the Customer's six (6) highest Billing Demands (as such term is described in Service Tariff No. WNY-2) for Expansion Power and/or Replacement Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to in accordance with the procedures provide in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, Service Tariff WNY-2 and the Rules, the Authority may suspend Electric Service to the Customer if the Customer does not comply with any of the requirements in Section I.4 or Article II of this Schedule B.

5. Notice of Intent to Reduce Contract Demand

In the event that the Authority determines that the Contract Demand will be wholly or partially reduced pursuant to Sections III.1, III.2, or III.3 of this Schedule B, the Authority shall provide the Customer with at least thirty (30) days prior written notice of the proposed reduction, specifying the amount and reason for the reduction.

Before implementing any reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance, Facility upgrade periods, and the business cycle. If, at the end of the thirty (30) day notice period, the Authority determines that a reduction is warranted, it shall provide the Customer with notice of such determination and provide the Customer with sixty (60) days to present a proposed plan with actionable milestones to cure the deficiency. The Authority shall respond to the Customer concerning the acceptability of any proposed plan that is provided in accordance with this Section III.5 within thirty (30) days of the Authority's receipt of such proposed plan. It shall be within the Authority's discretion whether or not to accept the Customer's proposed plan, require a different plan, or implement the reduction of the Contract Demand.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

The Customer shall employ at least 165 full-time employees (“Base Employment Level”) at the Customer’s Facility. The Base Employment Level shall be maintained for the term of the Allocation in accordance with Article I of Schedule B.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the Facility (“Rolling Average”) shall total not less than \$ **N/A** (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the Facility during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the Facility during the two prior Reporting Years.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average as determined by the Authority is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.
2. **Expansion Project–Capital Investment Commitment** (if applicable, as specified below)
 - a. The Customer shall make a minimum capital investment of \$ 85 million to construct, furnish and/or expand the Facility (“Expansion Project Capital Investment Commitment”). The Expansion Project Capital Investment Commitment is expected to consist of the following approximate expenditures on the items indicated:

\$50 million – Computing Equipment

\$35 million – Construction of (3) Server Buildings

\$85 million – Total Expansion Project Capital Investment Commitment

- b. The total Expansion Project Capital Investment Commitment shall be made, and the Facility shall be completed and fully operational, no later than July 31, 2022 (*i.e.*, within three (3) years of the date of the Authority's award of the Allocation). Upon request of the Customer, such date may be extended in the discretion of the Authority.

SCHEDULE C
TAKEDOWN SCHEDULE

N/A

SCHEDULE D
ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Schedule D.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“EP and RP Programs ZEC Costs” has the meaning provided in Section II.4.b of this Schedule D.

“Government Action” has the meaning provided in Section II.8 of this Schedule D.

“Load Serving Entity” or “LSE” has the meaning provided in the CES Order.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the EP and RP power programs as authorized in the Power Authority Act.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Customer established in this Schedule D.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Schedule D.

“ZEC Program Year” has the meaning provided in Section II.2 of this Schedule D.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of Service Tariff No. WNY-2 or the Rules, as of January 1, 2019, the Customer shall be subject to a ZEC Charge as provided in this Schedule D. The ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, Service Tariff No. WNY-2 and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing the EP and RP power programs in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as a load serving entity, including the load that the Authority serves under the EP and RP power programs.
4. The ZEC Charge, which is intended to recover from the Customer costs that the Authority incurs for purchasing ZECs in quantities that are attributable to the Customer’s EP and/or RP load served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by

the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the EP and RP load that it serves (the “EP and RP Programs ZEC Costs”). Such allocation will be based on the forecasted kilowatt-hours load of the EP and RP programs to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the EP and RP power programs based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the EP and RP Programs ZEC Costs to the Customer as the ZEC Charge based on the proportion of the Customer’s actual kilowatt-hours load for the EP and/or RP purchased by the Customer to total kilowatt-hours load served by the Authority under the EP and RP power programs (i.e., EP and RP Programs level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Customer based on the proportion of the Customer’s annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the EP and RP power program by the Authority (EP and RP Programs level load). The ZEC Charge assessed to the Customer shall not include any costs resulting from the Authority’s inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the ZEC Charge pursuant to another Authority-established procedure.
6. The Authority may, in its discretion, modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected EP and RP customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall

provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.

7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of Service Tariff No. WNY-2 or the Rules.
8. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, "Government Action"), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

SCHEDULE E
MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule E.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Schedule E.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity” has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Schedule E.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Public Service Commission” means the New York State Public Service Commission.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the EP and RP power programs as authorized in the Power Authority Act.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSERDA in accordance with NYSERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

“Total Monthly EP-RP Load” has the meaning provided in Section II.3.b of this Schedule E

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Schedule E.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of Service Tariff No. WNY-2 or the Rules, as of January 1, 2019, the Customer shall be subject to a Monthly REC Charge as provided in this Schedule E. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, Service Tariff No. WNY-2 and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly REC Charge.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the EP and RP power programs in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its EP and RP customers. Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total EP and RP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
3. The Monthly REC Charge, which is intended to recover from the Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s EP and/or RP load served under this Agreement, will be determined and assessed to the Customer as follows:

- a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total EP and RP load that it will serve during such calendar year.
 - b. The Authority will, for each month of each calendar year, calculate the total costs ("Total Monthly REC Costs") that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total EP and RP kilowatt-hour load for the month ("Total Monthly EP-RP Load"). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly EP-RP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly EP-RP Load that the Authority served for the month.
 - c. Each month, the Authority will assess to the Customer, as a Monthly REC Charge, which will represent the Customer's share of the Total Monthly REC Costs assessed to the Total Monthly EP-RP Load. The Monthly REC Charge will be assessed as the proportion of the Customer's total kilowatt-hours load served by the Authority for such month to the Total Monthly EP-RP Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority's inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA's published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly REC Charge pursuant to another Authority-established procedure.
5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Customer's Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority's bills

for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Schedule E.

6. Notwithstanding the provisions of Section II.3 of this Schedule E, if Electric Service for the Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for Customer's load for the year, and bill the Customer for the costs associated with such separate REC Compliance Measures.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of Service Tariff No. WNY-2 or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Schedule E (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.



**NY Power
Authority**

**Canal
Corporation**

Exhibit 5d i-A
July 30, 2019

Chief Operations Officer's Report

Joseph F. Kessler, P.E.
EVP & Chief Operating Officer

July 30, 2019

Level 1 KPIs – Year-to-Date May 2019

KPI	YTD May 2019			
	Status	Target	Actual	Variance
Generation Market Readiness	▲	97.40%	99.50%	2.10%
Transmission System Reliability	▲	95.91%	96.40%	0.49%
Environmental Incidents (Corporate)	▲	12	9	-3
Dart Rate (Corporate)	▲	0.78	0.75	-0.03

Status	
▲	Within Target
■	Outside of Target
●	Significantly Outside of Target Range

Communications Backbone Program Optical Ground Wire Transmission Line Construction Services Contract Awards

Background

- Replace static ground wire with OPGW on transmission lines to establish primary communication network between regions
- On-Call master service agreements will be used to mini-bid the work to ensure best value
- Interim award for OPGW installation on the Niagara to Rochester transmission line received in June

Requested Trustee Action

Approve five-year, master service agreement contracts in the aggregate amount of \$93 million for OPGW installation services in support of the Communications Backbone Program to:

- J.W. Didado Electric, LLC – Akron, OH
- Henkels & McCoy, Inc. – Blue Bell, PA
- M10, Inc. (Michels Corporation) – Neenah, WI
- PAR Electrical Contractors, Inc. – Kansas City, MO

North Country Energy Storage Project Capital Expenditure Authorization Request Design Build Contract Award

Background

- Establish a 20 MW/hr battery storage facility adjacent to the Authority's existing Willis Switchyard
- Storage system will supply the NY wholesale energy and ancillary service markets; contribute to the adequacy, economy and reliability of the supply of electric power
- Project completion is expected in mid-2020

Requested Trustee Action

- Authorize capital expenditures in the amount of \$23.8 million
- Approve the award of a three-year contract to O'Connell Electric Company, Inc. in the amount of \$25.6 million

Transmission Life Extension & Modernization Program

Northern NY Region, Remote Substation

Capital Expenditure Authorization Request - Phase 2

Background

- Continuation of Transmission LEM Program
- Scope of Work includes:
 - Replacement of power circuit breakers at Willis Substation
 - Procurement of power circuit breakers for Saranac Substation
 - Relay and station service upgrades at Plattsburgh and Willis Substations
 - Current approved expenditure authorization of \$26.3 million
 - Total program estimated to cost \$60.6 million
 - Program completion expected in 2024

Requested Trustee Action

- Authorize capital expenditures in the amount of \$34.3 million



**NY Power
Authority**

**Canal
Corporation**



Exhibit A
July 30, 2019

December 12, 2017

AUDIT COMMITTEE CHARTER

A. PURPOSE

The Audit Committee ("Committee") oversees the work of the Internal Audit Department and monitors all internal audits and external audits performed by the Independent Auditor and other external agencies as well as management's corrective action and implementation plans to all audit findings.

The responsibilities of the Committee are to: recommend to the Board of Trustees the hiring of a certified independent accounting firm for the New York Power Authority ("Authority"), establish the compensation to be paid to the accounting firm and provide direct oversight of the performance of the independent audit conducted by the accounting firm hired for such purposes, provide direct oversight of the Internal Audit Department, and perform such other responsibilities as the Trustees may assign it.

B. MEMBERSHIP AND ORGANIZATION

(1) Committee Composition

The Committee will be comprised of at least three independent members of the Board of Trustees, who possess the necessary skills to understand the duties and functions of the Committee and be familiar with corporate finance and accounting. Committee members and the Committee Chair will be selected by a vote of the Board of Trustees.

Committee members are prohibited from being an employee of the Authority or an immediate family member of an employee of the Authority. In addition, Committee members shall not engage in any private business transactions with the Authority or receive compensation from any private entity that has material business relationships with the Authority, or be an immediate family member of an individual that engages in private business transactions with the Authority or receives compensation from an entity that has material business relationships with the Authority.

(2) Term

Committee members will serve for a period of five years subject to their term of office under Public Authorities Law § 1003. Committee members may be reelected to serve for additional periods of five years subject to their term of office. A Committee member may resign his or her position on the Committee while continuing to serve as a Trustee. In the event of a vacancy on the Committee due to death, resignation or otherwise, a successor will be selected to serve in the manner and for the term described above.

(3) Removal

A Committee member may be removed if he or she is removed as Trustee for cause, subject to Public Authorities Law § 2827, or is no longer eligible to serve as a Committee member.

(4) Meetings and Quorum

The quorum of the Committee is a majority of the number of regular Committee members selected by the Board of Trustees.

A majority vote of all Committee members present is required to take action on a matter.

The Committee shall hold regularly scheduled meetings at least three times per year. A Committee member may call a special meeting of the Committee individually, or upon the request of the Authority's President and Chief Executive Officer ("CEO"), Executive Vice President and Chief Operating Officer ("COO"), Executive Vice President and General Counsel ("GC"), Executive Vice President and Chief Financial Officer ("CFO"), Chief Risk Officer ("CRO"), Controller, or Chief Audit Executive of the Internal Audit Department ("CAE"). The notice of meeting need not state the purpose for which the meeting has been called. In order to transact business, a quorum must be present.

In addition, the Committee: (1) will meet at least twice a year with the CAE for the purpose of reviewing audit activities, audit findings, management's response, remediation action plans, and providing the CAE with an opportunity to discuss items and topics of relevance with the Committee; (2) will meet at least twice a year with the Authority's independent auditors to discuss the audit work plans, objectives, results and recommendations; and (3) may meet independently with the Authority's CEO, COO, GC, CFO, CRO, Controller, or CAE on matters or issues and items within the Committee's purview as it deems necessary. These meetings may be held as part of a regular or special meeting at the Committee's discretion.

An agenda will be prepared and distributed to each Committee member prior to each meeting and minutes of each meeting will be prepared in accordance with the New York Open Meetings Law. Minutes of the meeting should include, at a minimum:

- a. Date; location; time meeting was called to order and adjourned; and if other Board committee (e.g., Finance Committee) is meeting simultaneously.
- b. Title and name of attendees; public comments period; title and name of public speakers.
- c. Approval of the official proceedings of the previous month's Committee meeting.
- d. Pre-Approval of audit and non-auditing services as appropriate, all auditing services and non-audit services to be performed by independent auditors will be presented to and pre-approved by the Committee:
 1. External Audit Approach Plans: Independent auditor presents approach/service plan, which is to be submitted to the Committee electronically;
 2. Internal Audit Activity Report: CAE provides overview of Internal Audit activities; and
 3. Risk Management: CRO provides an overview of Risk Management activities.
- e. Follow-up items including communications to the Committee of the current status of selected open issues, concerns, or matters previously brought to the Committee's attention or requested by the Committee.
- f. Status of audit activities, as appropriate; representatives of the certified independent accounting firm or agency management will discuss with the Committee significant audit findings/issues, the status of on-going audits, and the actions taken by agency management to implement audit recommendations.
- g. Copies of handouts or materials presented to the Committee.

Any meeting of the Committee may be conducted by video conferencing. To the extent permitted by law, the Committee may hold meetings or portions of meetings in executive session.

C. FUNCTIONS AND POWERS

The Committee has the following responsibilities:

(1) General Powers

The Committee may call upon the resources of the Authority to assist the Committee in the discharge of its oversight functions. Such assistance may include the assignment of Authority staff and the retention of external advisors subject to the requirements of the Public Authorities Law and the Authority's Expenditure Authorization Procedures. The Committee may communicate directly with the CEO.

The Committee may direct any Authority employee to make oral or written reports to the Committee on issues and items within the Committee's purview.

The Committee may direct the Authority's internal auditors to conduct special audits of items and issues of concern to the Committee.

(2) Accounting, Financial Reporting, and Oversight of Independent Accountants and Controller

The Committee will seek to enhance the integrity, quality, reliability and accuracy of the Authority's financial statements and accompanying notes, and will oversee the relationship with the Authority's independent accountants. To accomplish these objectives, the Committee will:

- a. Provide advice to the Trustees on the selection, engagement, compensation, evaluation and discharge of the independent accountants.
- b. Review and discuss as necessary the Authority's financial statements including any material changes in accounting principles and practices with the independent accountants, the Controller, or members of Authority management.
- c. Review and approve the Authority's annual audited financial statements (including the independent accountants' associated management letter).
- d. Oversee the establishment of procedures for the effective receipt and treatment of (i) complaints regarding auditing, internal auditing and accounting matters, and (ii) the confidential submission of concerns raised by whistleblowers and other persons regarding accounting or auditing practices.
- e. Review at least annually the scope, objectives and results of the independent auditors' examination of the annual financial statements and accompanying notes, and report to the Trustees on the Committee's findings.
- f. Assure the independence of the independent accountants by approving any non-audit work by them for the Authority and examining the independent auditor's relationship with the Authority.

- g. Report to the Trustees on any matters relevant to the audit process or independent accountant communications, and make such recommendations as the Committee deems appropriate.

(3) Risk Management, Internal Controls and Oversight of the Internal Audit Department

The Committee will seek to enhance the Authority's risk management infrastructure, and ensure timely and effective identification and mitigation of critical business risks. To accomplish these objectives, the Committee will:

- a. Have authority over appointment, dismissal, compensation and performance reviews of the CAE. The CAE will report directly to the Committee.
- b. Review the charter, activities, staffing and organizational structure of the Internal Audit Department with management and the CAE.
- c. Ensure that the Internal Audit Department is organizationally independent from Authority operations.
- d. Provide oversight of the Internal Audit Department and its resources and activities to facilitate the Internal Audit Department's improvement of internal controls.
- e. Review Internal Audit reports and recommendations of the CAE. This review will include a discussion of significant risks reported in the Internal Audit reports, and an assessment of the responsiveness and timeliness of management's follow-up activities pertaining to the same.
- f. Require the CAE to attend any meeting of the Committee and to prepare and deliver such reports as the Committee requests.
- g. Provide guidance to the Authority's CRO and enterprise risk management program on critical business objectives, risks and philosophy and tolerance for risk mitigation, and establish requirements for the CRO to report to the Committee.
- h. Report at least annually to the Board of Trustees on matters relating to the internal audit function and the enterprise risk management program, and make such recommendations as the Committee deems appropriate.
- i. Present periodic reporting to the Board on how the Committee has discharged its duties and met its responsibilities, and regularly report activities, issues and recommendations.
- j. Review the Committee's charter annually, reassess its adequacy, and recommend any proposed changes to the Board.
- k. Conduct an annual self-evaluation of performance, including its effectiveness and compliance with the charter.



Exhibit B
July 30, 2019

NEW YORK STATE CANAL CORPORATION

AUDIT COMMITTEE CHARTER

A. PURPOSE

The Audit Committee ("Committee") oversees the work of the Internal Audit Department and monitors all internal audits and external audits performed by the Independent Auditor and other external agencies as well as management's corrective action and implementation plans to all audit findings.

The responsibilities of the Committee are to: recommend to the Board the hiring of a certified independent accounting firm for the New York State Canal Corporation ("Corporation"), establish the compensation to be paid to the accounting firm and provide direct oversight of the performance of the independent audit conducted by the accounting firm hired for such purposes, provide direct oversight of the Internal Audit Department, and perform such other responsibilities as the Board may assign it.

B. MEMBERSHIP AND ORGANIZATION

(1) Committee Composition

The Committee will be comprised of at least three independent members of the Board, who possess the necessary skills to understand the duties and functions of the Committee and be familiar with corporate finance and accounting. Committee members and the Committee Chair will be selected by a vote of the Board.

Committee members are prohibited from being an employee of the Corporation or an immediate family member of an employee of the Corporation. In addition, Committee members shall not engage in any private business transactions with the Corporation or receive compensation from any private entity that has material business relationships with the Corporation, or be an immediate family member of an individual that engages in private business transactions with the Corporation or receives compensation from an entity that has material business relationships with the Corporation.

(2) Term

Committee members will serve for a period of five years subject to their term of office under Public Authorities Law § 1003. Committee members may be reelected to serve for additional periods of five years subject to their term of office. A Committee member may

resign his or her position on the Committee while continuing to serve as a member of the Board. In the event of a vacancy on the Committee due to death, resignation or otherwise, a successor will be selected to serve in the manner and for the term described above.

(3) Removal

A Committee member may be removed if he or she is removed as a member of the Board for cause, subject to Public Authorities Law § 2827, or is no longer eligible to serve as a Committee member.

(4) Meetings and Quorum

The quorum of the Committee is a majority of the number of Committee members selected by the Board.

A majority vote of all Committee members present is required to take action on a matter.

The Committee shall hold regularly scheduled meetings at least twice per year. A Committee member may call a special meeting of the Committee individually, or upon the request of the Corporation's President and Chief Executive Officer ("CEO"), Executive Vice President and Chief Operating Officer ("COO"), Executive Vice President and General Counsel ("GC"), Executive Vice President and Chief Financial Officer ("CFO"), Chief Risk Officer ("CRO"), Controller, or Chief Audit Executive of the Internal Audit Department ("CAE"). The notice of meeting need not state the purpose for which the meeting has been called. In order to transact business, a quorum must be present.

In addition, the Committee: (1) will meet at least twice a year with the CAE for the purpose of reviewing audit activities, audit findings, management's response, remediation action plans, and providing the CAE with an opportunity to discuss items and topics of relevance with the Committee; (2) will meet at least twice a year with the Corporation's independent auditors to discuss the audit work plans, objectives, results and recommendations; and (3) may meet independently with the Corporation's CEO, COO, GC, CFO, CRO, Controller, or CAE on matters or issues and items within the Committee's purview as it deems necessary. These meetings may be held as part of a regular or special meeting at the Committee's discretion.

An agenda will be prepared and distributed to each Committee member prior to each meeting and minutes of each meeting will be prepared in accordance with the New York Open Meetings Law. Minutes of the meeting should include, at a minimum:

- a. Date; location; time meeting was called to order and adjourned; and if other Board committee (e.g., Finance Committee) is meeting simultaneously.
- b. Title and name of attendees; public comments period; title and name of public speakers.
- c. Approval of the official proceedings of the previous month's Committee meeting.

- d. Pre-Approval of audit and non-auditing services as appropriate, all auditing services and non-audit services to be performed by independent auditors will be presented to and pre-approved by the Committee:
 - 1. External Audit Approach Plans: Independent auditor presents approach/service plan, which is to be submitted to the Committee electronically;
 - 2. Internal Audit Activity Report: CAE provides overview of Internal Audit activities; and
 - 3. Risk Management: CRO provides an overview of Risk Management activities.
- e. Follow-up items including communications to the Committee of the current status of selected open issues, concerns, or matters previously brought to the Committee's attention or requested by the Committee.
- f. Status of audit activities, as appropriate; representatives of the certified independent accounting firm or Corporation management will discuss with the Committee significant audit findings/issues, the status of on-going audits, and the actions taken by Corporation management to implement audit recommendations.
- g. Copies of handouts or materials presented to the Committee.

Any meeting of the Committee may be conducted by video conferencing. To the extent permitted by law, the Committee may hold meetings or portions of meetings in executive session.

C. FUNCTIONS AND POWERS

The Committee has the following responsibilities:

(1) General Powers

The Committee may call upon the resources of the Corporation to assist the Committee in the discharge of its oversight functions. Such assistance may include the assignment of Corporation staff and the retention of external advisors subject to the requirements of the Public Authorities Law and the Corporation's Expenditure Authorization Procedures. The Committee may communicate directly with the CEO.

The Committee may direct any Corporation employee to make oral or written reports to the Committee on issues and items within the Committee's purview.

The Committee may direct the Corporation's internal auditors to conduct special audits of items and issues of concern to the Committee.

(2) Accounting, Financial Reporting, and Oversight of Independent Accountants and Controller

The Committee will seek to enhance the integrity, quality, reliability and accuracy of the Corporation's financial statements and accompanying notes, and will oversee the relationship with the Corporation's independent accountants. To accomplish these objectives, the Committee will:

- a. Provide advice to the Board on the selection, engagement, compensation, evaluation and discharge of the independent accountants.
- b. Review and discuss as necessary the Corporation's financial statements including any material changes in accounting principles and practices with the independent accountants, the Controller, or members of Corporation management.
- c. Review and approve the Corporation's annual audited financial statements (including the independent accountants' associated management letter).
- d. Oversee the establishment of procedures for the effective receipt and treatment of (i) complaints regarding auditing, internal auditing and accounting matters, and (ii) the confidential submission of concerns raised by whistleblowers and other persons regarding accounting or auditing practices.
- e. Review at least annually the scope, objectives and results of the independent auditors' examination of the annual financial statements and accompanying notes, and report to the Board on the Committee's findings.
- f. Assure the independence of the independent accountants by approving any non-audit work by them for the Corporation and examining the independent auditor's relationship with the Corporation.
- g. Report to the Board on any matters relevant to the audit process or independent accountant communications, and make such recommendations as the Committee deems appropriate.

(3) Risk Management, Internal Controls and Oversight of the Internal Audit Department

The Committee will seek to enhance the Corporation's risk management infrastructure, and ensure timely and effective identification and mitigation of critical business risks. To accomplish these objectives, the Committee will:

- a. Have authority over appointment, dismissal, compensation and performance reviews of the CAE. The CAE will report directly to the Committee.
- b. Review the charter, activities, staffing and organizational structure of the Internal Audit Department with Corporation management and the CAE.
- c. Ensure that the Internal Audit Department is organizationally independent from Corporation operations.
- d. Provide oversight of the Internal Audit Department and its resources and activities to facilitate the Internal Audit Department's improvement of internal controls.
- e. Review Internal Audit reports and recommendations of the CAE. This review will include a discussion of significant risks reported in the Internal Audit reports, and an assessment of the responsiveness and timeliness of management's follow-up activities pertaining to the same.

- f. Require the CAE to attend any meeting of the Committee and to prepare and deliver such reports as the Committee requests.
- g. Provide guidance to the Corporation's CRO and enterprise risk management program on critical business objectives, risks and philosophy and tolerance for risk mitigation, and establish requirements for the CRO to report to the Committee.
- h. Report at least annually to the Board on matters relating to the internal audit function and the enterprise risk management program, and make such recommendations as the Committee deems appropriate.
- i. Present periodic reporting to the Board on how the Committee has discharged its duties and met its responsibilities, and regularly report activities, issues and recommendations.
- j. Review the Committee's charter annually, reassess its adequacy, and recommend any proposed changes to the Board.
- k. Conduct an annual self-evaluation of performance, including its effectiveness and compliance with the charter.



Charter Title:
Internal Audit Charter

Charter Number:
CP 5-1

Page:
1 of 5

Internal Audit Charter

Note: Revision # should be listed in descending order starting with most recent version at the top.

Revision Date(For BCG Use Only)	Revision #	Description/Modification	Revision Section (s)	Author
10/5/2018	1	Update to Charter	Various Sections	Angela Gonzalez SVP Internal Audit
12/17/2015	0	Creation of Charter This Charter replaces the Internal Audit Program Company Policy 5-1. There were 5 prior versions of the previous policy	N/A	Jennifer Faulkner SVP of Internal Audit

1 PURPOSE

Purpose:

The mission of the Internal Audit (IA) function is to provide independent, objective audit and consulting services designed to add value, manage risks and improve NYPA and Canal Corporation (Canals) operations. IA helps the organization accomplish its objectives by bringing a systemic and disciplined approach to evaluating and improving the effectiveness of NYPA and Canals governance, risk management, and internal controls. This includes processes designed to evaluate the effectiveness and efficiency of operations, ability to execute on strategic initiatives, reliability of financial reporting, and compliance with applicable laws and regulations. IA will align to professional standards and serve as a training and talent development organization within NYPA.

Authority:

IA, with accountability for strict confidentiality and safeguarding of records and information, is authorized full and unrestricted access to any and all of NYPA and Canals records, physical properties, and personnel pertinent to carrying out any IA engagement in accordance with applicable governance requirements. All employees are requested to assist IA in fulfilling its roles and responsibilities. IA, through the SVP of Internal Audit/Chief Audit Executive (CAE), will also have full and unrestricted access to the Board of Trustees (the Board) and/or Audit Committee (AC) of the Board, which is governed by the Audit Committee Charter. The CAE will also have access to the Executive Management Committee (EMC).

Responsibilities:

IA will develop an annual audit plan based on the prioritization of the audit universe, an appropriate risk-based methodology, and input from management and the Board and/or AC with the following responsibilities:

- Evaluating risk exposure relating to achievement of the organization's strategic objectives.
- Evaluating the reliability and integrity of information and the means used to identify, measure, classify, and report such information.
- Evaluating the systems established to validate compliance with those policies, plans, procedures, laws, and regulations which could have a significant impact on the organization.
- Evaluating the effectiveness and efficiency with which resources are employed.
- Perform consulting and advisory services related to governance, risk management and control as appropriate for the organization.
- Report periodically on IA's purpose, authority, responsibility, and performance relative to its plan.
- Collaborate with Enterprise Risk Management and the Ethics and Compliance Office and report significant risk exposures and control issues, including fraud risks, governance issues, and other matters needed or requested by
- Evaluate specific operations at the request of the Board and/or AC or management, as appropriate.
- Track open recommendations to ensure proper closure and remediation to improve the organization's internal control environment.

2 INDEPENDENCE AND OBJECTIVITY

The IA function will carry out its responsibilities free from interference by any element (e.g. person, group, business unit, policy, procedure, technology) within the organization, including matters of audit selection, scope, procedures, frequency, timing, or report content to permit maintenance of necessary independence and objectivity.

IA will have no direct operational responsibility or authority over any of the activities audited. Accordingly, they will not implement internal controls, develop procedures, install systems, prepare records, provide approvals or engage in any other activity that may impair IA's judgment.

IA must exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process under examination. Internal auditors must make a balanced assessment of the relevant circumstances and not be unduly influenced by their own interests or by others in forming judgments.

IA will confirm to the AC of the Board, the CEO and applicable members of management, at least annually, the organizational independence of the IA function.

3 PROFICIENCY AND DUE PROFESSIONAL CARE

IA will govern itself in accordance with the Institute of Internal Auditors' mandatory guidance including the Definition of Internal Auditing, the Code of Ethics, and the International Standards for the Professional Practice of Internal Auditing (Standards). This mandatory guidance constitutes principles of the fundamental requirements for the professional practice of internal auditing and for evaluating the effectiveness of IA's performance.

4 QUALITY ASSURANCE

IA will maintain a Quality Assurance and Improvement Program that covers all aspects of the Internal Audit function. As part of this program, it will include conducting a quality review for select internal audit projects periodically throughout the year, to verify quality standards of IA's work products.

5 MANAGING THE INTERNAL AUDIT FUNCTION

The CAE is delegated the authority and discretion to perform audit and consulting services and to oversee the IA function. The CAE will promote a strong control environment and emulate appropriate "tone at the top." The CAE will also be responsible for maintaining a professional IA department which possess sufficient knowledge, skills, experience, and professional qualifications to meet the requirements of the IA charter.

In addition, the CAE will be responsible for overseeing the following aspects of the IA function:

- Developing and overseeing the execution of IA work programs which should address the appropriate scope and techniques required to achieve the audit objectives.
- Overseeing the development of work papers that meet the quality standards required by management and are consistent with audit professional standards.
- Coordinating alignment with other risk management and compliance functions.
- Serving as a business partner to proactively identify risks and support execution of NYPA and Canals strategies
- Maintaining updated job descriptions, roles, and competencies for each staff

- level and updating the organizational chart as necessary.
- Periodically reviewing critical hiring and recruiting needs as well as competency gaps.
- Developing staff with skills that can be transferred to other areas of the business.
- Effectively onboarding IA new hires and providing core training materials as well as ongoing training and development that correlates to competency and career planning.
- Developing and deploying effective methodologies to execute the function's mandate.
- Assessing and identifying appropriate technologies required to support the function and add value to NYPA and Canals.

6 NATURE OF WORK

IA will establish an audit universe to define the auditable entities and risks that IA will monitor and mitigate. These elements will include operational, financial, compliance and strategic risk, as well as information technology. IA will generally perform three categories of IA activities:

- **Audits** – IA will provide independent assurance activities of the performance of NYPA and Canals governance, risk management and control processes.
- **Assessments** – IA will provide independent advisory activities focused on process improvement opportunities, risk identification and mitigation within new processes and initiatives.
- **Consulting** – IA will provide various consulting activities in either documented form or real-time feedback applied to new processes, initiatives or other identified management requests. IA is considered a partner and trusted advisor in these efforts.

7 ENGAGEMENT PLANNING & AUDIT PERFORMANCE

IA will perform an annual risk assessment to create an Internal Audit plan. As part of the risk assessment, IA will consider feedback from management at various levels, emerging risks, strategic objectives, prior years' internal audit results, and significant upcoming industry and organizational changes, among others, to understand risks faced by NYPA and Canals. In addition to the development and execution of the Internal Audit plan, IA will be responsible for budget and resource allocation, managing personnel assigned to projects, scope determination, and communication protocols with management for each of its projects.

IA will execute the annual audit plan, including as appropriate, any special projects requested by the AC of the Board, the CEO and/or applicable members of management. As part of audit execution, IA will be responsible for:

- Establishing end-to-end audit timelines including ongoing risk monitoring activities, planning, and fieldwork, required status meetings and reporting.
- Establishing an understanding with the business regarding audit objectives, scope, timelines, and reporting of observations and recommendations.
- Utilizing all records, personnel and physical properties within NYPA and Canals in an ethical manner, and in accordance with NYPA and Canals policies and procedures, to avoid undue interruption of normal operations.
- Taking responsibility for employee privacy and confidentiality of information obtained during audit projects.

8 COMMUNICATING RESULTS

IA will review IA reports and communicate all observations with appropriate management in a manner that will allow management to assess the adequacy of internal controls and understand remediation factors that should take place. All observations will be agreed upon with management prior to report issuance. In addition, IA will execute a report rating process whereby observations and reports will be rated against a scale of pre-defined criteria. Observations will be rated on a scale of High, Medium and Low, and reports will be evaluated as Good, Satisfactory, Needs Improvement and Unsatisfactory. Ratings will be relative to the individual observation, risk categories, or risks to NYPA and Canals and may consider materiality or potential impact.

IA will provide reasonable and appropriate recommendations for corrective action plans (i.e., management action plans and/or management recommendations) which management will agree to, and provide IA with an action owner and timeline by which remediation is expected.

9 MONITORING PROCESS

Management action plans will be monitored on a monthly basis. Any recommended action that, in the judgment of IA, does not receive adequate attention will be escalated to an appropriate level of management for resolution. The escalation process may involve successive levels of management and may include the EMC, the CEO, and/or AC of the Board in the event a high rated observation is not timely or satisfactorily resolved. Management of the audited organization shall be notified of intent to escalate a particular issue and will be encouraged to participate.

IA will regularly report observations to management and the AC and/or Board through regular reporting and meetings. Regular reporting to management creates visibility into key processes and activities and enables management to address observations timely.

RESOLUTION

Whereas, Ed Rider has been an inspirational example of professionalism, dedication and leadership in his nearly four decades of distinguished service to the New York Power Authority and the State of New York; and

Whereas, Mr. Rider has held various crucial NYPA engineering and operations positions, starting out in 1982 as an electrical engineer and rising steadily through the ranks to become the Power Authority's Northern New York Regional Manager. This is the highest ranking position at the St. Lawrence-Franklin D. Roosevelt Power Project, NYPA's first power plant; and

Whereas, Mr. Rider has been consistently recognized for his leadership in bringing forth the highest performance standards from the St. Lawrence project's 200-plus-member workforce in ensuring low-cost power generation for Alcoa's Massena operation and for the creation and retention of jobs at other North Country businesses; and

Whereas, Mr. Rider's profound personal commitment to maintaining a safe work environment, combined with his deep respect for the men and women who served under him and the safety culture they built together, led to two of the longest safety records in the plant's history for a total of 3-1/2 years without an accident or injury causing a worker to lose a day of work; and

Whereas, Mr. Rider's exceptional engineering expertise, management know-how, and commitment to excellence ensured that the St. Lawrence project has been a mainstay for reliable, low-cost electricity and a prominent part of the Power Authority's clean energy profile, which continues to expand in support of Governor Andrew Cuomo's ambitious goals for the state to achieve a carbon-neutral electric system by 2040; and

Whereas, Mr. Rider's duties also extended to the environmental stewardship of more than 30 miles of the St. Lawrence River Valley, including two control dams upstream and thousands of acres of public parkland along the river for recreational enjoyment and wildlife preservation, where he presided over the creation of numerous new habitat improvement projects and the restoration of several new park facilities and the Eugene L. Nicandri Nature Center; and

Whereas, Mr. Rider, a rare leader who prefers to lead by example and build consensus, exemplifies integrity in all facets of his life and embodies the spirit of giving back to the community, along with being a trusted advisor and inspiring mentor to many young engineers; and

Whereas, During the many periods of unusually high river flows that corresponded with Mr. Rider's tenure at the Moses-Saunders Power Dam, he developed a keen appreciation for NYPA's role in balancing the needs of water, safety and power and built a solid reputation as NYPA's liaison to the International Lake Ontario-St. Lawrence River Board and made sure the St. Lawrence project was available to pass through the required amounts of water when called upon to balance water flows; and

Whereas, Following the devastating damage of Hurricanes Irma and Maria in Puerto Rico and the U.S. Virgin Islands—and the restoration of power—Rider selflessly represented the Power Authority on special assignment leading a NYPA Caribbean team to help design more storm resilient and “greener” electric systems;

Now Therefore Be It Resolved, that the Trustees of the Power Authority of the State of New York convey their deepest gratitude, respect and appreciation to Ed Rider for his service to NYPA and the people of the state and wish him, his wife Jennifer, of 30 years, their children and grandchildren a happy, healthy and rewarding future.



May 2019