



**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**

September 25, 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 9:04 a.m.

Members of the Board present were:

John R. Koelmel, Chairman
Eugene L. Nicandri, Vice Chairman
Tracy McKibben
Dennis Trainor

Dr. Anne Kress – Excused
Anthony Picente, Jr. – Excused
Michael Balboni – 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
Soubhagya Parija	Senior Vice President and Chief Risk Officer
Robert Piascik	Senior Vice President and Chief Information Officer
Lee Garza	Senior Vice President – Financial Operations
Angela Gonzalez	Senior Vice President – Internal Audit
Kimberly Harriman	Senior Vice President – Public & Regulatory Affairs
Keith Hayes	Senior Vice President – Clean Energy Solutions
Yves Noel	Senior Vice President – Strategy & Corporate Development
Kristine Pizzo	Senior Vice President – Human Resources
Karen Delince	Vice President and Corporate Secretary
Daniella Piper	Vice President – Digital Transformation Office and Chief of Staff
John Canale	Vice President – Strategic Supply Management
Ruth Colón	Vice President – Enterprise Shared Services
Ricardo DaSilva	Vice President – Strategic Operations
Steven Kalashian	Vice President – Human Resources & Organizational Development
Joseph Leary	Vice President – Community & Government Relations
Patricia Lombardi	Vice President – Project Management
Doug McMahon	Vice President – Strategy
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
Dennis Chang	Manager – Fuel Supply & Operations
Gerard McLoughlin	Manager – Business Power Allocations & Compliance
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Quatrocci	Associate Corporate Secretary
Kate Asher	Partner – BuroHappold Engineering

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

Introduction

Chairman Koelmel welcomed the Trustees/Directors and NYPA and Canal staff members who were present at the meeting. He also welcomed new Authority staff members Mr. Adam Barsky, Executive Vice President and Chief Financial Officer, and Mr. Yves Noel, Senior Vice President of Strategy and Corporate Development.

Chairman Koelmel 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 September 25, 2019 Proposed Meeting Agenda**

Upon motion made by member Tracy McKibben and seconded by member Dennis Trainor, the members adopted the meeting Agenda, as amended.

Conflicts of Interest

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

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

“Mr. Chairman, I move that the NYPA and Canal Boards conduct an Executive Session to discuss the financial and credit history of a particular corporation and the employment of a particular person or corporation.” On motion made by member Tracy McKibben and seconded by Vice Chair Nicandri, 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 Dennis Trainor, 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 Dennis Trainor and seconded by member Tracy McKibben, the members approved the Consent Agenda.

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 July 30, 2019 were unanimously adopted.

b. Power Allocations:

i. Proposed Agreement and Service Tariff Relating to the Sale of Recharge New York Power and Energy to the Griffiss Business & Technology Park

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve:

1. The attached form of contract (the ‘Agreement’) for the wholesale sale of Recharge New York (‘RNY’) power and energy to GUSC Energy Inc. (‘GUSC’ or ‘Customer’). The Agreement would be entered into between (a) the New York Power Authority (‘Authority’), and (b) GUSC and Griffiss Utility Services Corporation (the ‘Griffiss Utility’) (collectively, ‘Griffiss Entities’).
2. The accompanying Authority Service Tariff No. RNY-2B (‘ST RNY-2B’), which, along with the Agreement, would apply to the sale of RNY Power to GUSC.

Copies of the Agreement and ST RNY-2B are attached as Exhibit ‘4b i-A.’

BACKGROUND

1. The RNY Power Program

Chapter 60 (Part CC) of the Laws of 2011 (‘Chapter 60’) created the RNY Power Program. The RNY Power Program makes 910 megawatts (‘MW’) of RNY Power available to ‘eligible applicants’ for the purpose of attracting new businesses and retaining and expanding existing businesses throughout the State of New York.

RNY Power is comprised of: (1) fifty percent (50%) of firm hydroelectric power from the Authority’s Niagara and St. Lawrence-FDR hydroelectric projects (‘RNY Hydropower’) that was withdrawn, effective August 1, 2011, from the utility corporations that had purchased such power for the benefit of domestic and rural consumers; and (2) fifty percent (50%) of market power procured by the Authority from market or other appropriate sources (‘RNY Market Power’).

Awardees of RNY Power have a choice to purchase the entire amount of their RNY Power allocation from the Authority (RNY Hydropower and RNY Market Power) or purchase only the RNY Hydropower portion from NYPA and purchase the RNY Market Power component from another source.

2. RNY Power Allocation to Griffiss

The Griffiss Business & Technology Park located in Rome, NY (‘Griffiss Park’ or ‘Park’) hosts many entities consisting of a number of business enterprises that employ thousands of people focusing on technology, manufacturing, aviation and other fields. The Park and its tenants make a significant contribution to the Rome and Mohawk Valley area economies.

The GUSC applied for an allocation of RNY Power for the purpose of providing the RNY Power to the business enterprises located within the Park.

In 2012, GUSC was awarded 6,730 kilowatts (‘kW’) of RNY Power for a 7-year term for use by eligible businesses located within the Griffiss Park.

RNY Power is sold to GUSC as a wholesale transaction given that, among other things, the Authority is not selling the RNY Power directly to Eligible End Users, the Authority is not serving as the New York Independent System Operator, Inc. ('NYISO') Load Serving Entity ('LSE') for the RNY Power sold to GUSC, and the local electric utility will be delivering the Accepted Allocation in accordance with a wholesale, not a retail, tariff.

GUSC's current allocation is scheduled to expire on November 30, 2019.

EDPAB recommended at its September 26, 2018 meeting, and the Trustees approved at their October 2, 2018 meeting, a seven-year extension of the 6,730 kW RNY Power allocation.

DISCUSSION

The Authority would sell the extended allocation to GUSC pursuant to the Agreement and ST RNY-2B attached as Exhibit '4b i-A.' The Agreement reflects an updated contract form containing many of the terms and conditions set forth in the updated form of RNY retail sale agreement approved by the Board at its October 2, 2018 meeting. ST RNY-2B reflects an updated tariff form which includes, among other things, an updated rate structure.

The following is a summary of some key terms and conditions of the Agreement and ST RNY-2B:

- The Customer will resell the Accepted Allocation to the Griffiss Utility. The Griffiss Utility, in turn, will distribute and sell the Accepted Allocation to Eligible End Users.
- Electric Service would commence on December 1, 2019.
- The Customer may only sell the RNY Power to the Griffiss Utility, and the Griffiss Utility may only sell such RNY Power to Eligible End Users. The RNY Power will be sold to Eligible End Users at a price equal to the amount the Customer pays to the Authority for such RNY Power.
- As more specifically detailed in the Agreement, the allocation is subject to supplemental commitments that include a 5,120-job employment commitment and a \$10,000,000 capital investment commitment. These supplemental commitments would represent an aggregate amount of employment and capital investments that would be undertaken collectively at the Griffiss Park by the GUSC Entities and Eligible End Users.
- Eligible End Users are identified in a schedule to the Agreement which will be updated by annual reports filed by the Customer.
- The Griffiss Utility (or another party approved by the parties) will function as the NYISO LSE.
- The Customer will be required to conduct an energy efficiency audit at the Park in the manner provided for in the Agreement at least once during the term of its RNY Power allocation.
- In the event of a curtailment of hydropower produced by the Authority's hydroelectric projects, the Authority will supply, and the Customer will purchase 'Substitute Energy' procured by the Authority.
- While the Authority is not currently serving as the LSE for the RNY Power sold under the Agreement, the Agreement provides for the assessment of a Monthly Clean Energy Implementation Charge in the event that the Authority becomes the LSE. This Charge would allow for the recovery of the Authority's costs for actions it would take for purposes of complying with the State Energy Plan and the State's Clean Energy Standard.

The Agreement and ST RNY-2B include other terms which are largely standard terms and conditions for Authority power contracts and tariffs relating to such matters as prohibitions on the transfer of RNY Power allocations, metering arrangements, and modification and termination of allocations and the Agreement.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions recommends that the Trustees approve the form of the proposed Agreement for the sale of Recharge New York power and energy to GUSC Energy Inc. and Griffiss Utility Services Corporation.

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 Trustees hereby approve the proposed form of the Agreement for the Sale of Recharge New York Power and Energy at Wholesale to GUSC Energy Inc. and Griffiss Utility Services Corporation and Authority Service Tariff No. RNY-2B, attached as Exhibit “4b i-A” to 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 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. **Transfer of Recharge New York Power Allocations**

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Trustees are requested to approve the transfer of the following New York Power Authority ('Authority') power allocations:

1. Transfer of a 146-kilowatt ('kW') Recharge New York ('RNY') Power allocation awarded to EJ USA Inc. ('EJ USA') for use at its facility located at 6177 S. Bay Road, Cicero, New York, to a facility located at 132 County Rte. 59, Phoenix, New York.
2. Transfer of a 46 kW RNY Power allocation and pending 10-kW RNY Power allocation awarded to Flexible Business Systems, Inc. ('Flexible') for use at its facility located at 380 Oser Avenue, Hauppauge, New York, to a facility located at 290 Motor Parkway, Hauppauge, New York.
3. Transfer of a 210 kW RNY Power allocation awarded to New York Container Terminal Inc. ('NYCT') for use at 300 Western Avenue, Staten Island, New York, to GCT New York LP ('GCT') in order to address organizational changes.
4. Transfer of a 420 kW RNY Power allocation awarded to Norampac Schenectady Inc. ('Norampac') for use at its 801 Corporation Park, Schenectady, New York facilities, to Cascades Holding US Inc. ('CHUS') in order to address organizational changes.

The Trustees have previously approved transfers of Authority power allocations in similar circumstances.

Transfers of RNY Power and RNY Hydropower are subject to approval of the Economic Development Power Allocation Board ('EDPAB'). At its September 24, 2019 meeting, EDPAB approved the transfer of the RNY Power allocations described above.

DISCUSSION

The following discussion describes the facts relating to the recommended transfers:

1) EJ USA Inc.

EJ USA manufactures steel and aluminum products, such as hatches, grates and covers. The company presently has a 146 kW RNY Power allocation.

The company has moved to a more modern facility that will allow for growth of its manufacturing within its markets in New York, New Jersey, Connecticut and Pennsylvania.

EJ USA requests that the 146 kW RNY Power allocation be transferred to the 132 County Rte. 59, Phoenix, New York location. The company would continue to honor all commitments including employment, power utilization, and capital investment commitments related to the 146 kW RNY Power allocation.

2) Flexible Business Systems, Inc.

Flexible Business Systems, Inc. ('Flexible') provides IT support, as well as IT technology consultation for LI-area businesses. The company presently has a 46 kW RNY Power allocation and a pending 10 kW RNY Power allocation.

The company had outgrown the facilities located at 380 Oser Avenue and moved into a facility that will allow the company to meet its business growth demands.

Flexible requests that its 46 kW RNY Power allocation and the pending 10 kW RNY Power allocation be transferred to the 290 Motor Parkway location. The company would continue to honor all commitments including employment, power utilization, and capital investment commitments related to the 46 kW RNY Power allocation and the pending 10 kW RNY Power allocation.

3) New York Container Terminal Inc.

New York Container Terminal Inc. ('NYCT') has a 210 kW RNY Power allocation for use at its facility on Staten Island, New York. The facility is an international cargo container shipping terminal used for loading and discharging cargo containers to and from ocean-bound cargo vessels for transport to ports all over the world. NYCT restructured for business and branding purposes and is now GCT.

These companies request that the 210 kW RNY Power allocation be transferred to GCT. The restructuring will not result in changes to operations at the facility and GCT has indicated that it will honor all terms and commitments, including employment, power utilization, and capital investment commitments made by NYCT under its RNY Power sales agreement.

4) Norampac Schenectady Inc.

Norampac Schenectady Inc. ('Norampac') has a 420 kW RNY Power allocation for use at its facility in Schenectady, New York. This facility manufactures corrugated packaging and displays. Norampac merged into CHUS, an affiliate, and this location is now operated as Cascades Containerboard Packaging – Schenectady, a division of CHUS.

In light of the merger, the companies have asked that the 420 kW RNY Power allocation be transferred to CHUS. The merger will not result in changes to operations at the facility and CHUS has indicated it will honor all terms and commitments, including employment, power utilization, and capital investment commitments made by Norampac under its RNY Power sales agreement.

RECOMMENDATION

Staff recommends that the Trustees approve the transfers discussed above, subject to: (1) assumption of existing supplemental commitments by the proposed transferees as described above; and (2) the transfers are addressed in contract documents containing such terms and conditions determined by the Authority to be appropriate to effectuate each transfer.

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 transfer of the 146 kilowatt ("kW") Recharge New York ("RNY") Power allocation awarded to EJ USA Inc., for use at its facilities at 6177 S. Bay Road, Cicero, New York, to facilities located at 132 Rte. 59, Phoenix, New York, as described in the foregoing report of the President and Chief Executive Officer ("report") be, and hereby is, approved subject to (i) such terms and conditions as are set forth in the foregoing report, and (ii) such terms and conditions as are required by the Authority

in contract documents prepared by the Authority in order to effectuate the transfer; and be it further

RESOLVED, That the transfer of the 46 kW RNY Power allocation, and a pending 10 kW RNY Power allocation, awarded to Flexible Business Systems, Inc., for use at its facilities located at 380 Oser Avenue, Hauppauge, New York to facilities at 290 Motor Parkway, Hauppauge, New York, 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 terms and conditions as are required by the Authority in contract documents prepared by the Authority in order to effectuate the transfer; and be it further

RESOLVED, That the transfer of the 210 kW RNY Power allocation awarded to New York Container Terminal Inc. for its use at its facility at 300 Western Avenue, Staten Island, New York, to GCT New York LP, for use at the same facility, 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 terms and conditions as are contained in contract documents prepared by the Authority to effectuate the transfer, and be it further

RESOLVED, That the transfer of the 420 kW RNY Power allocation awarded to Norampac Schenectady Inc. for use at its facility at 801 Corporation Park, Schenectady, New York, to Cascades Holding US Inc. for use at the same facility, 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 terms and conditions as are contained in contract documents prepared by the Authority to effectuate the transfer; 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.

iii. **Jacob K. Javits Convention Center Power Purchase Agreements**

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Trustees are requested to authorize the execution of power purchase agreements ('PPA'), described below, with Siemens Industry, Inc. ('Siemens') and the New York Convention Center Operating Corporation, doing business as the Jacob K. Javits Convention Center ('Javits Center'). The estimated annual cost of the PPA with Siemens will be \$455,000 per year for up to a 20-year term based on a preliminary budget analysis. These costs, plus an administrative fee, will be directly billed to the Javits Center under the 'back-to-back' PPA.

BACKGROUND

The Trustees' approval is being sought under Public Authorities Law 1005(17), which enables the Authority to finance and design, develop, implement and administer energy related energy services for its customers. As described below, the Authority will be entering into a PPA with Siemens for the purchase of energy and attributes from a solar photovoltaic ('PV') and energy storage system, and, in turn, selling that energy and attributes to the Javits Center under a separate PPA. Any subsequent projects utilizing this contracting structure will seek the Trustees' approval in this format.

Both Governor Cuomo and the Mayor of New York City have identified the increased deployment of renewable distributed energy resources ('DER') as top priorities in their respective administrations, with Governor Cuomo directing the Authority to assist state entities to lead by example. The Javits Center has undertaken numerous projects to drive sustainability efforts and lead by example and engaged the Authority to procure a commercial-scale solar PV and energy storage system to be installed at the Javits Center, consistent with Public Authorities Law Section 1005(17). Additionally, the Authority may execute contracts for the purchase of electricity with public sector customers within the Southeast New York operating territory, including the Javits Center.

In support of the State's goals, the Trustees are requested to authorize the execution of PPA with Siemens and Javits Center, enabling the completion of the Jacob K. Javits Center Solar PV and Energy Storage Project.

DISCUSSION

The DERs team offers subject matter expertise and project management for the procurement and implementation of renewable DER, to all Authority customers meeting the eligibility criteria under Public Authorities Law Section 1005(17). The Authority was engaged by the Javits Center to support the procurement process for a solar PV and energy storage system to be integrated with the Javits Center's existing green roof and support the Javits Center's sustainability and renewable energy goals. These systems will provide the Javits Center with approximately 1,450 kilowatts of solar PV capacity and 2,000 kilowatts of energy storage capacity, which are expected to generate more than 1,800,000 kilowatt hours of electricity per year. Using the 2,000-kilowatt energy storage system, the Javits Center will be able to provide substantial grid support services in a critical network area through demand response and other energy usage optimization programs.

On August 2, 2018 Request for Proposal ('RFP') Q18-6513SR was posted in Ariba and advertised in the New York State *Contract Reporter* soliciting firms interested in providing a solar PV and energy storage system through a 'back-to-back' PPA structure for the Javits Center. Under this contracting structure, the solar PV and energy storage system is owned, operated and maintained by a third-party throughout the term of the PPA, with the Authority responsible for purchasing all attributes produced by the solar PV and energy storage system. Those attributes will then be purchased by the Javits Center from the Authority under substantially like terms and conditions.

In response to the invitation to bid, on October 1, 2018, proposals were received from six firms. The proposals were reviewed by an evaluation committee comprised of staff from Business and Market Development, Strategic Supply Management, and Finance. At the conclusion of the evaluation process, Business Development requested that Siemens be released to begin the design development process of the solar PV and energy storage system at the Javits Center. In concurrence with that request, granted on February 27, 2019, and as a result of a successful design development phase, the Trustees' approval is now being sought to proceed with the 'back-to-back' PPA execution.

FISCAL INFORMATION

The estimated annual cost of the PPA with Siemens will be \$455,000 per year for up to a 20-year term based on a preliminary budget analysis. These costs, plus an administrative fee, will be directly billed to the Javits Center under a separate PPA. Additionally, the Authority will receive funds sufficient to fully recover the costs incurred by Clean Energy Solutions Business Development for advisory services rendered throughout the procurement and implementation processes.

RECOMMENDATION

The Executive Vice President and Chief Commercial Officer, the Senior Vice President – Clean Energy Solutions, and the Vice President – Business Development recommends that the Trustees approve the request to execute back-to-back power purchase agreements with Siemens Industry, Inc. and the Jacob K. Javits Center, for an estimated annual cost of \$455,000.

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 Trustees hereby authorize execution of back-to-back power purchase agreements with Siemens Industry, Inc. and the New York Convention Center Operating Corporation doing business as the Jacob K. Javits Convention Center, for an estimated annual amount of approximately \$455,000, as described 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 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:

Commercial Operations – Fuel Planning and Operations

The non-personal services contract with **Saybolt LP ('Saybolt') (FD-2019-13)** would provide for independent petroleum inspection and other related services in connection with the delivery, transfer and storage of various types of distillate fuel oil within the New York Harbor and Long Island areas. Such services include, but are not limited to, the inspection, measurement and testing of bulk oil deliveries and transfers made via barge, tanker, pipeline or truck to the Authority's electric generating stations and/or oil storage facilities situated within the aforementioned areas for the Richard M. Flynn, Zeltmann (500 MW) and Astoria Energy II power plants. The resulting data on oil quantity and quality provides the basis for both paying for oil delivered and assessing penalties for non-conforming oil, as well as for providing evidence of compliance with environmental quality regulations. Since the existing contract for such services expires at the end of the year, and the need for such services is ongoing, staff developed a new Request for Proposals (**RFP/QFS-2019-11**). Bids were solicited from seven firms, including those that may have responded to a notice in the New York State *Contract Reporter*. Three proposals were received and evaluated. Based on each firm's unit pricing for the required services and forecasted demand / projected usage, staff calculated the total costs for providing such services (including a mixture of delivery modes and quantities for each mode of delivery or activity) for each of the bidders. Based on the foregoing and as further set forth in the Award Recommendation documents, staff recommends the award of a contract to Saybolt, the lowest-priced evaluated bidder, which is qualified to perform the services, is fully responsive to the Authority's bid requirements and has provided satisfactory services under an existing contract for such work. The new contract would become effective on or about January 1, 2020 for an intended term of up to three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$50,000.

Commercial Operations – Program Operations

Due to the need to meet and maintain the Authority's project schedule, the proposed personal services contract (**4500312014**) with **J.D. Power ('JDP')** for the Voice of Customer ('VoC') Platform and Program Support became effective August 30, 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. The VoC program and platform will specifically provide NYPA with the ability to generate and track various 'Industry Standard' customer satisfaction scores, including but not limited to Net Promoter Score (NPS) and overall Customer Satisfaction (CSAT), among other forms of customer feedback on a near real-time basis. It is also expected that VoC program inform NYPA of key actionable insights with regular frequency. The objectives of the VoC program are to increase customer satisfaction, enhance product offerings, streamline processes, increase employee engagement and satisfaction and enhance internal lines of communication. 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 firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Six 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 JDP 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 30, 2019 and end on August 29, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$1,673,329.

Human Resources & Administration – Organizational Development

The proposed personal services contracts with **Deloitte Consulting LLP ('Deloitte'), Strategy Muse, Inc. ('SMI') and FTI Consulting, Inc. ('FTI') (Q19-6624RM)** would provide for Change Management Employee Value Proposition consulting 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. Twenty-six firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Thirteen 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 Deloitte, SMI and FTI 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 contracts are for an intended term of up to 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, \$2 million in the aggregate.

Information Technology – Service Delivery

The proposed non-personal services contract with **Information Technology Corporation of the Tri-States ('ITC') (Q19-6674TB)** would provide Apple Macintosh Desktop Support Services. The Authority has been utilizing ITC to provide Apple Macintosh Desktop Support Services since 2010 to service the Macintosh user community at the White Plains location. 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. Thirteen 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 ITC 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, \$266,868.

Utility Operations – Environmental, Health & Safety

The proposed personal services contracts with **Buffalo Environmental Consultants, Inc. dba AFI Environmental ('Buffalo') and Colden Corporation ('Colden') (Q19-6730CC)** would provide

consulting for hygiene occupational health and safety. Both Colden and Buffalo have experience conducting workplace exposure assessments for chemical, physical and biological hazards, as well as confined space assessments, ergonomic evaluations, and reviewing and updating site safety programs for the power and utility industry. 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-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 contracts to Buffalo and Colden 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 contracts are 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, \$2.5 million in the aggregate.

Utility Operations – Facility Management

The proposed non-personal services contracts with **Bayside Refrigeration, Inc. dba Airlogix ('Bayside')** and **Carey & Walsh, Inc. ('Carey') (Q19-6735JM)** would provide on-call HVAC services for the Clarence D. Rappleyea Centroplex Building in White Plains. 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 Bayside and Carey 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 contracts are for an intended term of five years, subject to the Trustees' approval, which is hereby requested. These contracts will begin on October 1, 2019 and end on September 31, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$1.5 million in the aggregate. Bayside Refrigeration, Inc. dba Airlogix is a NYS-certified Women-owned Business Enterprise.

Utility Operations – Project Management

Due to the need to meet and maintain the Authority's project schedule, the proposed construction contract **(4500312577)** with **Ferguson Electric Construction Company, Inc. ('Ferguson')** for the Robert Moses Niagara Power Project ('RMNPP') Emergency Diesel Generator ('EDG') Systems Project became effective August 26, 2019, for the initial interim award amount of \$100,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The project would furnish, deliver and install the EDG for the Fan Building, S&R Building and for the Lewiston Pump-Generating Plant ('LPGP'). The Fan Building is located in the RMNPP switchyard and supplies operating power to all the 345kV breakers in the switchyard. 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. Thirty-three 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 Ferguson 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, \$2,007,000.

Utility Operations – Small Clean Power Plants – SENY

Due to the need to meet and maintain the Authority's project schedule, the proposed non-personal services contract **(4500312788)** with **Sisu Energy & Environmental LLC ('Sisu')** for the Catalyst Engineering Services became effective September 3, 2019, for the initial interim award amount of \$500,000, subject to the Trustee's approval, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The project would provide Catalyst Engineering Services for the Small Clean Power Plants ('SCPPs'). The Small Clean Power Plants utilize eleven (11) CO and SCR catalysts for the six (6) LM6000 power plants in operation throughout the five boroughs of New York City. The catalysts are used to reduce emissions that could be considered harmful to the environment and must be operated in conjunction with the plants. Annual maintenance and engineering evaluation of the catalysts is recommended to ensure proper function is maintained with no potential risks to the units. 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. 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 Sisu 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, \$5 million.

Utility Operations - Technology & Innovation - Agile Lab

The proposed personal services contracts with **Hatch Associates Consultants, Inc. ('Hatch')** and **SNC Ltd. ('SNC') (Q19-6632JGM)** would provide engineering support for the Advanced Grid Innovation Laboratory for Energy ('AGILE') Lab. The Authority has recently undertaken a major initiative of establishing the AGILE, the first phase of which was established in NYPA's White Plains office in late 2017. AGILE is expected to be a world-class power systems laboratory, with a simulation and testing facility. It is able to provide electric utilities, governments, universities, high-tech businesses and others, from around the world, with a wide range of research and development tools. AGILE will accelerate improvements to New York's energy infrastructure, and lead to a more reliable and efficient electric grid. 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-eight firms / entities were listed as having been invited to, or requested to participate in, the Ariba event. Fourteen 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 Hatch and SNC 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 contracts are 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 – Technology and Innovation – Research, Technology & Innovation

The non-personal services contract with **EDM International, Inc. ('EDM')** would provide for maintenance, onsite repair, satellite communication service and GridWatch web data hosting for five sagometers installed in critical locations on the Authority's NATL transmission line. The sagometers enable the Authority to monitor and measure the sag of transmission conductors by measuring the clearance between the lowest portion of the energized conductor and the ground. Such measurements are available in real time, stored in the EDM GridWatch database and compared over time to detect any changes. This device/technology enables the Authority to identify the transmission line's unused capacity and increase power flow to satisfy peak demand, while still leaving enough ground clearance to comply with codes and provide safe and efficient operation of its power lines. The award is made on a sole-

source basis, since EDM developed this system in collaboration with the Electric Power Research Institute ('EPRI') and holds the commercial license for this technology. As the original equipment developer, EDM is uniquely qualified to perform all such required services and has provided satisfactory services under an existing contract for such work. The previous contract will end on March 31, 2020 and the new contract would become effective on April 1, 2020 for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$116,250.

Extensions and/or Additional Funding Requests:

Commercial Operations – Business Development

On September 29, 2015, the Authority issued a three-year personal services contract to **The Cadmus Group LLC ('Cadmus') (4600003049)** in the amount of \$1 million to provide permit expediting services for the K-Solar Program. The contract was subsequently extended on September 10, 2018 for a one-year grace period through September 10, 2019. Some of the work under this program has been delayed, requiring an additional extension of the contract term. Staff requests a contract extension of one-year, through September 10, 2020, to provide continuation of permit expediting services for the K-Solar Program. Staff requests Trustee approval for the extension of the Cadmus contract for one-year, through September 10, 2020. No additional funding is being requested.

Commercial Operations – Business Development

On August 31, 2018, the Authority issued a one-year personal services contract to **U.S. Green Building Council, New York Chapter dba Urban Green Council ('U.S. Green') (4500301092)** in the amount of \$33,000 for the State University of New York ('SUNY') Brockport Workforce Development Program. Staff requests a contract extension of one-year, through August 31, 2020, to provide continuation of Operation and Maintenance Training and Coaching for the SUNY Brockport Workforce Development Program. No additional funding is being requested.

Commercial Operations – Business Development

On October 1, 2018, the Authority issued an eleven-month personal services contract to **O'Brien & Gere / Dewberry Energy Services Joint Venture ('O'Brien') (4500301917)** in the amount of \$175,000 for the State University of New York ('SUNY') Brockport Workforce Development Program. Staff requests a contract extension of one-year, through September 9, 2020, to provide continuation of Operation and Maintenance Training and Coaching for the SUNY Brockport Workforce Development Program. No additional funding is being requested.

Commercial Operations – Engineering & Construction Management

On August 17, 2018, the Authority issued a one-year construction contract to **Millennium Maintenance and Electrical Contractors, Inc. ('Millennium') (4500300477)** in the amount of \$33,665 for the upgrade of lighting equipment at the DCAS Crown Heights Health Center. The start of the work was delayed by the customer, requiring the extension of the original contract term. Staff requests a contract extension of one-year, through August 16, 2020, to continue the lighting equipment upgrade. Interim approval is also requested for the extension of the contract from August 17, 2019 to September 25, 2019 for a continuation of services, subject to Trustees' ratification. No additional funding is being requested.

Commercial Operations – Engineering & Construction Management

On October 16, 2018, the Authority issued a one-year construction contract to **Millennium Maintenance and Electrical Contractors, Inc. ('Millennium') (4600003534)** in the amount of \$214,100 for the upgrade of lighting equipment at several New York City Police Department ('NYPD') sites. Due to

customer delays, the start of work was delayed thereby requiring the extension of the original contract term. Staff requests a contract extension of one-year, through October 15, 2020, to continue the lighting equipment upgrade. No additional funding is being requested.

Commercial Operations – Engineering & Construction Management

On December 18, 2012 the Trustees approved the original awards for the South East New York ('SENY') Energy Services Program to nineteen Implementation Contractors ('ICs') in the aggregate amount of \$750 million for a term of up to five years. The ICs provided a combination of services including energy auditing, engineering and design, procurement of equipment and installation services, construction management and construction trade management. On July 25, 2017 the Trustees extended the contract through December 31, 2019 with \$300 million additional funding. Trustee approval is requested to extend the term of the construction contract for **SourceOne, Inc. (DE) ('SourceOne') (4600002639, with a target value of \$40 million as an individual IC)** for an additional three-year term from December 31, 2019 to December 31, 2022. This extension will support current on-going energy efficiency assignments. No additional funding is being requested.

Commercial Operations – Engineering & Construction Management

On October 10, 2018, the Authority issued a one-year construction contract to **Threetech Electric, Inc. ('Threetech') (4500302206)** in the amount of \$76,200 for the upgrade of lighting equipment at the New York Police department's 77th Precinct. Due to customer delays, the start of work was delayed thereby requiring the extension of the original contract term. Staff requests a contract extension of one-year, through October 9, 2020, to continue the lighting equipment upgrade. No additional funding is being requested.

Utility Operations – Facility Management

On November 10, 2014, the Authority issued a five-year non-personal services contract to **Michael Bellantoni, Inc. ('MBI') (4600002864)** in the amount of \$550,000 for the snow removal at the Authority's White Plains office. Staff requests Trustee approval for the extension of the MBI contract for six months, through May 11, 2020 to provide continuation of services through the entire 2019-2020 snow season. No additional funding is being requested.

Utility Operations – General Maintenance

On August 12, 2018, the Authority issued a one-year construction contract to **Barrett Paving Materials, Inc. ('Barrett') (4500299373)** in the amount of \$1,782,019 for the Hawkins Point Parking Lot Reconstruction project. Change Orders associated with this construction project and appropriately approved by management in accordance with NYPA's EAPs, increased the project cost to \$1,941,774. The project extension is requested due to adverse weather conditions which did not allow the contractor to complete the paving, striping, seeding and final permanent storm weather pollution prevention measures. Staff requests Trustee approval for the extension of the Barrett contract for four-and-a-half-month term from August 12, 2019 to December 31, 2019. Interim approval is also requested for the extension of the contract from August 13, 2019 to September 25, 2019 for a continuation of reconstruction services, subject to Trustees' ratification. No additional funding is being requested.

Utility Operations – Project Management

At their December 17, 2015 meeting, the Trustees authorized capital expenditures and contract awards to begin preliminary work on the Moses-Adirondack Smart Path Reliability Project for replacing the existing Moses-Adirondack transmission lines with 230kV lines on double circuit steel monopole structures. To that end, contract **4500268363** for engineering support services was awarded to **Burns & McDonnell Consultants, Inc. dba Burns & McDonnell Consultants P.C. ('Burns')** and became effective February 1, 2016, for a term of five years and for the approved amount of \$5,375,651.

Subsequent Change Orders due to design changes were approved in accordance with the Authority's EAPs and raised the contract authorized amount to \$6,725,448. Due to additional design changes and additional requests from state regulators reviewing the Article VII application, Trustee approval is requested to issue a Change Order for the Moses-Adirondack Smart Path Reliability Project in the amount of \$1,007,800 bringing the total contract authorized value to \$7,733,248. Interim approval is also requested in the amount of \$500,000 to continue with final design for permit submittal.

Utility Operations – Project Management

On November 9, 2018, the Authority issued a one-year construction contract to **Hartmann Fine Art Conservation Services, Inc. ('Hartmann') (4500303086)** in the amount of \$116,077 for the removal, transportation and conservation of the two Thomas Hart Benton Murals and wood-cut Map located in the Exhibition room at St. Lawrence-FDR Power Project. The work is nearing completion, requiring the transportation of the murals to their interim destination, the New York State Museum, and the completion of minor restoration of the Map and transportation and installation at the Visitor's Center. Staff requests Trustee approval for the extension of the Hartmann contract for six months from November 8, 2019 through May 8, 2020. No additional funding is being requested.

Utility Operations – Project Management

On September 28, 2018, the Authority issued a one-year personal services contract to **Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors D.P.C ('Bergmann') (4500301879)** in the amount of \$411,100 to conduct an assessment for the replacement of three roadway bridges located within the Project limits of Robert Moses Niagara Power Plant ('RMNPP') in Lewiston, NY. Bergmann assessment uncovered possibilities of re-purposing two of the three roadways, and the project team has deemed this option worth exploring as it has the potential to significantly reduce the cost of the project. Further, this methodology aligns with the Authority's 'best value' and asset management strategy and may reduce the total cost of ownership. Staff requests Trustee approval for the extension of the Bergmann contract for one-year from September 27, 2019 through September 27, 2020 and also requests additional funding in the amount of \$300,000 to provide for the feasibility study for Niagara RMNPP Superstructure Bridge Replacement project.

Utility Operations – Project Management

On October 1, 2018, the Authority issued a one-year information technology support services contract to **Scipar, Inc. ('Scipar') (4500301771)** in the amount of \$650,000 for the St. Lawrence Generator Control System ('GCS') Human-Machine Interface ('HMI') Upgrade Project. Staff requests a contract extension of one year, through September 30, 2020, to provide for the continuation of information technology support services. 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 – Technology & Innovation; the Senior Vice

President – Clean Energy Solutions; the Vice President – Project Management; the Vice President – Environmental, Health & Safety; the Vice President – Engineering and Construction Management; the Vice President – Business Development; the Vice President – HR & Organizational Development; the Vice President – Economic Development; the Vice President – Critical Secure Services & CISO; the Senior Director – Research, Technology Development & Innovation, the Regional Manager SENY; 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 unanimously adopted.

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 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. Rate Making

i. Decrease in Westchester County Governmental Customer Rates – Notice of Proposed Rulemaking

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve a Notice of Proposed Rulemaking ('NOPR') to decrease the production rates by 9.32% as compared to 2019 rates for the Westchester County Governmental Customers ('Customers').

In addition, the Trustees are requested to direct the Corporate Secretary to file the NOPR with the New York State Department of State for publication in the New York *State Register* in accordance with the requirements of the State Administrative Procedure Act ('SAPA'). Following the publication of this NOPR in the State Register, the 60-day public comment period will begin on October 16, 2019 and close on December 16, 2019.

Although rates are projected to decrease, since the proposed decrease includes an increase to the Fixed Costs by more than 2.0%, a public forum will be held in accordance with the Authority's policy. The Trustees' authorization is also requested to direct the Corporate Secretary to provide all appropriate notice for such public forum.

Upon closure of the aforementioned public comment period, Authority staff will take into consideration any concerns that have been raised and return to the Trustees at their January 2020 meeting to seek final adoption of this proposal.

BACKGROUND

The Authority provides electricity to governmental customers in Westchester County, which includes the County of Westchester, school districts, housing authorities, cities, towns and villages. The County of Westchester is the largest single customer in this group, accounting for about one-third of total sales.

The basis of providing service is contained in the Supplemental Electricity Agreements ('Agreements') with the Customers. The Agreements were approved by the Trustees at their December 19, 2006 meeting, and were signed by each of the Customers. Among other things, the Agreements permit the Authority to modify the Customers' rates (for Rate Years subsequent to 2007) at any time based on a fully supported pro forma Cost of Service ('COS') subject to Customer review and comment and compliance with the SAPA process, and allow the Authority to apply an Energy Charge Adjustment ('ECA') mechanism to the Customers' bills each month.

The current 2019 base production rates were adopted by the Trustees at their January 2019 meeting, when they approved a 0.95% decrease over the 2018 rates. Staff is proposing another rate decrease for 2020, which is largely due to the projected lower purchase power expenses.

The Authority's policies and procedures call for a public forum if the Fixed Costs component of the proposed rate change exceeds a 2.0% increase. Since the proposed increase is greater than 2.0%, Authority staff recommends that a public forum be held. A public forum allows the Customers an additional opportunity to voice their concerns regarding the increase in the proposed 2020 Fixed Costs component. The Trustees' authorization is also requested to direct the Corporate Secretary to provide all appropriate notice for such public forum.

DISCUSSION

Consistent with the Authority's past ratemaking practices and with the rate-setting process set forth in the Agreements, the proposed production rate decrease is based on a *pro forma* COS for next year. The Preliminary 2020 COS for the Westchester Customers is \$26.16 million, compared to \$29.55 million in 2019.

The Fixed Costs component is projected to increase in 2020, from \$1.23 million to \$1.32 million, an approximate \$80,000, or 6.8%, increase as compared to the Final 2019 COS. This increase is primarily driven by Operations and Maintenance expenses due to an increase in non-recurring projects. Pursuant to the Authority's policies and procedures, this increase in Fixed Costs is subject to a public forum.

Offsetting the increase in Fixed Costs, the Variable Costs component is projected to decrease from \$28.32 million to \$24.85 million, an approximate \$3.47 million, or 12.3%, decrease as compared to those costs included in the rates that are currently in effect. The primary cost element, Energy Purchase Power cost, is \$19.31 million and accounts for 74% of the total production costs. Although these Customers receive a pro-rated share of energy revenues from the small hydro generation facilities, their energy requirements are purchased from the market (in NYISO Zones 'A' (Western New York), 'D' (Northern New York) and 'G' (Hudson Valley)). The 2020 Energy Purchase Power costs are expected to decrease by \$2.09 million as compared to those prices projected for 2019 and incorporated into the rates that are currently in effect. This decrease is primarily driven by an expected \$1.4 million decrease in Zone G 2020 purchases, as well as a \$0.9 million decrease in congestion costs. Slightly offsetting the Variable Costs decrease is a \$0.93 million decrease in net Transmission Congestion Contracts ('TCC') revenues compared to prior year, as a result of a \$0.84 million decrease in expected TCC rents.

Applying current rates to the 2020 Customer sales forecast results in projected revenues of \$28.85 million, representing an over-collection of \$2.69 million from the Customers. Therefore, staff is proposing a 9.32% decrease in base production rates.

Under SAPA, there is a 60-day public comment period on the rate change. At the close of the comment period, Authority staff will review any comments which have been filed and, if warranted, staff will make any necessary changes to the proposed rates to address any concerns raised. Staff will return to the Trustees at their January 2020 meeting to request an approval of the final production rate modification to become effective with the January 2020 billing period. Subsequent to the approval of this proposed action by the Trustees, the Final Staff Report containing the Final 2020 COS will be made available to the Customers.

FISCAL INFORMATION

The proposed production rates are cost-based, and with the application of the Energy Charge Adjustment mechanism, staff anticipates that the Authority will recover all costs incurred in serving the Customers.

RECOMMENDATION

The Director – Revenue & Pricing Analysis and the Vice President – Finance recommend that the Trustees authorize the Corporate Secretary to file a Notice of Proposed Rulemaking in the New York *State Register* for the adoption of a production rate decrease applicable to the Westchester County Governmental Customers.

It is also recommended that the Vice President – Finance, or his designee, be authorized to issue written notice of the proposed action to the affected Customers under the provisions of the Authority's tariffs.

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 Vice President – Finance, or his designee, be, and hereby is, authorized to issue written notice to the affected Customers of this proposed action by the Trustees for a projected 9.32% decrease in the production rates applicable to the Westchester County Governmental Customers as set forth in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Corporate Secretary of the Authority be, and hereby is, directed to file such notices as may be required with the Secretary of State for publication in the New York *State Register* and to submit such other notice as may be required by statute or regulation concerning the proposed rate decrease, and proposed tariff modification; 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. Finance

**i. Approval of Budget Report for Submission
Pursuant to Section 2801 of the Public
Authorities Law and Agency Procedures**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to (a) approve the budget report attached as Exhibit '4e i-A' (the 'Budget Report'), and (b) authorize Authority staff to submit to the State officials the Budget Report identified in Public Authorities Law ('PAL') §2801, and file the Budget Report electronically with the State in accordance with New York State Authorities Budget Office ('ABO') and State Comptroller requirements.

BACKGROUND

PAL §2801 requires each state public authority to submit a budget report annually, not less than 90 days before the commencement of its fiscal year, in the form submitted to its members or trustees, with budget information on operations and capital construction setting forth the estimated receipts and expenditures for the next fiscal year and the current fiscal year, and the actual receipts and expenditures for the last completed fiscal year, to the Governor, the Chair and Ranking Minority Member of the Senate Finance Committee, the Chair and Ranking Minority Member of the Assembly Ways and Means Committee and the ABO (collectively, 'State Officials').

The ABO and State Comptroller also require state public authorities to file budget reports electronically with the State through the Public Authorities Reporting Information System ('PARIS') online reporting system. PARIS requires three additional years of forward-looking budget information for a total of six years of budget information.

DISCUSSION

The Trustees are requested to approve the Budget Report prepared by staff. The Budget Report reflects information required by PAL §2801 and additional information required by the PARIS system. The Budget Report is inclusive of budget information relating to the Canal Corporation. The Trustees are further requested to authorize staff to submit the Budget Report to the State Officials identified in PAL §2801, and to file the Budget Report with the State electronically through PARIS.

The Budget Report is prepared solely for the purpose of meeting the requirements of PAL §2801 and the Comptroller and ABO requirements. The Budget Report relies on data and projections that were developed during the months of July through September 2019. These data and projections include inputs such as forecasts of electric prices, fuel expenses, customer power and energy use, generation levels and revenues from the Authority's power projects, operations & maintenance and capital expense. The Authority is not required to update the Budget Report at any point during the remainder of 2019 or in 2020 prior to submittal of the Budget Report for fiscal year 2020.

Staff is in the process of preparing the Authority's annual budget as well as the Four-Year Budget and Financial Plan. The annual budget and the Four-Year Budget and Financial Plan will be presented to the Trustees for approval at a subsequent meeting. The Four-Year Budget and Financial Plan may include assumptions and figures that are different from those in the Budget Report.

FISCAL INFORMATION

The Budget Report's estimates for each of the years 2019-2023 are indicative forecasts. The Trustees are not being asked to approve any revenue or expenditure amounts for those years at this time.

RECOMMENDATION

The Chief Financial Officer recommends that the Trustees: (1) approve the Budget Report; and (2) authorize staff to submit the Budget Report to State Officials and file the Budget Report with the State electronically through the Public Authorities Reporting Information System ('PARIS'), as discussed herein.

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 Public Authorities Law §2801, the Budget Report attached as Exhibit "4e i-A" is approved for the purposes stated in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority's staff be, and hereby is, authorized to submit the Budget Report to the State officials identified in Public Authorities Law §2801, and file the Budget Report with the State electronically in accordance with the New York State Authorities Budget Office and State Comptroller requirements; 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.

f. Canal Corporation

**i. Procurement (Services) Contract – Canalway Trail from
Utica to Dyke Road – Contract Award with Interim Approval**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Board of Directors ('Board') is requested to approve the award of a competitively bid 16-month contract related to Inquiry No. K19-1028241MR to CCI Companies, Inc. of Canastota, NY the low bidder for the construction of the Canalway Trail from Utica to Dyke Road in the City of Utica and the Town of Schuyler, Oneida and Herkimer Counties, New York, in the bid amount of \$8,331,831.10. Construction is expected to begin in September 2019 and conclude by the contract completion date of December 31, 2020.

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. An interim approval process may be utilized if the contract award process is expected to extend beyond 60 days after the letting and is in the best interest of maintaining the project schedule. Accordingly, an interim approval in the amount of \$600,000 is being requested to allow the contractor to meet and maintain the project schedule as required by the Empire State Trails Initiative.

BACKGROUND

This project will construct a 3.7-mile-long segment of Erie Canalway Trail linking the City of Utica to Dyke Road in the Town of Schuyler and will complete a missing segment of the Empire State Trail. The project is within the limits of the City of Utica (Oneida County) and the Town of Schuyler (Herkimer County). The canal system, as a whole, is a listed National Historic Landmark. This project enhances and expands the prominence of the system, considering the recreational and economic impacts on the Empire State as the original historic Erie Canal had on previous generations.

Construction activities will include installing temporary erosion and sediment control devices, work zone traffic control, clearing brush and removing trees and stumps, excavating and grading for a 10-foot wide asphalt shared use path, constructing railing systems, swales and other drainage structures, constructing one pedestrian bridge, installing picnic tables, benches and bike racks.

DISCUSSION

In response to an advertisement issued on June 28, 2019 for the Canalway Trail from Utica to Dyke Road, Oneida and Herkimer Counties, New York, Inquiry No. K19-1028241MR, two (2) proposals ('bids') were received and publicly opened and read on July 30, 2019. The bids were reviewed by an Evaluation Committee consisting of Corporation staff from Design, Construction and Procurement and New York Power Authority's Strategic Supply Management staff. CCI Companies, Inc. was deemed by the committee to be the lowest responsible bidder.

FISCAL INFORMATION

All associated expenditures will be paid from a combination of the Empire State Trails and the Canal Corporation capital fund, as appropriate.

RECOMMENDATION

The Evaluation Committee recommends an interim approval in the amount of \$600,000.00, followed by Board approval and award of a 16-month construction contract, in the bid amount of \$8,331,831.10, related to K19-10282418MR, to CCI Companies, Inc. of Canastota, NY for the Canalway Trail from Utica to Dyke Road.

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 award a 16-month construction Contract, starting September 2019, for the total of \$8,331,831.10, to CCI Companies for the construction of the Canalway Trail from Utica to Dyke Road in the City of Utica and the Town of Schuyler, Oneida and Herkimer Counties, New York, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Contract Award</u>
CCI Companies, Inc.	Canastota, NY	<u>\$8,331,831.10</u>

K19-10282418MR

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.

ii. **Procurement (Services) Contract – Canalway Trail from Frankfort to Ilion – Contract Award with Interim Approval**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Board of Directors ('Board') is requested to approve the award of a competitively bid 16-month contract related to Inquiry No. K19-10281877MR to Carver Construction, Inc. of Altamont, NY, the low bidder for the construction of the Canalway Trail from Frankfort to Ilion Marina in the Town of Frankfort and the Village of Ilion, Herkimer County, New York, in the bid amount of \$4,334,450.00. Construction is expected to begin in August 2019 and conclude by the contract completion date of November 20, 2020.

In accordance with the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures ('EAPs'), Board 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. An interim approval process may be utilized if the contract award process is expected to extend beyond 60 days after the letting and is in the best interest of maintaining the project schedule. Accordingly, an interim approval in the amount of \$640,000 is being requested to meet and maintain the project schedule as required by the Empire State Trails Initiative.

BACKGROUND

This project will construct a 1.25-mile-long segment of Erie Canalway Trail linking Frankfort to the Ilion Marina and complete a missing segment of the Empire State Trail. The project is within the limits of the Town of Frankfort and the Village of Ilion, both located in Herkimer County. The canal system, as a whole, is a listed National Historic Landmark. This project enhances and expands the prominence of the system considering recreational and economic impacts on the Empire State as the original historic Erie Canal had on previous generations.

Construction activities will include installing temporary erosion and sediment control devices, work zone traffic control, clearing brush and removing trees and stumps, excavating and grading for a 10-foot wide asphalt shared use path, constructing railing systems, swales and other drainage structures, constructing one pedestrian bridge, installing picnic tables, benches and bike racks.

DISCUSSION

In response to an advertisement issued on May 23, 2019 for the Canalway Trail from Frankfort to Ilion, Herkimer County, New York, Inquiry No. K19-10281877MR, five (5) proposals ('bids') were received and publicly opened and read on June 25, 2019. The bids were reviewed by an Evaluation Committee consisting of Corporation staff from Design, Construction and Procurement and New York Power Authority Strategic Supply Management staff. Carver Construction, Inc. was deemed by the committee to be the lowest responsible bidder.

FISCAL INFORMATION

All associated expenditures will be paid from a combination of the Empire State Trails and the Canal Corporation capital fund, as appropriate.

RECOMMENDATION

The Evaluation Committee recommends an interim approval in the amount of \$640,000.00, followed by Board approval and award of a 16-month construction contract, in the bid amount of

\$4,344,450.00, related to K19-10281877MR to Carver Construction, Inc. of Altamont, NY for the Canalway Trail from Frankfort to Ilion.

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 award a 16-month construction Contract, starting August 2019, for the total of \$4,344,450.00, to Carver Construction, Inc. for the construction of the Canalway Trail from Frankfort to Ilion Marina in the Town of Frankfort and Village of Ilion, Herkimer County, New York, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Contract Award</u>
Carver Construction, Inc.	Altamont, NY	<u>\$4,344,450.00</u>

K19-10281877MR

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.

iii. **Procurement (Services) Contract – DeRuyter Dam
Rehabilitation – Contract Award with Interim Approval**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Board of Directors ('Board') is requested to approve the award of a competitively bid 14-month contract related to Inquiry No. K19-10270750NF to The Wesson Group LLC of Johnstown, NY the low bidder for the Rehabilitation of the DeRuyter Dam on Limestone Creek in the Towns of Fabius and Cazenovia, Onondaga and Madison Counties, New York, in the bid amount of \$7,814,537.10. Construction is expected to begin in September 2019 and conclude by the contract completion date of October 30, 2020.

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. An interim approval process may be utilized if the contract award process is expected to extend beyond 60 days after the letting and is in the best interest of maintaining the project schedule. Accordingly, an interim approval in the amount of \$1,000,000 is being requested to meet and maintain the project schedule as required by the contract documents.

BACKGROUND

The DeRuyter Dam is located on Limestone Creek at the north end of the DeRuyter Reservoir within the limits of the Towns of Fabius and Cazenovia, in Onondaga and Madison Counties, respectively. The dam dates back to the Civil War era and is classified by the NYS Department of Environmental Conservation as a high-hazard structure. In order to minimize safety risks while repairs are being done, water levels on the reservoir will be lowered.

The project includes improving the stability of the dam embankment, installing drainage systems, building new low-level outlets for the dam and rehabilitating the overflow spillway structures. Construction work will also involve clearing and removing tree stumps, temporary erosion and sediment control, work zone traffic control, the installation of in-ground instrumentation, roadway reconstruction and resurfacing, fencing, and electrical work.

DISCUSSION

In response to an advertisement issued on June 28, 2019 for the Rehabilitation of the DeRuyter Dam, Herkimer County, New York, Inquiry No. K19-10270750NF, three (3) proposals ('bids') were received and publicly opened and read on August 8, 2019. The bids were reviewed by an Evaluation Committee consisting of Corporation staff from Design, Construction and Procurement and New York Power Authority's Strategic Supply Management staff. The Wesson Group LLC was deemed by the committee to be the lowest responsible bidder.

FISCAL INFORMATION

All associated expenditures will be paid from a combination of the Empire State Trails and the Canal Corporation's capital fund, as appropriate.

RECOMMENDATION

The Evaluation Committee recommends an interim approval in the amount of \$1,000,000.00, followed by Board approval and award of a 14-month construction contract, in the bid amount of

\$7,814,537.10, related to K19-10270750NF, to The Wesson Group LLC of Johnstown, NY for the Rehabilitation of the DeRuyter Dam.

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 award a 14-month construction Contract, starting September 2019, for the total of \$7,814,537.10, to The Wesson Group LLC for the Rehabilitation of the DeRuyter Dam on Limestone Creek in the Towns of Fabius and Cazenovia, Onondaga and Madison Counties, New York, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Contract Award</u>
The Wesson Group LLC	Johnstown, NY	<u>\$7,814,537.10</u>

K19-10270750NF

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, to the Board, (Exhibit "5a i-A").

Performance Scorecard

NYPA Overall Performance – July 2019

President Quiniones said that to date, NYPA is meeting or exceeding its key performance targets. Greenhouse Gas did not meet the target for this reporting; however, this was due to a timing issue. The Dart Rate did not meet the target; Joe Kessler will provide a report on this performance target.

Vision 2030

President Quiniones said that under Governor Cuomo's leadership, the state passed the Climate Leadership and Community Protection Act, the most aggressive climate change legislation in any jurisdiction; NYPA will be a big contributor in advancing the goals of the legislation.

There has been a tremendous amount of changes in the industry, especially as it relates to lowering costs in the area of renewable energy – solar, on-shore / off-shore wind and battery storage. Technology is driving the adoption and penetration of renewable energy into the power system. More importantly, the customers are starting to make their own commitments in responding to the climate crisis. The temperament and motivation of the citizens have resulted in more interest in responding to the climate crisis and its sustainability. The convergence of these key drivers is transforming the economy, and these are the drivers that the Authority considered when developing its new 2030 Strategic Plan.

The three key drivers used to develop NYPA's new 2030 Strategy are:

1. Progressive Clean Energy Policy
 - Climate Change Imperative
 - Climate Leadership and Community Protection Act
2. Rapid Advancements in Technology
 - Lowering Costs of Clean Technology
 - Data, analytics and platform technologies
3. Growing Consumer Interest in Sustainability
 - Corporate and government sustainability targets
 - Green energy job creation

Vision 2030 – Strategic Planning Process

The Vision 2030 strategic planning process started earlier this year. The strategic planning team, led by Doug McMahon, have been visiting the Authority's sites, engaging employees and getting their input into the Strategic Plan. This has been a very extensive involvement and engagement from the employees, pivoting this initiative. Staff is now reviewing the first draft of the strategic vision. In addition, staff plans to engage the Board members to get their input and perspectives and integrate it into the Plan. In parallel, staff will be developing investment grade business plans, finalize the Strategic Plan document and, by the annual Board meeting in March, will request approval for the allocation of investments in the

strategic initiatives. He said Mr. Doug McMahon will present a more detailed update on the Authority's planning process.

Reimagine the Canals

President Quiniones said that last May, the Governor established a Task Force to recommend "best ideas" to revitalize the New York State Canals. Three subcommittees were created under the Task Force: Western New York, Central New York, and Mohawk Valley. The Task Force is led by the Chair of the Thruway Authority, Joanie Mahoney. The leaders of the task force in those three regions are: Western New York - Bob Duffy, former Lieutenant Governor; Mohawk Valley - Joe Martens, former DEC Commissioner; and Central New York - Joanie Mahoney.

The Authority reached out to the various communities along the Canal corridor and partnered with the Rockefeller Institute, one of the SUNY "Think Tanks," to help in the process and to establish a website to gather ideas and input from all of the citizens who live close to, and along the Canals.

Five community outreach meetings were scheduled, and many people participated in each of those meetings. In addition to the meetings, the website is open to enable all community members to submit ideas about how to reimagine the Canals.

The plan is to have the Task Force evaluate all of the suggested options for revitalization in each of the regions. The Authority will vet the ideas with the relevant agencies and stakeholders and, sometime in the first quarter of next year, will bring the recommendations to the Board for the members' review and approval.

President Quiniones ended by saying that, looking ahead, the Authority will finish strong this year. Authority staff have begun planning for next year's budget and will review it with the Board members in December.

1. Vision 2030 – Update on NYPA’s Strategic Planning Process

Mr. Doug McMahon provided an update of the Authority’s Strategic Planning Process to the Board. He said that the Authority is now at a pivotal point in the evolution of both the Authority and the electricity industry. Mr. McMahon then reported on some of the key themes that will be included in Vision 2030, the next generation of the Authority’s Strategic Plan. (Exhibit 5a i-1-A)

“Development of Vision 2030

There are key forces that are changing the Authority’s business environment and which provide unique opportunities for an entity such as NYPA to help create the next generation of electricity grid and address one of the greatest challenges facing mankind in the 21st century -- to build a thriving, clean energy economy while mitigating the influence of global warming and climate change on society.

Very few places of work have an opportunity to position true social value and impact at the heart of their business. NYPA is already well-positioned to continue the vital role it has played in the development of the Empire State over the last 50 years.

Over the last six months, the Strategic Planning team have spoken with more than 250 NYPA employees and external industry experts as they worked out how NYPA should respond to the changes that are taking place in its business environment. The team have undertaken strategic planning workshops; scenario planning exercises; two visits to each NYPA site and planning a third in the fall.

The Plan is still a work in progress, and after the introduction of some of the key themes today, the Trustees will be given an opportunity to review and comment on the Plan later in October. The objective as laid out by Governor Cuomo is to move the Authority’s energy system from one that is currently based on reliability and affordability to one that is not only still affordable and reliable, but also clean, and to do so in the next 30 years.

Vision 2030: The Decarbonized Economy

Many of the clean technologies, products, and services required to enable decarbonization are already being developed -- solar, wind, transmission, short-duration storage, Electric Vehicles, and energy efficiency, to name a few. However, these solutions will not be enough to fully decarbonize the energy system. At least one new form of carbon free generation to fill in for extensive periods when the wind is not blowing and the sun is not shining, is needed. Cost-effective solutions to electrify buildings, longer-duration storage, and advanced software and data solutions to optimally manage the supply and demand of the grid are also needed.

Furthermore, the electricity system will become increasingly critical in the successful decarbonization of other parts of the economy, electrification being the most likely solution for cleaning up the transportation and building sectors.

With the right logical breakthroughs, getting to an 85 percent decarbonized economy by 2050 is achievable. The real challenge facing the industry is how to achieve this while maintaining affordability and reliability for the customers. NYPA is already using low-cost, clean, reliable power to create jobs, capital investment, and a thriving economy. Therefore, in NYPA, the state has a strong foundation from which to pursue its decarbonization ambitions.

While Vision 2030 will place the customers' path to a thriving, decarbonized economy at its center, the Authority believes that by looking at decarbonization through the eyes of the customers it serves, will ensure that the Authority aligns its success to the success of its customers.

With Vision 2030, the Authority plans to outline the specific outcomes it desires to achieve in partnership with its customers between now and 2030. To this end, the Authority will work on a framework on how it plans to work with its customers to act as a 'first mover' for new, clean technologies and products. NYPA will lead by example in the areas of innovation and commercialization in order to accelerate the scaling of clean energy technologies across the state.

The first step to placing the customer at the center of Vision 2030 is to better understand how their relationship with the electricity grid is going to change over the next 10 to 15 years.

Over the last six months, the Authority identified four key areas that the customer will possibly have to navigate carefully in the future, namely:

1. interaction with an electricity grid that is more complex and presents greater choice to the customer;
2. exploring opportunities that can optimize the way they consume electricity;
3. NYPA is going to have to integrate new forms of electricity load such as transportation and buildings; and
4. help customers optimally manage the cost of cleaning up their end-to-end energy consumption.

These areas will help the Authority provide strong direction to the content of its Vision 2030 Plan.

Vision 2030: Measuring Success

The most important section of the Vision 2030 Plan focuses on measuring the success of the Plan. NYPA's strategic goals include the measures it will use to determine the impact on the investments it will make over the next ten years. NYPA will continue to measure critical operational metrics, measures that define the health of its business, and gauge its capacity to serve its customers with the introduction of three customer impact goals:

1. Customer Decarbonization – measuring the impact of the Authority's investments and the extent to which the Authority is helping its customers decarbonize their businesses and operations;
2. Customer Value – the effectiveness of the jobs that are created and the capital investments that the Authority is making; and
3. Clean Economic Development – the investments that the Authority is making in environmental justice and sustainability.

Vision 2030: Strategic Themes

The Authority is also proposing five strategic investment areas, i.e. areas that the Authority would invest in to help realize the strategic goals.

1. Carbon Free Generation and Transmission;
2. Customer and Grid Flexibility;
3. Electrification;
4. Internet of Energy Assets; and
5. Workforce Development.

Within these areas, NYPA will make a series of investments -- some 'no-regret' investments that will pan out in all eventualities, and some 'big bets' that will position NYPA and its customers as 'first movers.'

Most of these themes build on existing investments that NYPA has been making over the last five to ten years. This lends itself to the conclusion that Vision 2030 will not necessarily require a fundamental shift in what NYPA does -- continuing to build a greater focus around its customer. Over the next six months, NYPA plans to work on defining what investments it will make in each of the five themes.

Vision 2030: The Regional Perspective

NYPA recognizes the importance of linking the NYPA 2030 Strategic Plan to its employees and the communities in which it operates. To that end, it is proposed that three sections be added to the Vision 2030 Strategic Plan that demonstrate the link between NYPA's mission, vision, goals, strategies, and employees.

- The first section will be centered around NYPA's uniqueness and lays out the unique characteristics and qualities that NYPA brings to the electricity system in New York.
- The second section will focus on in-flight and recently completed case study projects that link back to delivering affordable, clean, reliable electricity to NYPA's customers.
- The third section will outline the regional impacts that NYPA's operations have across the state of New York, focusing on economic development and decarbonization impacts in the communities it operates.

Mr. McMahon ended by saying that the next step will be solicitation of feedback from the Board members on the proposed content of the Vision 2030 Strategic Plan. Following that, staff will provide a further update to the Board."

President Quiniones then introduced the Authority's new Senior Vice President of Strategy, Mr. Yves Noel, and welcomed him to the team. In response, Mr. Noel said that he spent the past 15 years in consulting, primarily within the energy, chemicals, and utilities space where he has a broad background, most recently, at Oliver Wyman, and he is excited to join the team at NYPA.

b. Utility Operations

i. Chief Operations Officer's Report

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

Performance Measures – Year-to-Date

Generation Market Readiness

- Generation Market Readiness factor was at 99.62%. This is above the target of 97.40%.

Transmission System Reliability

- Transmission System Reliability factor was 96.98%. This is above the target of 96.40%.

Environmental Incidents

- Year-to-date, there were 13 incidents. The Target is not to exceed 16 incidents.

Safety

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

- The year-to-date DART Rate is 0.98. The target is 0.78.

With the regard to the DART rate, Mr. Kessler said that Utility Operations is working on some initiatives to improve this performance. One of the focus areas is "Arc Flash." Utility Operations recently procured fire-retardant and Arc Flash clothing to supplement the protection of staff working in the field. In addition, a guest speaker has been retained to address staff with the aim to raise awareness on all safety issues, specifically Arc Flash. Utility Operations is optimistic that the DART rate can be recovered and will keep working on that target.

**1. Procurement (Services) Contract – Moses-Adirondack
Smart Path Reliability Project – Material Management
Services Contract – Award**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to authorize the award of a five-year, competitively bid contract to Kenny Construction Company ('Kenny') of Chicago, Illinois in the amount of \$9,268,950 to setup, manage, maintain and closeout two material laydown yards for the Moses-Adirondack Smart Path Reliability Project ('Project'). An additional \$1,853,790 is requested for managing risks of scope and schedule changes, bringing the total authorized amount to \$11,122,740.

BACKGROUND

In accordance with the Guidelines for procurement contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, the award of a construction contract to be rendered for a period in excess of one year and/or in excess of \$6,000,000 requires the Trustees' approval.

This Project will replace 78 miles of single-circuit, wooden transmission structures with new single-circuit, steel pole structures that can support 345kV transmission, but will operate at 230kV until the full length of the transmission system is upgraded.

The total estimated cost of the Project is \$483.8 million, of which \$142.7 million has been authorized, to date. This material management construction contract is within the approved capital expenditure authorization.

DISCUSSION

On April 22, 2019, Request for Proposal No. Q19-6697MR, was issued via Ariba e-sourcing and was advertised in the New York State *Contract Reporter*.

Five proposals were received on May 31, 2019 and revised proposals were submitted on July 9, 2019 via Ariba. The proposals were thoroughly reviewed by an Evaluation Committee comprised of Authority staff from Strategic Supply Management, Quality Assurance, Safety and Project Management. Relevant criteria used for the evaluation included meeting technical specifications; quality assurance and control requirements; pricing; and whether the bidder took exceptions to the Authority's contract terms and conditions.

Staff evaluated the pricing submitted by each bidder. The evaluated price includes additional areas that would be required to store the material appropriately. The bidders' evaluated prices were:

<u>Bidder</u>	<u>Evaluated/Negotiated Price</u>
Jingoli Power, LLC ('Jingoli')	\$11,009,353
Kenny Construction Company ('Kenny')	\$9,268,950
MJ Electric, LLC ('MJE')	\$10,068,235
Northline Utilities, LLC ('Northline')	\$10,699,407
Wesco Distribution ('Wesco')	\$9,441,257

Following evaluation, clarifications and negotiations, the Evaluation Committee recommends awarding a contract to Kenny as they were determined to be the best value, most competitive and compliant with the requirements of the bidding documents.

FISCAL INFORMATION

Payment associated with this Project will be made from the Authority's Capital Fund and 100% of the cost will be recovered under the Authority's Annual Transmission Revenue Requirement.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Vice President – Project Management, the Vice President – Strategic Supply Management, and the Project Manager recommend that the Trustees approve the award of a five-year contract to Kenny Construction Company, in the amount of \$9,268,950 to setup, manage, maintain and closeout two material laydown yards for the Moses-Adirondack Smart Path Reliability Project. An additional \$1,853,790 is requested for managing risks of scope and schedule changes for a total authorization amount of \$11,122,740.

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 McKibben, 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 a five-year contract to Kenny Construction Company of Chicago, Illinois in the amount of \$9, 268,950 to setup, manage and maintain two laydown yards for the Moses-Adirondack Smart Path Reliability Project with an additional \$1,853,790 for managing scope and schedule changes over the five-year period for a total authorization amount of \$11,122,740, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Contract Amount</u>
Kenny Construction Company Chicago, ILL	<u>\$11,122,740</u>
(Q19-6697MR)	

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,

September 25, 2019

**subject to the approval of the form thereof by the
Executive Vice President and General Counsel.**

2. Procurement (Services) Contract – On-Call Engineering Services – Contract Awards

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Board of Trustees ('Board') is requested to approve the award of a competitively bid five-year contract, related to Bid Inquiry Q19-6684CC, for Engineering Services to a total of (12) technically qualified firms, in the aggregate amount of \$25,000,000, starting on or about January 1, 2020.

The technically qualified firms include:

- Bergmann Associates, Architects, Engineers, Landscape Architects and Surveyors, D.P.C., Rochester, NY.
- CHA Consulting, Inc., Albany, NY
- Hatch Associates Consultants, Inc., Amherst, NY
- Kleinschmidt Associates PA, PC, Pittsfield, ME
- Middough, Inc., Cleveland, OH
- Mott MacDonald, Inc., Iselin, NJ
- Sargent and Lundy, LLC, Chicago IL
- SNC Ltd, Rochester, NY
- Stantec Consulting Services, Inc., New York, NY
- Substation Engineering Company, Reading, PA
- TRC Engineers, Inc., Windsor, CT
- Power Engineers Consulting, A Professional Service Corporation, Ann Arbor, MI

In accordance with the Authority's Guidelines for Procurement Contracts and Expenditure Authorization Procedures, the Trustees' approval is required when the term of a personal services contract exceeds one year and/or the value of such contract exceeds \$1,000,000. The services are required to support the operations and maintenance of Authority assets.

BACKGROUND

The on-call contracts for Engineering Services will provide the Authority with a vehicle for rapid response to a wide variety of emergent tasks. Work will be assigned to the firm possessing the most capability in the area required and the ability to meet Authority schedule constraints. The award of multiple contracts ensures that adequate skill coverage will be available, as required, supplementing the Authority's staff in some areas and providing timely access to specialty skills in others.

DISCUSSION

Bid Inquiry Q19-6684CC for Engineering Services Request for Proposals ('RFP') was published in the New York State *Contract Reporter* and posted on the Authority's Procurement website on May 30, 2019. The RFP solicited proposals from engineering firms with experience in providing applicable technical design services to the Authority's Power Generation and Transmission Assets.

Twenty-Three (23) proposals were received. These were reviewed by an evaluation team consisting of T. McGuire and L. Bartolo each of WPO Engineering, A. Jacoby of WPO Project Management and J. McNamara of WPO Strategic Supply Management. The proposals were reviewed based on evaluation criteria specified in the RFP documents:

- Professional qualifications and experience of key personnel and backup staff.
- Experience in specific technical areas of interest to the Authority.
- Size and depth of organization and resources.

- Cost of services.
- Proximity to Authority facilities and ability to respond quickly to requests for services.
- Knowledge of Authority facilities and systems.
- Prior Authority experience.

FISCAL INFORMATION

Expenditures for these contracts will be paid from the Authorities Capital or Operating Fund, as appropriate.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Vice President – Project Management, and the Vice President – Strategic Supply Management recommends that Value Contracts be awarded to Bergmann Associates, Architects, Engineers, Landscapes Architects & Surveyors, D.P.C , CHA Consulting, Inc., Hatch Associates Consultants, Inc., Kleinschmidt Associates PA, PC, Middough, Inc., Mott MacDonald, Inc., Sargent and Lundy, LLC, SNC Ltd, Stantec Consulting Services, Inc., Substation Engineering Company, TRC Engineers, Inc., and Power Engineers Consulting, A Professional Service Corporation for Engineering Services in the aggregate amount of \$25,000,000 and for a term of five (5) years starting on or about January 1, 2020.

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 McKibben, 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 award and funding of the five-year procurement contracts to the firms listed below, in the aggregate amount of \$25,000,000, is hereby approved as recommended in the foregoing report of the President and Chief Executive Officer;

- **Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors, D.P.C. Rochester, NY.**
- **CHA Consulting, Inc., Albany, NY**
- **Hatch Associates Consultants, Inc., Amherst, NY**
- **Kleinschmidt Associates PA, PC, Pittsfield, ME**
- **Middough, Inc., Cleveland, OH**
- **Mott MacDonald, Inc., Iselin, NJ**
- **Sargent and Lundy, LLC, Chicago IL**

- **SNC Ltd, Rochester, NY**
- **Stantec Consulting Services, Inc., New York, NY**
- **Substation Engineering Company, Reading, PA**
- **TRC Engineers, Inc., Windsor, CT**
- **Power Engineers Consulting, A professional Service Corporation, Ann Arbor, MI**

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.

3. Canal Corporation Operation Update

Mr. Phil Toia, Senior Vice President of Power Supply, was tasked with operational responsibility for the NYS Canal Corporation (Canals) in April. Mr. Toia provided an update on the integration and alignment of the Canals within NYPA's operational organization.

Alignment with NYPA

- Over the last few years the operational responsibilities focused on several key areas, namely, organizational alignment, safety, operational performance, portfolio management and infrastructure modernization. To that end, the Canal Corporation has implemented best practices from NYPA in safety training and procedures such as electrical safety/Arc Flash equipment and safety programs such as tailgates and DART Rate performance. The DART Rate performance year-to-date at Canals is 3.4. In 2016 it was 5.4, therefore, it has been trending downwards.
- Work management practices include the introduction of Planners within the Canals' organization to better plan job responsibilities and develop standardized job plans to improve productivity and worker safety.
- Work has also begun in order to integrate the NYPA Portfolio management and budgeting practices within the Canals organization for both Capital as well as O&M budget for planning purposes and project controls.

Infrastructure

Infrastructure improvements include:

- Fleet Modernization - Modernization of Canals' marine fleet work vessels and dredging equipment.
- Embankments - 80 acres of vegetation in the Canals' embankment that threatened the integrity and safety of the infrastructure have been cleared and restored. This will continue over the next few years.
- Lock O-7 Rebuild - Work is underway on the refurbishment of Lock O-7 in Oswego, NY, a three-year, \$30 million project. This project is expected to be completed in 2020.
- Canalway Trail Extensions – Work continues on the 8 trails project. This is part of the Empire State Trail Initiative that will enable walking and biking along the entire system adjacent to the canal.

Continual Improvement

Continual improvement efforts include increased focus in four areas including safety, work management, asset management and financial performance. Each of these areas directly impacts the other areas. As asset management is implemented in a rigorous inspection program, it will allow staff to identify the assets' conditions and address problems before they become emergent work. This will allow for better planning for capital and O&M investments, will lead to greater ability to perform planned work versus emergent work, and improve safety for employees and the public. These improvements will result in better financial management and budgeting performance for Canals.

Mr. Toia ended by saying that the engagement of both the Canals' employees and NYPA's management and employees in integrating portfolio management and project controls have been great and both parties have worked well together to this end. A Civil Works Task force within Canals have

been implemented to use shared services, with employees from NYPA, to help Canals. The cooperation from both sides have been tremendous and have helped to improve performance, as well as the collaboration of engagement with the Canals' staff.

Mr. Kessler added that NYPA has been responsible for Canals' operations for two full cycles, including opening and closing for navigation, and it has been very educational. NYPA used the "shared services model" for Canals' operations, i.e. using NYPA support staff to provide Canals with technical expertise. With the controls in place, from an operational portfolio management perspective, in terms of financial planning, and from NYPA's technical review, an area that NYPA has significant competency, NYPA now has better visibility and control of the predictability of what it can anticipate as it manages Canals' operations.

He continued that, from an operational perspective, NYPA is doing well. The operational spends, in the aggregate, have been within the range anticipated. From a capital perspective, working with the Civil Works Task force and other agencies, NYPA can identify, prioritize and evaluate projects more objectively. In addition, NYPA have been addressing the emergent projects by implementing a rigorous inspection and asset management program so that, in the future, those emergent work will decrease and NYPA will have a better control of capital spends for Canals and get a better handle on the day-to-day operation of this asset.

President Quiniones added that, as NYPA evaluate the projects that will come out of the Reimagine the Canals initiative, NYPA's ability to expand utilization, and the benefits and value of the canals to the users and the people who live in the communities along the canal system, will exponentially increase.

c. Commercial Operations

i. Commercial Operations 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 in line with what was anticipated.
- Generation, the amount that the Authority can sell into the merchant market and get merchant revenues, is higher than budgeted by 8 percent year-to-date through July.
- Electricity Prices are 22 percent lower than budgeted. The electricity prices have been severely depressed this year relative to what was set in the budget and, with the forward market curves in September of last year, they are not completely offsetting each other.
- Fuel Prices, a component of the electric prices, are 20 percent lower than the target.
- Merchant Gross Margin year-to-date is slightly under what was forecasted for the year. With hedging opportunities, it is anticipated that, by the end of the year, it will be within the range that was set for the gross margin. It is not anticipated that the Authority will be able to completely recoup the softer electricity prices through the end of September. However, the Authority have done a very good job of executing on its hedging strategy, narrowing the range by which it expects the numbers to come in.

Economic Development

Recharge New York Power / Capital Commitments

Commercial Operations works closely with its Economic Development partners, led by Keith Hayes in the Clean Energy Solutions business, and have, with the Board's approval, extended the Authority's supply contracts over the next seven years. Those contracts include job creation and retention as well as new capital commitments totaling approximately \$20 billion. By the end of the year, Commercial Operations plans to report on new investments and customers in New York State to further drive job creation.

Energy Efficiency

Customer Investments

Based on new contracts being signed with the customers, as well as implementing them at a faster rate, the Authority is seeing strong progress relative to fee capture and revenue increases over what have been forecasted and budgeted for the year.

Non-Utility Revenues

Non-Utility Revenues increased over 57 percent of what was anticipated in the budget. This is an indication of the exemplary progress that the Authority is making in the energy efficiency and clean energy solutions initiatives.

Operating Expenses is 4% lower than the target.

Ms. Salati ended by saying that, at the next Board meeting, she will provide information regarding the progress that Commercial Operations have made in the energy efficiency and clean energy solutions business and the impact they have on meeting both the state goals and providing strong paybacks to the customers.

In terms of tracking and trending relative to repositioning and redirecting the group, Ms. Salati said that with the new reorganization, combining the Account Executives and Economic Development with the Business Development representatives for some of the new services, Commercial Operations is able to market the Authority's products and services more effectively.

In addition, Commercial Operations is putting more focus in project management in order to advance new ways of executing contracts as well as having and strengthening a strong QA/QC process, tightening cycle times and a stronger execution on those projects.

1. **Recharge New York Power – Allocation Extensions and Modifications**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to authorize the extension of each of the existing 4 allocations of Recharge New York (‘RNY’) Power (‘Allocation’ or collectively ‘Allocations’) awarded to the businesses listed in Exhibit ‘5c i-1-A’ as described below for a term of 7 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 7 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.
- c) Each of the customers identified in Exhibit ‘5c i-1-A’ 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 September 24, 2019, recommended to the Trustees that each of the Allocations listed on Exhibit ‘5c i-1-A’ be extended for 7 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 ‘5c i-1-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 or an extension application. 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 ‘5c i-1-B’ for the reasons detailed in Exhibit ‘5c i-1-B.’ EDPAB, at its meeting held on September 24, 2019, recommended to the Trustees that the modifications listed on Exhibit ‘5c i-1-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 7 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 '5c i-1-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. On March 26, 2019, the Trustees authorized extensions for 72 RNY Power Allocations. Most recently, on July 30, 2019, the Trustees approved the extension of an additional 28 RNY Power Allocations.

EDPAB, at its meeting held on September 24, 2019, recommended that the Trustees approve extensions for the 4 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 '5c i-1-B' for the reasons discussed below and in Exhibit '5c i-1-B.'

DISCUSSION

1. Extension of Existing Allocations

For the current round of recommendations, Authority staff has reviewed applications from 4 RNY Power customers listed on Exhibit '5c i-1-A' who are seeking extensions; a copy of each application has been made available to the Board. Staff's review has consisted of a review on a customer-specific basis 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 following are staff's recommendations regarding these customers.

Staff is recommending that the full Allocation of Data Device Corporation be extended as indicated in Exhibit '5c i-1-A.'

Staff is recommending an extension of BASF Corporation's Allocation in a reduced amount as indicated in Exhibit '5c i-1-A,' because this customer is offering a reduced job commitment for its proposed extended term.

Staff is recommending that the full Allocations of Citigroup Global Markets Inc. and Kaleida Health be extended, but, at the customers' request, on terms that would differ from those that applied to the original Allocations. The amount of the Allocations for these companies would remain the same, but in the case of each customer, the job and capital investment commitments listed in Exhibit '5c i-1-A' would apply collectively to multiple facilities/addresses that receive RNY Power. In the course of their business,

each of these customers has a need to shift employees between the facilities. Therefore, in the case of each customer, employment and capital investment commitments would apply to multiple facilities/addresses that receive RNY Power. This revised approach, which would be implemented through the customer's RNY Power contract, would accommodate the customers' unique business needs and not result in a net loss of employment or overall reduction of capital investment at the facilities.

In summary, the businesses listed on Exhibit '5c i-1-A,' which are located throughout the State, bring valuable benefits to the State. In total, the Allocations listed in Exhibit '5c i-1-A' are supporting the retention of some 15,800 jobs and over \$105 million in capital investments throughout New York 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 '5c i-1-A' for the Extended Term.

At its meeting held on September 24, 2019, EDPAB recommended to the Trustees that each of the Allocations listed on Exhibit '5c i-1-A' be extended for 7 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 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.

Based on the foregoing discussion, staff recommends that the Trustees extend the Allocations listed on Exhibit '5c i-1-A' as described above and in Exhibit '5c i-1-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 '5c i-1-A' (subject to adjustments described above), 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.

Staff believes that an extension of each Allocation listed on Exhibit '5c i-1-A' in the manner described 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 '5c i-1-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.

2. Modifications Relating to Previously Extended Allocations

At its meeting held on September 24, 2019, EDPAB recommended that the Trustees approve modifications relating to the previously extended RNY Power allocations listed on Exhibit '5c i-1-B' for the reasons described in Exhibit '5c i-1-B.' The following is a summary of the circumstances pertaining to each customer that underlie the proposed modifications.

- Matt Industries Inc. was previously approved for an Extended Allocation. Due to a processing error related to a previously approved allocation transfer to the company, the amount of the allocation approved was 146 kW but should have been 532 kW. In addition, the job commitment approved was 165 instead of 236. Accordingly, staff is recommending that amount of the company's extended allocation be revised to 532 kW and the corresponding employment commitment be revised to 236.
- The extension application of Morton Salt, Inc. incorrectly reported the company's proposed capital investment commitment. Staff is requesting a modification of the capital investment commitment for this company from \$150,000,000 to \$15,000,000 in order to state the correct investment commitment.
- The extension application of Owens-Brockway Glass Container Inc. incorrectly reported the company's capital investment commitment. Staff is requesting a modification of this company's capital investment commitment from \$20,000,000 to \$10,000,000 in order to state the correct capital investment commitment.
- Southern Glazer's Wine and Spirits of Upstate New York, LLC was previously approved for an extended allocation. Due to a processing error, the amount of the allocation approved for extension was 50 kW instead of 300 kW. Therefore, staff is recommending that the amount of its RNY allocation be revised to 300 kW. The corresponding employment and capital investment commitments remain the same at 600 jobs and \$3,000,000, respectively.
- The extension application of United Health Services Hospitals, Inc. incorrectly reported the company's capital investment commitment. Staff is requesting a modification of this company's capital investment commitment from \$28,000,000 to \$10,000 in order to state the correct capital investment commitment.

Staff believes that the modifications listed on Exhibit '5c i-1-B' are appropriate and/or otherwise consistent with the statutory criteria that are used to evaluate applications for an award of RNY Power, which are listed in Exhibit '5c i-1-C.' For these reasons, staff recommends that the Trustees approve the modifications listed on Exhibit '5c i-1-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 4 Allocations of RNY Power in the manner described above for the customers listed on Exhibit '5c i-1-A' for a term of 7 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 7 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 '5c i-1-A' (subject to adjustments described above), 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 an ongoing project/expansion capital investment commitment 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 '5c i-1-B' for the reasons discussed above.

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 Commercial Operations, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That the Trustees hereby accept the recommendations of the Economic Development Power Allocation Board and approve the extension of each of the existing 4 Recharge New York (“RNY”) Power allocations (“Allocation” or collectively “Allocations”) previously awarded to the customers listed in Exhibit “5c i-1-A” in the manner described in the accompanying report of the President and Chief Executive Officer (“Report”) a term of 7 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 7 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 “5c i-1-A” (subject to adjustments described**

above) 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 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 "5c i-1-B" for the reasons indicated in the Report and Exhibit "5c i-1-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.

2. 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-2-A' in the amounts indicated on Exhibit '5c i-2-A';
2. award allocations of RNY Power available for 'expansion' purposes to the businesses listed in Exhibit '5c i-2-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-2-C' in the amounts indicated on Exhibit '5c i-2-C.'

These actions have been recommended by the Economic Development Power Allocation Board ('EDPAB') at its September 24, 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 7 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 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-2-E'):

- '(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-three prior occasions spanning from April 2012 through July 2019. Of the 200 MW block of RNY Power made available pursuant to Chapter 60 for business 'expansion' purposes, 87.2 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, 2.1 MW remain unallocated. Of the remaining RNY Power made available pursuant to Chapter 60, 93.0 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 September 24, 2019 meeting, recommended that each of the applicants identified in Exhibits '5c i-2-A', '5c i-2-B', and '5c i-2-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:

- (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 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.

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-2-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 September 24, 2019 meeting, that RNY Power retention allocations be awarded to the businesses listed in Exhibit '5c i-2-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-2-A' are each recommended for a term of 7 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-2-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-2-B,' these applications seek a RNY Power allocation for expansion of an existing business or a new business/facility. EDPAB recommended, at its September 24, 2019 meeting, that RNY Power expansion-based allocations be made to the businesses listed in Exhibit '5c i-2-B.' Each such allocation would be for a term of 7 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-2-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-2-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-2-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-2-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 September 24, 2019 meeting, that RNY Power allocations be awarded to the small businesses and/or not-for-profit applicants listed in Exhibit '5c i-2-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-2-C' in exchange for the recommended RNY Power allocations as described in Exhibit '5c i-2-C.' The RNY Power allocations identified in Exhibit '5c i-2-C' are recommended for a term of 7 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-2-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-2-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 –Termination of Application/Review Process – Informational Item

At its meeting on September 24, 2019, EDPAB terminated the application review process for the applicants listed on Exhibit '5c i-2-D' for the reasons listed on Exhibit '5c i-2-D.' 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-2-A' as indicated therein; (2) award the allocations of RNY Power for expansion purposes to the businesses listed in Exhibit '5c i-2-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-2-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 Commercial Operations, provided highlights of staff's recommendation to the Board.

On motion made by Vice Chair Nicandri and seconded by Trustee Trainor, 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-2-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-2-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-2-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 on Exhibit "5c i-2-A" in the amounts indicated;**
- (2) award allocations of RNY Power for expansion purposes to the applicants listed on Exhibit "5c i-2-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 on 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.

3. Preservation Power Allocation

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Trustees are requested to approve an allocation of 16,000 kilowatts ('kW') of Preservation Power ('PP') to Confluent Energies, Inc. ('CEI') which is proposing to construct hydroponic greenhouse facilities on 40 acres of property located in the Town of Massena. The project is described in further detail below and in Exhibit '5c i-3-A.' The term of the allocation would be ten years. The allocation would support a capital investment of at least \$110 million and the creation of at least 240 new, permanent full-time jobs.

The Trustees are requested to authorize a public hearing, in accordance with Public Authorities Law ('PAL') §1009, on the proposed direct sale contract for CEI, the current form of which is attached as Exhibit '5c i-3-B.'

BACKGROUND

Under PAL §1005(13)(a), the New York Power Authority ('NYPA' or 'Authority') may contract to allocate 490 megawatts ('MW') of PP to businesses in Franklin, Jefferson and St. Lawrence counties, and applies the same allocation criteria that pertain to the allocations of Replacement Power and Expansion Power.

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 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.

For PP, NYPA confers with economic development officials from Franklin, Jefferson and St. Lawrence counties along with the Northern New York ('NNY') representative of the Empire State Development to coordinate other economic development incentives that could help bring projects to New York State and to assess support for applications. Staff discusses potential recommendations with these entities to help maximize the value of hydropower to improve the economy of NNY and New York State.

There is currently 233,900 kW of PP available to allocate to qualified businesses under the criteria set forth in PAL §1005(13)(a).

DISCUSSION

CEI was formed to develop and operate a network of Advanced Technology Greenhouses ('ATGs') utilizing the principles of Controlled Environment Agriculture ('CEA'). The history of the company dates back to 2007 when one its founders received a grant to study the feasibility of energy-related practices associated with CEA greenhouses.

The company is proposing to develop an industry sector for CEA with its first facility to be located in Massena. The new facility would produce leafy green vegetables, particularly lettuce, utilizing year-round 24/7 ATGs. The project would be located on a site located in Massena and implemented incrementally in 4 phases with each phase consisting of separate 10-acre greenhouse facilities. The company would spend approximately \$27.5 million per phase, producing a total capital investment of at least \$110,000,000. The company plans to begin construction in 2019 and start operations in 2020. The entire project would be completed and operational by September 25, 2022. CEI would commit to the

creation of at least 240 new, permanent, full-time jobs which would all be located at the project site in Massena. The average value of compensation/benefits per job is nearly \$67,000.

CEI has submitted an application requesting 24,000 kW of PP in connection with this project. Staff is proposing that the company be awarded a PP allocation in the amount of 16,000 kW.

The job creation ratio for the proposed allocation of 16,000 kW is 15 new jobs per MW. This ratio is below the historic average of 66 new jobs per MW based on allocations made during the past fifteen years. The total project investment of at least \$110,000,000 would result in a capital investment ratio of over \$6.8 million per MW. This ratio is below the fifteen-year historic average of \$16.9 million per MW.

Staff recommends that an allocation of 16,000 kW of PP for a term of ten years be awarded to the company in support of its proposed project.

Contract Information

Staff intends to discuss the proposed form of the customer agreement with CEI, and anticipates reaching agreement with this applicant on a contract substantially similar to the one attached as Exhibit '5c i-3-B.'

Under PAL §1009, when the Authority believes it has reached agreement with its prospective co-party on a contract for the sale of PP, it will transmit the proposed form of the contract to the Governor and other elected officials specified by statute, 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 additional recommendations regarding the proposed contract.

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

The general form of the proposed contract is consistent with other hydropower contracts recently approved by the Trustees. Some pertinent provisions of the proposed contracts include: (i) direct billing of all production charges (i.e., demand and energy) as well as all New York Independent System Operator, Inc. charges, plus taxes or any other required assessments, as set forth in the Authority's PP Service Tariff No. 20; (ii) collection of a Zero Emission Credit ('ZEC') Charge and a Renewable Energy Credit ('REC') Charge to allow the Authority to recover costs it would incur relating to its purchase of ZECs and RECs attributable to the customer's load for the purpose of complying with the State Energy Plan and the State's Clean Energy Standard; (iii) provisions relating to financial security to reflect a direct billing arrangement between the Authority and hydropower customers; (iv) provisions authorizing data transfers and addressing other utility-driven requirements which are necessary for efficient program implementation; (v) employment, capital investment and power usage commitments by the customer with a compliance threshold of 90%; and (vi) compliance provisions authorizing the Authority to reduce the allocation if the threshold is not met; and (vii) annual job and capital investment reporting requirements.

The recommended allocation would be subject to the Authority's PP Service Tariff No. 20. Transmission and delivery service would be provided by the customer's local electric distribution utility.

RECOMMENDATION

The Senior Vice President – Clean Energy Solutions, recommends that the Trustees approve an allocation of 16,000 kW of Preservation Power ('PP') to Confluent Energies, Inc. ('CEI') for a term of ten

years as described herein and in Exhibit '5c i-3-A,' and authorize a public hearing on the contract attached as Exhibit '5c i-3-B' for the sale of the allocation of PP to CEI.

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 Commercial Operations, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That an allocation of 16,000 kilowatts ("kW") of Preservation Power ("PP") to Confluent Energies, Inc. ("CEI") for a term of ten (10) years as detailed in the foregoing Report and Exhibit "5c i-3-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 PP to CEI (the "Contract"), the current form of which is attached to the foregoing Report as Exhibit "5c i-3-B," and subject to rates previously approved by the Trustees; 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.

4. Replacement Power Allocation

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve an allocation of 2,000 kilowatts ('kW') of Replacement Power ('RP') to Thinking Robot Studios Inc. ('TRS') to support the construction of a new manufacturing facility for medical-related devices ('Project'). The Project is described in further detail below and in Exhibit '5c i-4-A.' The term of the allocation would be ten years. The allocation would support capital investment of at least \$83,801,000 and the creation of at least 88 new, permanent, full time jobs for the term of the allocation that will be located at the facility.

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 TRS that would, along with Authority Service Tariff No. WNY-2 ('ST WNY-2'), apply to the sale of RP to TRS. Copies of the Proposed Contract and ST WNY-2 are attached as Exhibit '5c i-4-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 92,421 kW of unallocated RP is available to be awarded to businesses under the criteria set forth in PAL §1005(13)(a).

DISCUSSION

TRS is a Canada-based manufacturer of medical devices that is looking to establish a presence in Western New York. It is proposing to construct a new facility in Buffalo, NY which will specialize in the mass customization and manufacturing of medical devices utilizing industrial grade 3D printing. The new facility is estimated to be over 63,000 square-feet and would produce custom medical devices such as orthopedic implants and systems for bone and joint reconstruction.

The Project, which would involve a total capital expenditure of at least \$83,801,000, would consist of three phases. The first phase would consist of the development of the Project's designing and manufacturing platform, which would necessitate the purchase of 3D printers, CNC machines, finishing products, and other equipment. Collectively, the first phase would represent a capital investment expenditure of at least \$ 9.427 million. The second phase of the Project would consist of similar types of expenditures, of a larger magnitude, resulting in a capital investment amount of at least \$68.885 million. The third phase of the Project, which would account for a capital expenditure of at least \$5.489 million, would consist of a new imaging center.

The company plans to begin construction in October 2019 and start operations in October 2020. The site would be considered an Advanced Manufacturing Facility, which would include 3D printing technology, advanced machining, and finishing processes.

The company would also commit to the creation of 88 new, permanent, full-time jobs that would be located at the project site in Buffalo. The average compensation/benefits are estimated to be over \$130,000 per job.

The company submitted an application requesting 2,700 kW of hydropower in connection with the Project. Staff recommends an allocation of RP in the amount of 2,000 kW for a term of ten years.

The job creation ratio for the proposed allocation of 2,000 kW is 45 new jobs per MW. This ratio is below the historic average of 66 new jobs per MW based on allocations made during the past fifteen years. The total project investment of at least \$83,801,000 would result in a capital investment ratio of \$41.9 million per MW. This ratio is above the fifteen-year historic average of \$16.9 million per MW.

CONTRACT INFORMATION

Staff intends to discuss the form of the Proposed Contract with TRS and anticipates reaching agreement on a contract substantially similar to the form attached as Exhibit '5c i-4-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-4-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 Service Tariff, ST WNY-2:

- Base rates for demand and energy, an annual adjustment factor, and a minimum monthly charge which helps the Authority cover 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 2,000 kW of Replacement Power to Thinking Robot Studios Inc. as described herein and in Exhibit '5c i-4-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 Commercial Operations, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That an allocation of 2,000 kilowatts ("kW") of Replacement Power ("RP") be awarded to Thinking Robot Studios Inc. ("TRS"), for a term of 10 years as detailed in the foregoing report of the President and Chief Executive Officer and Exhibit "5c i-4-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 TRS (the

“Contract”), the current form of which is attached as Exhibit “5c i-4-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.

5. Annual Compliance Review – Expansion Power, Replacement Power and Preservation Power Hydropower Programs

The President and Chief Executive Officer submitted the following report:

SUMMARY

Authority Staff has conducted its annual compliance review of (1) customers with facilities in Western New York that receive hydropower under the Expansion Power ('EP') and Replacement Power ('RP') Programs, and (2) customers with facilities in Northern New York that receive Preservation Power ('PP') (collectively, 'Hydropower'), covering the reporting period of January 1, 2018 through December 31, 2018 (the 'Reporting Period'). The compliance review examined contract compliance in three areas: (1) job creation and retention (collectively, 'job retention'); (2) power utilization; and (3) capital investment. As provided for in each customer's contract with the Authority, these customers began submitting their compliance reports to the Authority in February 2019.

The purpose of this report is to inform the Trustees of the results of the compliance review for the Reporting Period. In addition, the Trustees are asked to authorize the reduction of hydropower allocations for certain customers that have failed to meet job retention, power utilization, and/or capital investment commitments, or a combination of these commitments. As detailed below, the underlying Hydropower contracts require customers to achieve at least a 90% compliance rate for each of the three commitment areas noted. At this time, Authority Staff is recommending enforcement of the contract commitments for specific customers that have an allocation of greater than 100 kilowatts ('kW') of Hydropower who have failed to achieve at least a 90% compliance level for job retention commitments, power utilization commitments, capital investment commitments, or a combination of these commitments.

In summary:

- (1) The compliance level of each of the 2 Hydropower customers described in Exhibit '5c i-5-A' fell below 90% of their job retention commitment for the Reporting Period. Staff recommends that the Hydropower allocations and contract demands for each such customer be reduced to the amounts indicated in Exhibit '5c i-5-A,' and that the Authority be authorized to adjust job commitments for these customers as indicated in Exhibit '5c i-5-A' to reflect the reduced Hydropower allocations and contract demands.
- (2) The compliance level of each of the 5 Hydropower customers described in Exhibit '5c i-5-B' fell below 90% of their job retention commitment for the Reporting Period. Staff recommends that the Authority be authorized to adjust the job commitments for each such customer as indicated in Exhibit '5c i-5-B.' No reductions in allocations are recommended for these customers.
- (3) The compliance level of each of the 3 Hydropower customers described in Exhibit '5c i-5-C' fell below 90% of their power utilization commitment for the Reporting Period. Staff recommends that the Hydropower allocations and contract demands for each such customer be reduced to the amounts indicated in Exhibit '5c i-5-C,' and that the Authority be authorized to adjust job commitments for these customers as indicated in Exhibit '5c i-5-C' to reflect the reduced Hydropower allocations and contract demands.
- (4) The compliance level of the 1 Hydropower customer described in Exhibit '5c i-5-D' fell below 90% of its contractual job retention and capital investment commitment for the Reporting Period. Staff recommends that the job and capital investment commitments be adjusted to reflect the amounts indicated in Exhibit '5c i-5-D.' No reduction in the allocation for this customer is recommended.

- (5) The Compliance level of the 8 Hydropower customers described in Exhibit '5c i-5-E' fell below 90% for one or more commitments for the Reporting Period. However, as described below and in Exhibit '5c i-5-E,' due to a change in commitment performance from efficiency gains, or because the applicable compliance methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction, Staff is not recommending compliance action as to these specific customers.

The table provided in Exhibit '5c i-5-F' provides a summary of all Hydropower customers discussed in greater detail in Exhibits '5c i-5-A' through '5c i-5-E.'

BACKGROUND

In addition to the basic requirement to pay for electric service, Hydropower contracts typically provide for several 'supplemental' commitments by the customer relating to (1) job retention, (2) power utilization, and/or (3) capital investment (collectively, 'Supplemental Commitments').

Each year Staff performs a review of all in-service Hydropower allocation contracts for compliance with Supplemental Commitments. In or around 2013, most RP and EP allocations began service under new contracts that were negotiated and approved by the Trustees in 2010, which require, among other commitments, annual capital investment commitments. In October 2018, the Trustees approved allocation extensions for most of the existing hydropower customers and associated allocations. The extended allocations are being delivered under a new contract and tariff as authorized by the Trustees. The new contract was effective for most customers January 1, 2019.

To facilitate compliance review and contract enforcement, nearly all Hydropower contracts require customers to report information on the Supplemental Commitments. Customers are required to report pertinent information no later than February 28 of each year for the prior 12-month reporting period from January through December.

As more specifically detailed in the Hydropower contracts, if a customer's report or other information indicates that any of its Supplemental Commitments for the reporting period is below a compliance rate of 90%, the Authority may take action against the customer, which may include reducing the customer's power allocation on a pro rata basis. Pro-rata reductions in allocations and contract demands are rounded up to the nearest 50 kilowatts.

Customers are given the opportunity to provide an explanation for a compliance shortfall during the Reporting Period. Accordingly, Staff's analysis and the recommendations contained herein do not represent a 'black and white' analysis, rather, Staff has taken a broader approach that includes, where reasonable, appropriate consideration of individual or special circumstances affecting customers. Staff is also focusing more carefully on power utilization by Hydropower customers as compared to other compliance reviews. Authority Hydropower is a valuable asset. A customer's failure to make use of an allocation as provided for in the Hydropower contract can result in unused Hydropower being unavailable for sale to other businesses that are willing to make job, capital investment and other commitments in exchange for the opportunity to receive Hydropower.

DISCUSSION

1. Background

Staff has completed its annual compliance review of all in-service Hydropower allocation contracts for compliance with Supplemental Commitments.* In 2018, the Authority had 120 Hydropower

* In addition to the annual compliance review, each year the Authority's Internal Audit group, with the assistance of an independent auditor retained by the Authority, randomly selects customers whose annual compliance report is reviewed for accuracy. This year, a job reporting audit and a capital

customers who collectively were receiving a total of 212 Hydropower allocations under the RP, EP, and PP programs. Of these, a total of 110 customers holding 203 allocations were required to report compliance levels for 2018. Of this number, the Authority received reports from all 110 customers covering the 203 Hydropower allocations. The contracts reviewed by Staff represent total power allocations of 770 megawatts and total employment commitments of 30,386 jobs. In the aggregate, these customers reported actual employment of 42,979 jobs. This represents 141% of the total job commitment for Hydropower customers reporting in 2018.

In addition, the reported aggregate capital investment spending during the Reporting Period totaled \$406 million for commitments collectively totaling \$132 million. The results showed that a majority of companies have met or exceeded a 90% compliance threshold for capital investments during this Reporting Period.

A total of 91 companies that were reviewed were found to be compliant with all three Supplemental Commitments. However, 19 companies were found not to be compliant for at least one Supplemental Commitment. Information relating to these customers is provided in Exhibits '5c i-5-A' through '5c i-5-E.'

Based on the Hydropower contract, 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 contract, suspension of electric service, and reduction of the amount of a customer's Hydropower allocation and contract demand.

As noted, the underlying Hydropower contracts require customers to achieve at least a 90% compliance rate with respect to the three Supplemental Commitment areas noted. At this time, Staff is recommending enforcement of the contract commitments for several Hydropower customers who have failed to achieve at least a 90% compliance level for job retention commitments, power utilization commitments, capital investment commitments, or a combination of these commitments. Staff is also recommending that the Authority be authorized to adjust job commitments and/or capital investment commitments proportionately as discussed below to reflect reduced Hydropower allocations and contract demands.

For reasons discussed below in Section 3 and in Exhibit '5c i-5-E,' Staff is not recommending that formal compliance-related action be taken regarding the 8 Hydropower customers listed in Exhibit '5c i-5-E' whose reported data indicate they failed to achieve at least a 90% compliance rate for the Supplemental Commitment indicated.

2. Failure to Meet Supplemental Commitments – Action Requested

This section discusses specific compliance information concerning the Supplemental Commitments described below.

a) Failure to Meet Job Retention Commitments

A total of 2 customers which are identified in Exhibit '5c i-5-A,' fell below a 90% compliance rate for their Supplemental Commitment for jobs.

Staff recommends that the Trustees approve reductions in the Hydropower allocations and contract demands for these 2 customers to the amounts indicated in Exhibit '5c i-5-A.' In addition, Staff recommends that the Trustees authorize the Authority to make adjustments to the job commitments for

investment spending audit was performed by an auditing firm. The audits are designed to help staff validate reported information. Audited customers receive feedback on the audit results, including guidance for future submittals.

these customers to the amounts indicated in Exhibit '5c i-5-A' to reflect the reductions in the Hydropower allocations.

b) Failure to Meet Job Retention Commitments

A total of 5 customers which are identified in Exhibit '5c i-5-B' fell below a 90% compliance rate for their Supplemental Commitment for jobs.

The methodology that the Authority uses to calculate possible reductions in allocation and contract demand does not yield a reduction in the case of these customers. Staff does recommend that the Trustees authorize the Authority to make adjustments to the job commitments for these customers to the amounts indicated in Exhibit '5c i-5-B.'

c) Failure to Meet Power Utilization Commitments

The 3 customers identified in Exhibit '5c i-5-C' fell below a 90% compliance rate for their Supplemental Commitment for power utilization.

Staff recommends that the Trustees approve reductions in the Hydropower allocations and contract demands for these 3 customers to the amounts indicated in Exhibit '5c i-5-C.' In addition, Staff recommends that the Trustees authorize the Authority to make adjustments to the job commitments for these customers to the amounts indicated in Exhibit '5c i-5-C' to reflect the reductions in the Hydropower allocations.

d) Failure to Meet Capital Investment and Job Retention Commitments

The compliance review showed that one business, identified in Exhibit '5c i-5-D,' failed to achieve at least a 90% compliance rate for its capital investment and job retention commitment. Staff recommends no reductions in the Hydropower allocation and contract demand for the reasons indicated on Exhibit '5c i-5-D,' and that the Trustees authorize the Authority to make adjustments to the capital investment and job commitment for this customer to the amounts indicated in Exhibit '5c i-5-D.'

3. Failure to Meet Supplemental Commitments – No Action Requested

The 8 customers described in Exhibit '5c i-5-E' reported data indicating that they did not achieve at least a 90% compliance rate for one or more Supplemental Commitments. For the reasons discussed below and in Exhibit '5c i-5-E,' Staff is not recommending compliance action with respect to these customers at this time. Where appropriate, staff will continue to monitor the commitment performance of these customers and may return to the Trustees at a later date with recommendations for compliance action regarding one or more of these customers.

i) Job Retention

Reporting data for the one customer listed in Exhibit '5c i-5-E,' Section 1, indicates that this customer fell below the 90% compliance threshold for job retention. However, application of the methodology that the Authority uses to calculate potential reductions to allocations/contract demand does not result in a reduction; therefore, compliance action is not requested for this customer.

ii) Power Utilization

Compliance reporting indicated that the 7 companies listed in Section 2 of Exhibit '5c i-5-E' were underutilizing their Hydropower allocations, on average, over the Reporting Period, and, as a result, fell below a 90% compliance rate for power usage. As indicated in Exhibit '5c i-5-E,' in the case of three of these customers, application of the methodology that the Authority uses to calculate potential reductions to allocations/contract demand does not result in a reduction. In the case of two of these customers, the

customers supplied the Authority with recent information which indicates an increase in power utilization. In the remaining cases, two companies implemented an automated process that improved efficiency. Consequently, staff is not recommending compliance action for these customers at this time.

RECOMMENDATION

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

- (1) authorize a reduction of the Hydropower allocations and contract demands for the 2 Hydropower customers identified in Exhibit '5c i-5-A' to the amounts indicated in Exhibit '5c i-5-A,' and authorize the Authority to adjust job commitments for these customers as indicated in Exhibit '5c i-5-A'; and
- (2) authorize the Authority to adjust job commitments for the 5 Hydropower customers identified in Exhibit '5c i-5-B' to the amounts indicated in Exhibit '5c i-5-B; and
- (3) authorize a reduction of the Hydropower allocations and contract demands for the 3 Hydropower customers identified in Exhibit '5c i-5-C' to the amounts indicated in Exhibit '5c i-5-C,' and authorize the Authority to adjust job commitments for these customers as indicated in Exhibit '5c i-5-C'; and
- (4) authorize the Authority to adjust the job commitment and capital investment commitment for the one customer identified in Exhibit '5c i-5-D' to the amounts indicated in Exhibit '5c i-5-D.'

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 Commercial Operations, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That the Trustees hereby accept the recommendations regarding the annual compliance review for the Expansion Power, Replacement Power, and/or Preservation Power (collectively, "Hydropower") programs for the compliance period January 1, 2018 through December 31, 2018; and be it further

RESOLVED, That the Trustees hereby approve the reduction of Hydropower allocations and contract demands for the customers identified in Exhibit "5c i-5-A" to the amounts indicated therein, and authorize the Authority to adjust job commitments for these customers as indicated in Exhibit "5c i-5-A," for the reasons described in Exhibit "5c i-5-A" and the foregoing report of the President and Chief Executive Officer ("Report"); and be it further

RESOLVED, That the Trustees hereby authorize the Authority to adjust the job commitments for the customers identified in Exhibit "5c i-5-B" as indicated in Exhibit "5c i-5-B," for the reasons described in Exhibit "5c i-5-B" and the foregoing Report; and be it further

RESOLVED, That the Trustees hereby approve the reduction of Hydropower allocations and contract demands for the customers identified in Exhibit “5c i-5-C” to the amounts indicated therein, and authorize the Authority to adjust job commitments for these customers as indicated in Exhibit “5c i-5-C,” for the reasons described in Exhibit “5c i-5-C” and the foregoing Report;

RESOLVED, That the Trustees hereby approve and authorize the Authority to adjust the job commitment and capital investment commitment for the customer identified in Exhibit “5c i-5-D” as indicated in Exhibit “5c i-5-D,” for the reasons described in Exhibit “5c i-5-D” and the foregoing Report;

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.

d. Financial Operations

i. Chief Financial Officer's Report

Mr. Adam Barsky, Executive Vice President and Chief Financial Officer, provided highlights of the financial report to the members (Exhibit 5d i-A).

Net Income

Net Income to year's end is forecasted to be slightly above target. In terms of the core business drivers, while the Authority continues to see significantly higher generation at its Niagara and St. Lawrence facilities, the favorable Net Income of those gains is dwarfed by the further softening of energy prices.

Additionally, due to unfavorable variances and margins driven by large industrial customers, the net result is an overall unfavorable generation margin compared to budget, both for the year-to-date results and for the year-end projections.

For the first seven months, the Authority projected \$24 million in budget. At year's end this will be \$38 million with a \$14 million positive variance.

Operating expenses reverses by year's end. The overall operating revenue trends continue as they were originally forecasted.

While the Authority is tracking just above budget in Net Income, it is coming from a different source in terms of overperformance in the Nonoperating Income versus the underperformance in the Operating Income driven by the lower prices.

There were some favorable results in the Nonoperating Income based on the performance of interest rates, both on lower interest costs to NYPA in the interests that NYPA have projected based on its financing needs and also on the mark-to-market of its investments based on the lower interest rates, which raises the value of those investments. This will reverse by the time those investments mature.

6. Board Committee Report

a. Finance Committee Report

Finance Committee Chair Tracy McKibben said that the Committee met prior to the Board meeting, adopted the minutes of its last meeting and considered staff's requests for funding related to actions in support of the Authority's energy efficiency program, appointment of prequalified pool of financial institutions as well as the scheduled quarterly release of funds in support of the New York State Canal Corporation.

i. **Energy Efficiency Program – Authorization to
Expand Program Funding and Award Services
Contracts to Support the Program**

This item was pulled from the Agenda. Finance Committee Chair, Tracy McKibben, said that staff will report on this item at the next meeting.

ii. **Actions in Support of the Authority's
Customer Energy Efficiency Programs –
Allocation and Transfer of Operating
Funds and Increase in Borrowing Capacity
under a Revolving Credit Agreement**

The President and Chief Executive Officer submitted the following report:

"SUMMARY

In connection with the Authority's Energy Efficiency Program and today's parallel request of the Trustees for Authorization to Expand Program Funding and Award Services Contracts to Support the Energy Efficiency Program, the Trustees are hereby requested to authorize the allocation of up to an additional \$150,000,000 of operating funds for the Authority's Governmental Customer Energy Efficiency Program ('GCEEP') and Statewide Energy Efficiency Program ('Statewide EEP' and, together with the GCEEP, 'Customer Energy Efficiency Programs'). This funding will increase support for the Authority's Customer Energy Efficiency Programs for additional future energy efficiency projects for eligible program participants across New York State. The amount requested is in addition to the \$300,000,000 that the Trustees allocated on January 28, 2014, increasing to \$450,000,000 the total amount of Operating Funds allocated to the Authority's Customer Energy Efficiency Programs. To the extent costs associated with Customer Energy Efficiency Programs constitute Capital Costs as described below, such funds are authorized to be transferred from time to time to the Capital Fund for expenditure.

In addition, the Trustees are hereby requested to approve an increase of up to \$100,000,000 in the borrowing capacity under the 2019 Revolving Credit Agreement, dated January 16, 2019, among the Authority, the Banks identified therein and JP Morgan Chase Bank, N.A., as Administrative Agent (the '2019 RCA'). The 2019 RCA provides liquidity support for the Authority's Series 1, 2 and 3 Commercial Paper Notes the proceeds of which, among other authorized uses, support the Authority's Customer Energy Efficiency Programs. The 2019 RCA was the result of a competitive procurement (RFP No. Q18-6526RM) and was approved by the Trustees on December 11, 2018 with, among other terms and conditions, a borrowing capacity not to exceed \$600,000,000. The request would increase the authorized borrowing capacity under the 2019 RCA from \$600,000,000 to \$700,000,000 and authorize the payment of associated fees and expenses.

BACKGROUND

As deemed feasible and advisable by the Trustees, the Authority has been authorized to finance and design, develop, construct, implement, provide and administer energy-related projects, programs and services for eligible customers. See, e.g., Public Authorities Law § 1005-17. In addition, the Authority is authorized to issue bonds for the purpose of financing any authorized project and to issue notes in the same manner as bonds. See, e.g., Public Authorities Law § 1010 § 1009-a. Capital Costs as defined in the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution') include the Authority's costs of any other purpose for which bonds, notes or other obligations of the Authority may be issued. Accordingly, a substantial portion of expenditures for the Authority's Customer Energy Efficiency Programs constitute Capital Costs under the Bond Resolution.

Upon compliance with provisions requiring prior application of funds (generally the payment of the Authority's operating expenses, senior debt and subordinated debt), the Bond Resolution permits the Authority to withdraw monies from the Operating Fund for deposit in the Capital Fund. Amounts in the Capital Fund may be applied solely to the payment of Capital Costs of the Authority. Prior to expenditure, such funds remain subject to the lien of the Bond Resolution and repayments received by the Authority from participants in the Authority's Customer Energy Efficiency Programs will constitute Revenues subject to the lien of the Bond Resolution.

The Authority currently has approximately \$600 million of Series 1, 2 and 3 Commercial Paper Notes outstanding in aggregate, supporting numerous projects and programs including the Customer Energy Efficiency Programs. In accordance with the 'Resolution Authorizing Commercial Paper Notes' adopted by the Authority on June 28, 1994, as amended, supplemented and restated, the Authority is required to maintain in full force and effect a credit agreement while the Notes are outstanding. The 2019 RCA has an initial term extending to February 1, 2022 and may be extended by two, one-year extensions not to exceed February 1, 2024.

DISCUSSION

With these authorizations, staff believes that the Authority's Customer Energy Efficiency Programs will have sufficient medium-term funding, given projected repayments, new originations and the development of additional external long-term funding sources.

Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to allocate such amounts to the Authority's Customer Energy Efficiency Programs and apply such amounts consistent with the terms of the Bond Resolution to fund Capital Costs associated with such programs.

In addition, staff believes an amendment of the 2019 RCA to increase the borrowing capacity thereunder is the most cost effective and expeditious alternative to provide increased support to these important programs. Staff expects increased fees and expenses associated with an amendment of the 2019 RCA to be not materially different from those presented to the Trustees for their December 11, 2018 approval.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to allocate an additional up to \$150,000,000 million in funding to support the Authority's Customer Energy Efficiency Programs.

The annual cost of the 2019 RCA, including those associated with an increase in the borrowing capacity thereunder, along with Administrative Agent and legal fees, will be paid from the Operating Fund. A portion of fees commensurate with the percentage of Commercial Paper Notes issued in support of the Authority's Customer Energy Efficiency Program will be fully recoverable from Customer Energy Efficiency Program participants.

RECOMMENDATION

The Chief Financial Officer recommends that the Trustees authorize the allocation of up to an additional \$150,000,000 million in funding to support the financing of the Authority's Customer Energy Efficiency Programs.

The Chief Financial Officer further recommends that the Trustees approve an amendment of the 2019 Revolving Credit Agreement increasing the borrowing capacity thereunder by an amount not to exceed \$100,000,000 and on terms otherwise not materially different from those previously approved by the Trustees.

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

Finance Committee Chair, Tracy McKibben, said that at its meeting Mr. Adam Barsky and Ms. Sarah Salati provided an update of the Authority's Energy Efficiency Programs and the Finance Committee is recommending that the Board of Trustees approve and authorize the increase in the

financial funding limit by \$250 million through the allocation of up to \$150 million from NYPA's operating account in support of financing of the Authority's Customer Energy Efficiency Programs as well as an increase of \$100 million in the borrowing capacity associated with the 2019 Revolving Credit Agreement.

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

RESOLVED, That the Trustees hereby authorize the allocation of up to an additional \$150,000,000 million in funding from the Operating Fund to support the Authority's Customer Energy Efficiency Programs, as discussed in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That such additional amount, together with up to \$300,000,000 previously allocated by the Trustees, may be transferred from time to time from the Operating Fund to the Capital Fund and applied to the payment Capital Costs associated with the Authority's Customer Energy Efficiency Programs and as specified in the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented ("Bond Resolution"); and be it further

RESOLVED, That the Trustees authorize the transfer from time to time of repayments and other receipts from participants in the Authority's Customer Energy Efficiency Programs to the Capital Fund from time to time provided, at the time of such transfer, such monies are not then needed for any of the purposes specified in Section 503(1)(a)-(c) of the Bond Resolution, all as directed and certified by Treasurer or Deputy Treasurer; and be it further

RESOLVED, That the Trustees authorize the execution by the Executive Vice President and Chief Financial Officer, the Treasurer or Deputy Treasurer, subject to the approval of the form thereof by the Executive Vice President and General Counsel, on behalf of the Authority, of an amendment of the 2019 Revolving Credit Agreement, dated as of January 16, 2019, among the Authority and JP Morgan Chase Bank, N.A., as Administrative Agent and the banks identified therein, such amendment consistent with the foregoing report of the President and Chief Executive Officer and having such terms and conditions as the executing officer deems necessary or advisable, such execution to be conclusive evidence of such determinations, provided that such amendment shall not exceed an additional \$100,000,000 in borrowing capacity; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, the Executive Vice President and General Counsel, the Executive Vice President and Chief Financial Officer, the Corporate Secretary, the Treasurer and all other

officers of the Authority be, and each of them hereby is, authorized and directed, for and in the name and on behalf of the Authority, to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements and other documents that they, or any of them, may deem necessary or advisable to effectuate the foregoing resolution, subject to approval as to the form thereof by the Executive Vice President and General Counsel.

iii. **Appointment of Prequalified Pool of Financial Institutions**

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Trustees are requested to approve the appointment, for a period of five years, of a prequalified pool of financial institutions to assist the Authority in the securitization, monetization or other disposition from time to time of all or a portion of the Authority's portfolio of project financings for the Authority's Customer Energy Efficiency Programs. The purpose of this initiative, among others, is to recapitalize the Customer Energy Efficiency Programs and develop a more efficient long-term project funding structure for these programs. The selected financial institutions, individually or as a group, will assist the Authority in structuring and implementing, through an underwriting or a direct placement (acting as principal or agent) of a limited recourse project funding facility for the Authority's Energy Efficiency Programs and provide related financial advisory services.

BACKGROUND

To be able to evaluate financing structures to meet the financing needs of the Authority's Energy Efficiency program, the Authority issued a Request for Proposal ('RFP') No. Q19-6613RM) to solicit proposals from qualified financial institutions interested in providing a limited recourse project funding facility to fund taxable and tax-exempt instruments originating from the Authority's Energy Efficiency Programs.

DISCUSSION

On April 4, 2019, the Authority issued the RFP to solicit proposals from qualified financial institutions interested in providing up to \$300mm as a Limited Recourse Project Funding Facility. The RFP was advertised on NYPA.gov and in the *New York State Contract Reporter*. On June 7, 2019 the Authority received a total of eight (8) proposals.

Authority staff reviewed each proposal, taking into consideration several qualitative characteristics essential for a successful underwriting team. This included: (a) firm experience in structuring, underwriting and providing both tax-exempt and taxable financing solutions; (b) ability to provide solutions that meet the Authority's goals of structuring a limited recourse facility, utilizing repeatable and simple loan documentation, retaining a customer credit assessment role for the Authority, maintaining transparent and competitive pricing methodology, creating an execution process that works for the Authority's Energy Efficiency customers, providing a variety of tenors, and covering a variety of technologies; (c) diversity and commitment to equal employment opportunities, and (d) financial strength and capital position.

Based on staff's evaluation, the following firms exhibit the qualifications that would make them suited to assist the Authority in the securitization, monetization or other disposition from time to time of all or a portion of the Authority's portfolio of project financings for the Authority's Customer Energy Efficiency Programs.

- Bank of America Merrill Lynch[†]
- Goldman Sachs & Co. LLC
- JP Morgan Chase Bank, N.A.

[†] Bank of America Merrill Lynch is the marketing name for the global banking and global markets businesses of Bank of America Corporation. Some services may be performed by affiliates of Bank of America Corporation.

Firm assignments to the prequalified pool of financial institutions will be established on an as needed basis, in each case subject to the Authority's Expenditure Authorization Procedures.

FISCAL INFORMATION

There is no fiscal impact associated with the selection of a prequalified pool of financial institutions. Any firm assignments to the prequalified pool of financial institutions will be funded out of the Authority's Operating Fund or the proceeds of financing transactions and subject to the Authority's Expenditure Authorization Procedures.

RECOMMENDATION

The Chief Financial Officer recommends that the Trustees approve the appointment, for a period of five years, of Bank of America Merrill Lynch, Goldman Sachs & Co. LLC, and JP Morgan Chase Bank, N.A. as a prequalified pool of financial institutions to assist the Authority in the securitization, monetization or other disposition from time to time of all or a portion of the Authority's portfolio of project financings for the Authority's Customer Energy Efficiency Programs. The Chief Financial Officer further recommends that the Trustees authorize the selected financial institutions, individually or as a group, to assist the Authority in structuring and implementing, through an underwriting or a direct placement (acting as principal or agent) of a limited recourse project funding facility for the Authority's Energy Efficiency Programs and provide related financial advisory services.

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

Finance Committee Chair, Tracy McKibben, said that at its meeting Mr. Adam Barsky provided highlights of staff's recommendation and the Finance Committee is recommending that the Board of Trustees approve and authorize the appointment of a prequalified pool of financial institutions, for a five-year term, to assist the Authority in structuring a limited recourse project funding facility for the Authority's Energy Efficiency Programs.

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

RESOLVED, That the appointment of Bank of America Merrill Lynch, Goldman Sachs & Co. LLC, and JP Morgan Chase Bank, N.A. for a period of five years as prequalified firms to serve as financial institutions to assist the Authority in the securitization, monetization or other disposition from time to time of all or a portion of the Authority's portfolio of project financings for the Authority's Customer Energy Efficiency Programs is hereby approved as recommended in the foregoing report of the President and Chief Executive Officer; and be it further.

RESOLVED, that prequalified financial institutions named above, individually or as a group, are authorized for a period of five years to assist the Authority in structuring and implementing, through an underwriting or a direct placement (acting as principal or agent) of a limited recourse project funding facility for the Authority's Energy Efficiency Programs and provide related financial advisory services; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, the Executive Vice President and General Counsel, the Executive Vice President and Chief Financial Officer, the Corporate Secretary, the Treasurer and all other officers of the Authority be, and each of them hereby is, authorized and directed, for and in the name and on behalf of the Authority, to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements and other documents that they, or any of them, may deem necessary or advisable to effectuate the foregoing resolution, subject to approval as to the form thereof by the Executive Vice President and General Counsel.

iv. **Release of Funds in Support of the
New York State Canal Corporation**

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize the release of up to an additional \$21.6 million in funding to the New York State Canal Corporation ('Canal Corporation') to support the operations of the Canal Corporation in calendar year 2019. The amount requested is 25% of the Canal Corporation's 2019 O&M Budget as presented to the Canal Corporation Board of Directors at its December 2018 meeting. The amount requested is in addition to the \$64.8 million that the Trustees authorized through July 2019 to be released to support the operations of the Canal Corporation in calendar year 2019.

BACKGROUND

The Authority has been authorized to provide financial support for the Canal Corporation. See, e.g., Public Authorities Law §1005-b(2). However, certain expenditures associated therewith do not constitute Capital Costs or Operating Expenses ('Operating Expenses') as defined in the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution'). Expenditures for the Canal Corporation's operating purposes that do not constitute Capital Costs or Operating Expenses must satisfy the requirements of the Authority's Bond Resolution relating to the release of funds from the trust estate created by the Bond Resolution for lawful corporate purposes. In addition, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 is to be used as a reference point in considering any such release of funds.

The Bond Resolution permits the Authority to withdraw monies 'free and clear of the lien and pledge created by the [Bond] Resolution' provided that (a) such withdrawals must be for a 'lawful corporate purpose as determined by the Authority,' and (b) the Authority must determine, taking into account among other considerations anticipated future receipt of revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed for (i) payment of reasonable and necessary operating expenses, (ii) an Operating Fund reserve in amounts determined by the Authority to be adequate for working capital, emergency repairs or replacements, major renewals or for retirement from service, decommissioning or disposal of facilities, (iii) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt or (iv) payment of interest and principal on subordinate debt.

Under the Bond Resolution, Capital Costs (which includes capital costs related to the Canal Corporation) may be paid without satisfying the provision described above.

DISCUSSION

With this authorization, the Trustees will approve the release of \$21.6 million, an amount equal to 25% of the Canal Corporation's 2019 O&M Budget. With regard to Canal Corporation's operating expenses in excess of \$64.8 million in calendar year 2019, staff is not requesting any action at this time, but will return to the Board to request additional releases as needed.

Staff has reviewed the effect of releasing up to an additional \$21.6 million in funding at this time on the Authority's expected financial position and reserve requirements. In accordance with the Board's Policy Statement adopted May 24, 2011, staff calculated the impact of this release, together with the last 12 months releases including (i) the release of \$54 million in Canal related operating expenses for 2018 previously authorized at the October and December 2018 meetings, (ii) the release of \$30 million in Recharge New York Discounts for 2019, (iii) the release of \$64.8 million in Canal related operating expenses for 2019 previously authorized at the December 2018, March 2019, and May 2019 meetings,

(iii) the release of up to \$1 million in Western NY Power Proceeds net earnings, and (iv) the release of up to \$2 million in Northern NY Power proceeds net earnings on the Authority's debt service coverage ratio and determined it would not fall below the 2.0 reference level. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to release such amounts from the trust estate created by the Bond Resolution consistent with the terms thereof.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to release an additional up to \$21.6 million in funding to support the operation of the Canal Corporation in calendar year 2019. Staff has further determined that the amounts presently held in reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution and that such Authority funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

The expenses associated with the operations of the Canal Corporation for calendar year 2019 are included in the Canal Corporation's 2019 O&M Budget.

RECOMMENDATION

The Chief Financial Officer recommends that the Trustees authorize the release of up to an additional \$21.6 million in funding to the Canal Corporation to support the operations of the Canal Corporation in calendar year 2019. The Chief Financial Officer further recommends that the Trustees affirm that such release is feasible and advisable, that the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, and that such funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

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

Finance Committee Chair, Tracy McKibben, said that at its meeting Mr. Adam Barsky and Mr. Joseph Kessler provided a joint presentation of staff's recommendation and the Finance Committee is recommending that the Board of Trustees authorize the release of \$21.6 million in scheduled funding to the Canal Corporation to support its ongoing operations for the fiscal year 2019. She said that the amount requested is the final 25 percent of the \$86.2 million in Canal Corporation's 2019 O&M budget which the Board approved in December of 2018. These funds represent the final quarterly installment for 2019. To date, the Trustees have authorized 64.8 million for this purpose.

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

RESOLVED, That the Trustees hereby authorize the release of up to an additional \$21.6 million in funding to the Canal Corporation to support operations of the Canal Corporation in calendar year 2019, as discussed in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, that the amount of up to \$21.6 million in funding as described in the foregoing report is not needed for any of

the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented, and that the release of such amount is feasible and advisable; and be it further

RESOLVED, That as a condition to making the payments specified in the foregoing report, on the day of such payments, the Treasurer or the Deputy Treasurer shall certify that such monies are not then needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, the Executive Vice President and General Counsel, the Executive Vice President and Chief Financial Officer, the Corporate Secretary, the Treasurer and all other officers of the Authority be, and each of them hereby is, authorized and directed, for and in the name and on behalf of the Authority, to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements and other documents that they, or any of them, may deem necessary or advisable to effectuate the foregoing resolution, subject to approval as to the form thereof by the Executive Vice President and General Counsel.

7. Presentation: Asset Management ISO 55001 Certification

Mr. Ricardo DaSilva, Vice President of Strategic Operations, provided highlights of the Asset Management ISO 55001 Certification to the members. He congratulated NYPA on being the first electric utility in North America to achieve and receive the ISO 55001 Certification, a Global Excellence Standard, and the dedicated and diverse group of individuals across the organization who worked steadfastly in this effort.

Mr. Ricardo said that having achieved this milestone as part of NYPA's Strategy 2020 is monumental. And, as NYPA looks forward to the development and implementation of its Strategy 2030, this accomplishment validates that NYPA is aligned in achieving its goals and have the proper system in place to meet its customers' needs.

He continued that, in order to stay at the forefront, NYPA is using best practices to guide its thinking, ultimately allowing the Authority to be more responsive and prepared so that it can continue to deliver a clean, reliable, safe, and cost-effective energy to its customers for the long term.

The ISO 55001 certification demonstrates a level of excellence and recognition within the industry, and it is an important differentiator in a competitive energy marketplace.

Achieving this certification means that NYPA has:

- Structured decision making which drives enhanced planning processes;
- clear justification for its investments;
- consistent work methodology;
- common platform for information and reporting; and, most importantly,
- a commitment to continual improvement.

Asset management is a merger of value creation and risk reduction, focusing on achieving the right balance among risk, cost, and performance. NYPA does this by leveraging technology to improve its situational awareness leading to better decision-making, for example, by its Communications Backbone program, iSOC or other integrated smart operations center or analytics efforts where there is a common element of collecting data and turning it into meaningful insights for the customers.

ISO 55001 certification is another piece of the equation to maximize the value from the Authority's generation and transmission assets and looking at ways to drive continual improvement as it has done throughout its history.

By using a systematic process, NYPA maximizes the value from the assets over their entire life cycle through a series of practices, procedures, and frameworks that guide consistent, defensible decision-making and risk management at every stage.

Over the decades, generations of NYPA staff have stood alongside one another in the construction, operation, and maintenance of its generation and transmission assets that will continue to provide a vital role in serving New York state.

To achieve the ISO 55001 certification, NYPA was subjected to an audit by an endorsed and independent assessor comprised of a team from Burns & McDonnell and EA Technology. Mr. DaSilva then introduce Mr. Robert Davis, the CEO of EA Technology, who presented NYPA with the Certificate.

Mr. Davis said that on behalf of EA Technology and Burns & McDonnell, their partners on this project, he would like to applaud NYPA, and, specifically, the Strategic Asset Management team on a job well done. He continued that, as the auditors went through this process and assessed NYPA's different systems and activities, it was clear to them that it was much more than about the certification for NYPA. He said that the systems that NYPA has been designing, since 2014, were, from the beginning, intended to be adopted by and for the benefit of the whole organization. While ISO 55000 certification is a starting point, the framework and processes were clearly designed within this organization for the benefit of all users and for assisting them in doing their jobs more effectively. He also added that NYPA exceeded the expectations and the standards of the ISO 55000 in several key areas, and that is unusual.

He continued that it is quite common for a project team to develop a great asset management system that is largely ignored or at least just tolerated by the rest of the organization. The buy-in for companies is often the most difficult thing to achieve; and it was clear that NYPA's project team had communicated and generated awareness way above many of the companies that they have audited. In addition, the team was greeted with hospitality and made to feel incredibly welcome and this allowed the team to focus on the details in the audit. In return, the auditors got to witness one of the best asset management systems they had seen in many, many years of doing audits such as this. The scoring was indeed some of the highest that we have ever seen in the many years.

He ended by introducing Mr. Andy McGarry, the lead auditor on the project, and said that they would like to formally award the New York Power Authority with the Certificate of Conformance to ISO 55001 2014 and that, it was, indeed, very well deserved.

President Quiniones responded that he was extremely proud of the team. He said that NYPA was proud to be the first electric utility in North America to achieve compliance with the globally recognized standard for asset management. He Congratulated Joseph Kessler, Ricardo DaSilva, and the entire team for this achievement. He recalled that, when NYPA envisioned the NYPA 2020 Strategic plan in 2012-2013, one of the six strategic initiatives was Asset Management; this was a trajectory that was put forth and it was very gratifying to arrive at this destination -- a testament to all the hard work.

President Quiniones also thanked the Board of Trustees for their support, guidance, oversight, and approval of the allocation of resources that were needed to accomplish this certification. He opined that, to have NYPA as the first electric utility in North America to receive this honor, is commendable. He said that the members have always said that the Authority should lead by example and this is a manifestation of that challenge.

Chairman Koelmel added that he wholly reinforces President Quiniones remarks as he is supporter of "leading from the front" and this certification is a tremendous validation of that challenge. He said that it is also a credit to the entire organization, culture, and the level of passion and commitment demonstrated to get this kind of "report card." He ended by congratulating Ricardo DaSilva, Joseph Kessler and the entire team for not only getting straight A's, but basically "blowing it out of the water," and also President Quiniones for his continued leadership.

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 December 11, 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 Dennis Trainor and seconded by Vice Chair Nicandri the meeting was adjourned at approximately 11:09 a.m.

Karen Delince

Karen Delince
Corporate Secretary

POWER AUTHORITY OF THE STATE OF NEW YORK
AND
NEW YORK STATE CANAL CORPORATION

EXHIBITS

For

September 25, 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
RECHARGE NEW YORK POWER AND ENERGY AT WHOLESALE

(GUSC ENERGY INC. and GRIFFISS UTILITY SERVICES CORPORATION)

The Power Authority of the State of New York, created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title 1 of Article 5 of the New York Public Authorities Law (“PAL”), with offices and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425 (“Authority”), hereby enters into this Agreement Relating to the Sale of Recharge New York Power and Energy at Wholesale (“Agreement”) with GUSC Energy Inc., with offices located at 410 Phoenix Drive, Rome, NY 13441 (“Customer”), and Griffiss Utility Services Corporation, with offices located at 410 Phoenix Drive, Rome, NY 13441 (the “Utility”). The Authority, Customer and Utility are from time to time referred to in this Agreement individually as a “Party” or collectively as the “Parties,” and the Customer and the Utility are from time to time referred to collectively as the “GUSC Entities.”

RECITALS

WHEREAS, the Authority is authorized to make available to, contract with and sell to “eligible applicants” located in New York State “Recharge New York Power” (“RNY Power”) as provided for in PAL § 1005(13-a) and Economic Development Law (“EDL”) § 188-a;

WHEREAS, the Authority has made an award of RNY Power to the Customer (more specifically defined in Article 1 of this Agreement as the “Awarded Allocation”), and consisting of equal amounts of “RNY Hydropower” and “RNY Market Power” as specified in Schedule A of this Agreement, for use by the Customer and other persons designated herein as “Eligible End Users”;

WHEREAS, pursuant to PAL § 1005(13-a)(c), the Customer has elected to purchase the RNY Hydropower and the RNY Market Power (if any) specified in Schedule A of this Agreement (more specifically defined in Article 1 of this Agreement as the “Accepted Allocation”);

WHEREAS, the Trustees have authorized the Authority to, among other things, provide electric service to the Customer at the rates and on the terms and conditions provided for in this Agreement and Service Tariff No. RNY-2B to enable the Customer to receive the Accepted Allocation; and

WHEREAS, the Utility, a not-for-profit corporation, operates and maintains the utility system of the Facility, and has the ability to distribute the Accepted Allocation to Eligible End Users.

NOW THEREFORE, in consideration of the mutual covenants herein, the Authority and the Customer 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.

“Accepted Allocation” means that portion of the Awarded Allocation the Customer has elected to accept and purchase from the Authority as specified in Schedule A of this Agreement.

“Agreement” means this Agreement as further described in the preamble, including all documents, schedules and other materials attached to and/or incorporated into this Agreement.

“Aggregate CI Commitment” has the meaning set forth in Appendix 2 of Schedule B.

“Aggregate CI Expenditures” has the meaning set forth in Appendix 2 of Schedule B.

“Agreement” means this Agreement as further described in the preamble, including all documents, schedules and other materials attached to and/or incorporated into this Agreement.

“Authority” means the Power Authority of the State of New York, as further described in the preamble to this Agreement.

“Awarded Allocation” means the amount of RNY Power awarded to the Customer as specified in Schedule A of this Agreement which consists of equal amounts of RNY Hydropower and RNY Market Power.

“Billing Period” has the meaning set forth in Service Tariff No. RNY-2B.

“Contract Demand” has the meaning set forth in Service Tariff No. RNY-2B.

“Customer” means GUSC Energy Inc., as further described in the preamble to this Agreement.

“Effective Date” means the date that this Agreement is fully executed by the Parties.

“Electric Service” has the meaning set forth in Service Tariff No. RNY-2B.

“Electric Service and Billing Data” has the meaning set forth in Section IV.8 of this Agreement.

“Eligible End User” means an entity who: (a) is a tenant, landowner or other occupant at the Facility; (b) who receives retail electric utility service from the Utility; (c) is not excluded from the definition of “eligible applicant” as provided for in EDL § 188-a(a)(4); and (d) is listed on Schedule D of this Agreement or identified as a new Eligible End User in a Eligible End User Report in accordance with the procedures specified in Section II.8 of this Agreement.

“Eligible End User Base Level Employees” has the meaning set forth in Section I.1.A of Schedule B.

“Eligible End User Report” has the meaning set forth in Section II.8 of this Agreement.

“Energy Services” has the meaning set forth in Article XI-A of this Agreement.

“Estimated Load Factor” has the meaning set forth in Service Tariff No. RNY-2B.

“Expansion Project” has the meaning set forth in Section VIII.2 of this Agreement.

“Expansion Project Capital Investment Commitment” has the meaning set forth in Appendix 2 of Schedule B.

“Facility” means the Griffiss Business & Technology Park located in Rome, New York as identified in Schedule A.

“Facility Meter” has the meaning set forth in Service Tariff No. RNY-2B.

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

“FERC License” means the license issued by FERC to the Authority for the continued operation and maintenance of the Niagara Power Project, pursuant to Section 15 of the Federal Power Act, which license became effective September 1, 2007 after expiration of the Project’s original license issued in 1957, and/or the license issued by FERC to the Authority for the continued operation and maintenance of the St. Lawrence-FDR Power Project, pursuant to Section 15 of the Federal Power Act, which became effective November 1, 2003 after expiration of the Project’s original license issued in 1953.

“Firm Energy” has the meaning set forth in Service Tariff No. RNY-2B.

“Firm Power” has the meaning set forth in Service Tariff No. RNY-2B.

“Hydro Projects” is a collective reference to the Authority’s Niagara Power Project, FERC Project No. 2216, and St. Lawrence-FDR Power Project, FERC Project No. 2000.

“ICAP” means installed capacity, including reserves, as required by the NYISO Tariffs that qualifies for use in meeting the Facility’s capacity obligations.

“International Joint Commission” and “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 Factor” has the meaning set forth in Service Tariff No. RNY-2B.

“Load Serving Entity” and “LSE” has the meaning established by the NYISO in NYISO Tariffs as may be modified from time to time.

“Local Electric Utility” means the local electric utility that provides electric service to the Facility. For purposes of this Agreement and Service Tariff No. RNY-2B, Local Electric Utility shall be understood to mean Niagara Mohawk Power Corporation d/b/a National Grid or any successor thereto authorized to provide electric transmission and delivery service to the Facility.

“Local Electric Utility Tariff” means the tariff(s) of the Local Electric Utility that is applicable to the delivery of the RNY Power and any other power and energy the Authority supplies under this Agreement.

“Metering Arrangement” has the meaning set forth in Section IV.9 of this Agreement.

“Niagara Project” means the Authority’s Niagara Power Project, FERC Project No. 2216.

“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 Section I.4.B of Schedule B.

“NYISO” means the New York Independent System Operator, Inc. or any successor organization.

“NYISO Charges” has the meaning set forth in the Service Tariff No. RNY-2B.

“NYISO Tariffs” has the meaning set forth in Service Tariff No. RNY-2B.

“Other NYPA Power” means power and energy, if any, other than RNY Power, that NYPA allocates and sells to the Customer pursuant to statute and/or contract.

“Person” means any natural person, corporation, company, sole proprietorship, governmental entity, or other entity.

“Physical Energy 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 energy utilization 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.

“Power Authority Act” or “PAA” has the meaning set forth in Section II.4 of this Agreement.

“PSC” means the Public Service Commission of the State of New York.

“Recharge New York Power” (or “RNY Power”) refers to Firm Power and Firm Energy the Authority is authorized to allocate and sell as provided for in PAL § 1005(13-a) and EDL § 188-a.

“Reporting Period” has the meaning set forth in Section II.1.A of Schedule B.

“RNY Blended Power Customer” has the meaning set forth in Service Tariff No. RNY-2B.

“RNY Hydro Customer” has the meaning set forth in Service Tariff No. RNY-2B.

“RNY Hydropower” has the same meaning as “recharge New York hydropower” as defined in PAL § 1005(13-a)(b), and further refers to the hydropower and energy components of a RNY Power allocation made to a RNY Hydro Customer or a RNY Blended Power Customer.

“RNY Installed Capacity” and “RNY ICAP” means the UCAP equivalent of ICAP that the Authority will supply to the Customer as provided for in this Agreement and Service Tariff No. RNY-2B with respect to the Accepted Allocation.

“RNY Market Power” has the same meaning as “recharge New York market power” as defined in PAL § 1005(13-a)(b), and further refers to the market power and energy components of a RNY Power allocation made to a RNY Blended Power Customer.

“Rules” refers to 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.

“Schedule A” refers to the Schedule A entitled “Recharge New York Power Allocations” which is attached to and made part of this Agreement.

“Schedule B” refers to the Schedule B entitled “Recharge New York Power Supplemental Commitments” which, along with its attachments and appendices, is attached to and made part of this Agreement.

“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 “List of Eligible End Users” (including any revisions made thereto in accordance with Section II.8 of this Agreement) which is attached to and made part of this Agreement.

“Schedule E” refers to the Schedule E entitled “Monthly Clean Energy Implementation Charge” which is attached to and made part of this Agreement.

“Served Load” has the meaning set forth in Article VII-A of the Agreement.

“Service Information” has the meaning set forth in Section IV.12 of this Agreement.

“Service Tariff No. RNY-2B” and “Service Tariff” means the Authority’s Service Tariff No. RNY-2B, issued on or about the December 1, 2019, as modified from time to time by the Authority, and which contains, among other things, the schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement. Service Tariff No. RNY-2B shall be applicable to Electric Service provided to the Customer under this Agreement beginning on or about December 1, 2019 and thereafter until such time as another Authority tariff applies.

“St. Lawrence Project” means the St. Lawrence-FDR Power Project, FERC Project No. 2000.

“Substitute Energy” means energy the Authority procures and sells to the Customer to replace RNY Hydropower that would otherwise have been sold to the Customer but for a curtailment made in accordance with Service Tariff No. RNY-2B.

“Supplemental Commitments” has the meaning set forth in Section VIII.1 of this Agreement.

“Supplemental Power” means default or supplemental power and associated energy, if any, that is required by the Customer and/or the Utility because the Accepted Allocation and any Other NYPA Power, if any, does not satisfy the full electric load of the Eligible End Users.

“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.

“Takedown Schedule” means a schedule pursuant to which the Accepted Allocation will be made available to the Customer as set forth in Schedule C and as may be modified from time to time.

“Taxes” have the meaning set forth in Service Tariff No. RNY-2B.

“Total Eligible End User Base Employment Level” has the meaning set forth in Appendix 1 of Schedule B.

“UCAP” has the meaning set forth in Service Tariff No. RNY-2B.

“Utility” means Griffiss Utility Services Corporation, as further described in the preamble to this Agreement.

“Utility Tariff” means the retail tariff(s) of the Customer’s local electric utility filed and approved by the PSC covering the delivery of RNY Power and the sale and delivery of Supplemental Power and RNY Market Power.

ARTICLE II **GENERAL PROVISIONS**

1. This Agreement shall govern: (a) the terms and conditions relating to allocation and sale of RNY Power comprising the Accepted Allocation by the Authority to the Customer; (b) the terms and conditions relating to the Customer’s sale of the RNY Power associated with the Accepted Allocation to the Utility; and (c) the terms and conditions relating to the Utility’s sale and distribution of RNY Power associated with such Accepted Allocation to Eligible End Users.

2. Unless agreed to by the Parties in writing: (a) the Customer shall not sell or otherwise transfer any portion of the Accepted Allocation to any Person other than the Utility in accordance with the provisions of this Agreement; (b) the Utility shall not sell or otherwise transfer any portion of the Accepted Allocation to any Person other than to Eligible End Users in accordance with the provisions of this Agreement; and (c) the GUSC Entities shall not “monetize” or sell any portion of the Accepted Allocation into any energy market.

3. Any sale, transfer, or use of RNY Power associated with the Accepted Allocation by the Customer or Utility that does not occur in accordance with the provisions of this Agreement is voidable by the Authority in its sole discretion, and shall be grounds for the Authority in its sole discretion to terminate the Accepted Allocation or any part thereof.

4. The sale of RNY Power comprising the Accepted Allocation by the Customer to the Utility, and sales of such RNY Power by the Utility to Eligible End Users, shall be subject to the provisions of this Agreement, Service Tariff No. RNY-2B, the Rules, the FERC License, PAL Article 5, Title 1 (the “Power Authority Act” or “PAA”) (to the extent such statute is not inconsistent with the FERC License), and all other applicable laws and regulations. Unless the Parties agree otherwise in writing, any contract between the Customer and the Utility providing for the sale, transfer, or use of such RNY Power, and any contract between the Utility and an Eligible End User providing for the sale, transfer, or use of such RNY Power, shall contain a provision providing that sales, transfer, and use of such RNY Power are subject to the provisions of this Agreement, the Service Tariff, the Rules, the FERC License, the PAA (to the extent such statute is not inconsistent with the FERC License), and all other applicable laws and regulations.

5. This Agreement shall not govern or otherwise affect any power allocated and sold by the Authority to the Customer under any other agreement between the Parties except as may otherwise be provided in this Agreement.

6. The Customer represents and warrants that each of the entities listed on Schedule

D is an Eligible End User as of the Effective Date.

7. No Person shall be entitled to receive any RNY Power associated with the Accepted Allocation other than Persons identified as Eligible End Users on Schedule D or identified as a new Eligible End User in accordance with the procedures specified in Section II.8 of this Agreement.

8. The Customer shall prepare and file with the Authority a written report for each Reporting Period that identifies at a minimum: (a) new Eligible End Users not listed on the then-effective Schedule D that received RNY Power associated with the Accepted Allocation during the corresponding Reporting Period; and (b) former Eligible End Users listed on the then-effective Schedule D that ceased receiving RNY Power associated with the Accepted Allocation during the corresponding Reporting Period (the “Eligible End User Report”). The Eligible End User Report shall indicate the dates on which each such entity identified as either new or no longer receiving RNY Power in the Eligible End User Report began or ceased receiving RNY Power associated with the Accepted Allocation. The Customer shall provide the Eligible End User Report or before the last day of August immediately following the preceding Reporting Period.

9. The Authority may from time to time in its discretion produce a revised Schedule D to reflect the information provided in Eligible End User Reports. Within thirty (30) business days of the Customer’s receipt of a revised Schedule D, the Customer shall review such revised Schedule D and inform the Authority of any changes that should be made in order to make the revised Schedule D accurate. If the Authority’s revised Schedule D is accurate, the Customer shall acknowledge receipt of and accept the revised Schedule D which shall replace the then-effective Schedule D. Notwithstanding the foregoing, the Authority reserves the right to request that the Customer produce an Eligible End User Report for any portion of a Reporting Period and Customer shall produce any such requested Eligible End User Report within thirty (30) days’ notice of any request by the Authority.

10. Nothing in this Agreement shall be construed as a representation of admission by the Authority that any Eligible End User would be eligible or otherwise be entitled to receive RNY Power if such Eligible End User applied to the Authority for RNY Power independently of the Customer.

ARTICLE III

RESALE OF THE ACCEPTED ALLOCATION

1. The Customer shall sell all of the RNY Power associated with the Accepted Allocation to the Utility for the purpose of enabling the Utility to sell all such RNY Power to Eligible End Users in accordance with this Agreement. The Customer shall sell all such RNY Power associated with the Accepted Allocation to the Utility at a price that equals the amount the Customer pays to the Authority for such RNY Power.

2. The Utility shall sell and distribute all the RNY Power associated with the Accepted Allocation it purchases from the Customer to Eligible End Users in accordance with

this Agreement. The Utility shall sell all such RNY Power to the Eligible End Users at a price that equals the amount the Customer pays to the Authority for such RNY Power.

3. Within thirty (30) days of any request by the Authority, each of the GUSC Entities shall provide the Authority with written notice of the price and/or rate it charges Eligible End Users for the RNY Power comprising the Accepted Allocation and the basis for the calculation of the price and/or rate.

ARTICLE IV **ELECTRIC SERVICE**

1. The Authority will provide Electric Service to enable the Customer to receive the Accepted Allocation in accordance with this Agreement, Service Tariff No. RNY-2B and the Rules. A copy of Service Tariff No. RNY-2B 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 commencement of Electric Service shall be subject to the terms of this Agreement, Service Tariff No. RNY-2 and the Rules, and the applicable operating procedures of the Authority, the Customer's Local Electric Utility and the NYISO.

2. If Schedule C specifies a Takedown Schedule for an Accepted Allocation, the Authority will provide Electric Service with respect to the Accepted Allocation in accordance with such Takedown Schedule.

3. Service Tariff No. RNY-2B 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 will provide at least thirty (30) days prior written notice to the Customer of any proposed change in the Rules or Service Tariff No. RNY-2B.

4. The Customer shall not be entitled to receive Electric Service for any RNY Power unless such RNY Power is identified as an Accepted Allocation on Schedule A.

5. Except as otherwise provided for in this Agreement, Service Tariff No. RNY-2B, or the Rules, in each Billing Period the Authority will schedule and provide to the Customer Firm Energy associated with Firm Power on a load factor sharing basis as set forth in Service Tariff No. RNY-2B which will be an amount equal to the product of: (a) Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for the Billing Period; (b) the number of hours in the Billing Period; and (c) Estimated Load Factor for the Billing Period.

6. The Contract Demand may not exceed the amount of the Accepted Allocation.

7. As part of Electric Service to the Customer, the Authority will provide RNY ICAP in amounts necessary to meet the UCAP equivalent of the Facility's NYISO installed capacity requirements associated with the Accepted Allocation. The amount of RNY ICAP that will be provided will be determined by the Authority in accordance with the following methodology:

$$ICAP_{AA} = ICAP \times LSRICAP$$

Where:

$ICAP_{AA}$ = RNY ICAP (*i.e.*, ICAP for the Customer's Accepted Allocation)

ICAP = Facility's total ICAP requirement for the current capability year (May through April)

LSRICAP (or "Load Split Ratio for ICAP") = T divided by the greater of (i) NCP, or (ii) T

NCP (or "Non-Coincident Peak") = Customer's maximum metered demand value during the prior year's NYISO summer control area peak month

T = Customer's Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for the month

8. The provision of Electric Service by the Authority under this Agreement shall be dependent upon the existence of a written agreement between the Authority and the Local Electric Utility pursuant to which the Local Electric Utility has agreed to provide the Authority with pertinent, timely and accurate information and data and other information that the Authority determines is necessary to provide Electric Service to the Customer and to render accurate bills to the Customer for such Electric Service. Such data and information includes but is not limited to demand and energy usage data recorded on the Facility Meter for each Billing Period that is necessary for the Authority to provide Electric Service and render accurate bills to the Customer, and ICAP information about the Facility that is necessary to enable the Authority to accurately provide RNY ICAP to the Customer (collectively, "Electric Service and Billing Data"). The Customer shall provide the Authority with Electric Service and Billing Data if the Authority in its sole discretion requests the Customer to do so.

9. 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 for the Authority in its sole discretion to withhold, suspend, or terminate Electric Service to the Customer. After commencement of Electric Service under this Agreement, 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 in its sole discretion withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. The Authority may, in its sole discretion, waive any of the requirements provided for in this Section IV.9 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 charges that become due in accordance with this Agreement, Service Tariff No. RNY-2B and the Rules.

10. If the Customer has elected to purchase RNY Market Power from the Authority, the Customer may request cancellation of such election. A request for cancellation must be made in writing in a form deemed satisfactory by the Authority and may only be made for the full amount of RNY Market Power purchased from the Authority. If the Authority in its sole discretion accepts the request, the Authority will effectuate such cancellation as soon as practicable, taking into consideration any commitments the Authority has made under contracts entered into with third parties for the purpose of supporting RNY Market Power supply and delivery to the Customer and other RNY Power program customers. The Authority shall have the right to reject a request for cancellation to the extent the Authority determines that such cancellation would unreasonably increase the costs chargeable to other RNY Power program customers or cause the Authority to incur unrecoverable costs. If the Customer's election is cancelled pursuant to this provision, the Authority shall have no further obligation to sell RNY Market Power to the Customer for the remaining term of the corresponding Accepted Allocation unless the Parties agree otherwise in writing.

11. By entering into this Agreement, the GUSC Entities consent to the exchange of information between the Authority and the Local Electric Utility pertaining to the GUSC Entities and Eligible End Users which the Authority and the Local Electric Utility determine is necessary to provide for the allocation, sale and delivery of RNY Power to the Customer, the proper and efficient implementation of the RNY Power program, billing related to RNY Power, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters. In addition, the GUSC Entities shall furnish the Authority with such forms and consents from or on behalf of Eligible End Users the Authority determines are necessary to effectuate such exchanges of information.

12. The GUSC Entities understand and acknowledge that the Authority may from time to time require the GUSC Entities to complete forms, provide documentation, execute consents and provide other information (collectively, "Service Information") the Authority determines is necessary for the provision of Electric Service, the delivery of RNY Power, billing related to the RNY Power Program, the effective and proper administration of the RNY Power Program, and/or the performance of contracts or other arrangements between the Authority and the Local Electric Utility. The GUSC Entities' failure to provide such Service Information shall be grounds for the Authority in its sole discretion to withhold or suspend Electric Service to the Customer.

13. The Authority may modify or terminate Electric Service under this Agreement or

modify the quantities of power and energy associated with any Accepted Allocation: (a) if such modification or termination 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); (b) the Customer or any other Eligible End User becomes ineligible to receive the Accepted Allocation; or (c) as otherwise provided in this Agreement, Service Tariff No. RNY-2B, or in the Rules. Unless such notice is impracticable, the Authority will provide thirty (30) days prior written notice to the GUSC Entities before any such modification or termination.

14. The Accepted Allocation may be modified by the Authority if the amount of power and energy available for sale as RNY Power from the Hydro Projects is modified as required to comply with any ruling, order or decision of any regulatory or judicial body having jurisdiction. Any such modification will be made on a *pro rata* basis to all of the Authority's RNY Power customers, as applicable, based on the terms of such ruling, order or decision. Unless such notice is not practicable, the Authority will provide thirty (30) days prior written notice to the GUSC Entities before any such modification.

ARTICLE V

RATES AND CHARGES FOR ELECTRIC SERVICE

1. The Customer shall pay for Electric Service and all other applicable charges, fees and assessments in accordance with this Agreement, Service Tariff No. RNY-2B and the Rules. Unless otherwise specified in this Agreement or Service Tariff No. RNY-2B, or agreed to by the Parties in writing, Electric Service shall be subject to the Billing Demand and Billing Energy rates and all other charges provided for in this Agreement, Service Tariff No. RNY-2B and the Rules. An alternative basis for billing may be used provided the Parties agree in writing.

2. No provision of this Agreement, Service Tariff No. RNY-2B, or the Rules shall be construed as a promise, representation or warranty of any nature whatsoever, express or implied, by the Authority that the provision of Electric Service will result in the Customer at any time (i) paying less for electricity than the amount it would have paid had the Customer not entered into this Agreement or procured electric service from another source, or (ii) receiving any other economic, reliability or other benefit except and to the extent expressly set forth in this Agreement or Service Tariff No. RNY-2B.

3. Notwithstanding any other provision of this Agreement, Service Tariff No. RNY-2B, or the Rules, the rates and other charges for Electric Service shall be subject to increase by the Authority at any time upon thirty (30) days prior written notice to the Customer if, after consideration by the Authority of its legal obligations, the marketability of the output or use of the Hydro Projects and the Authority's competitive position with respect to other suppliers, the 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 the Authority's bond and note resolutions and covenants with the holders of its financial obligations. The Authority shall use its best efforts to inform the Customer at the earliest practicable date of its intent to increase the power and energy charges

pursuant to this Section V.3. Any rate increase to the Customer under this Section V.3 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 Section V.3. With respect to any such increase, the Authority shall forward to the Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which the Authority will obtain the total of increased revenues and the bases upon which the Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as the Authority determines such increase is necessary to provide revenues for the purposes stated in this Section V.3.

ARTICLE VI

BILLING; BILLING METHODOLOGY

1. The amount of energy and demand that will be used by the Authority for Customer billing purposes (*i.e.*, Billing Demand and Billing Energy) shall be determined in accordance with Service Tariff No. RNY-2B.

2. The Authority will bill render bills to the Customer for Electric Service on or before the fifteenth (15th) business day of each month for charges due for the previous Billing Period and any other amounts due and owing. Bills will reflect the amounts due and owing in accordance with this Agreement, Service Tariff No. RNY-2B and the Rules, and are subject to adjustments and reconciliations as provided for in this Agreement, Service Tariff No. RNY-2B and the Rules. As provided in Service Tariff No. RNY-2B, bills will include NYISO Charges and Taxes associated with the Accepted Allocation and all other applicable charges, fees and assessments provided for in the Agreement, Service Tariff No. RNY-2B and the Rules. NYISO Charges shall be subject to adjustment consistent with any subsequent NYISO re-billings to Authority.

3. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority will render bills to the Customer electronically.

4. Bills are due and payable by the Customer within twenty (20) days of the date on which the Authority renders the bill. Unless otherwise agreed to by the Authority in writing, bills 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.

5. The Authority and the Customer may agree in writing to an alternative method for the rendering of bills and for the payment of bills, including but not limited to the use of an Authority-established customer self-service web portal.

6. 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.

7. If the Customer fails to pay any bill when due, the Authority may add an interest charge of two percent (2%) of the amount unpaid shall be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent (1 1/2%) 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.

8. Unless otherwise agreed to by the Parties 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.

9. If at any time after commencement of Electric Service the Customer fails to make complete and timely payment of any two (2) bills for Electric Service, the Authority may in its discretion: (a) require the Customer to 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, which sum shall be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service; (b) suspend Electric Service; or (c) modify or terminate Electric Service. If the Customer fails or refuses to provide a security the deposit within thirty (30) days of a request pursuant to this Section VI.9, the Authority may modify, suspend, or terminate Electric Service to the Customer.

10. The rights and remedies provided to the Authority in this Article 6 are in addition to any and all other rights and remedies available to Authority under this Agreement, Service Tariff No. RNY-1 and the Rules, and at law or in equity.

ARTICLE VII

TRANSMISSION AND DELIVERY

1. The GUSC Entities acknowledge and agree that: (a) the Local Electric Utility is responsible for delivering the Accepted Allocation to the Facility; and (b) the Authority has no responsibility for delivering the Accepted Allocation to the Facility.

2. Delivery of Accepted Allocations shall be subject to the Utility Tariff.

3. The GUSC Entities shall be solely responsible for complying with all requirements of the Local Electric Utility that are necessary to enable the GUSC Entities to receive delivery of the Accepted Allocation provided for under this Agreement, including requirements set forth in the Local Electric Utility Tariff and the Local Electric Utility's rules and procedures.

4. The Customer shall be responsible for obtaining any consents and agreements from any third party that are necessary for the delivery of the Accepted Allocation to the Facility, and for complying with the requirements of any such third party, provided that any such consents, agreements and requirements shall be subject to the Authority's approval.

5. The Customer shall be solely responsible for paying the Local Electric Utility for all charges associated with delivery of the Accepted Allocation in accordance with the Local Electric Utility Tariff and the Local Electric Utility's rules and procedures. Should the Authority incur any charges associated with such delivery, the Customer shall reimburse the Authority for all such charges.

6. The Customer shall be solely responsible for obtaining and paying for the procurement, transmission and delivery of (a) any Supplemental Power required by the Facility and Eligible End Users, and (b) all RNY Market Power the Customer has elected to purchase from a person other than the Authority. Should the Authority incur charges associated with the procurement, transmission, distribution, or delivery of such Supplemental Power or such RNY Market Power, the Customer shall reimburse the Authority for all such charges.

7. The Utility (or the GUSC Entities' designee with Authority's consent) shall serve as the LSE for the RNY Power and any other energy or power sold under this Agreement. The Authority shall not act as the LSE or perform any LSE functions with respect to the RNY Power or any power and energy sold under this Agreement. Should the Authority incur any costs relating to such matters or for any other services established in the NYISO Tariffs, the Customer shall reimburse the Authority for all such charges.

8. The Customer understands and acknowledges that delivery of the Accepted Allocation will be made over transmission facilities under the control of the NYISO. The Customer understands and agrees that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Accepted Allocation for services established in the NYISO Tariffs or any other applicable tariff.

ARTICLE VII-A

COMPLIANCE WITH STATE ENERGY-RELATED STANDARDS

For avoidance of doubt, the Parties agree and acknowledge in accordance with Section VII.7 of this Agreement that the Utility (or the GUSC Entities' designee with Authority's consent) serves as the Load Serving Entity for the RNY Power and any other power or energy sold under this Agreement to serve Facility load ("Served Load"). Consequently, the Authority has no responsibility as a Load Serving Entity or in any other capacity for complying with State Energy-Related Standards, including by way of example, the State Clean Energy Standard, Offshore Wind Energy Standard, or other applicable standard, with respect to Served Load, including the procurement and supply of Renewable Energy Credits, Offshore Wind Energy Credits, Zero Emission Credits, or other credits or attributes, or any other compliance measures that a Load Serving Entity has or may in the future have under any law, regulation or regulatory order. Should the Authority for any reason become the Load Serving Entity for the Served Load,

the Customer shall be subject to the Monthly Clean Energy Implementation Charge provided in Schedule E.

ARTICLE VIII

SUPPLEMENTAL COMMITMENTS

1. The Accepted Allocation is being provided partly in consideration of the supplemental commitments set forth in Article I of Schedule B and the Appendices thereto (*i.e.*, the Employment Commitments, Capital Investment Commitments, Power Utilization Commitments, and Energy Efficiency and Conservation Program Commitments (collectively, the “Supplemental Commitments”). As the recipient of the Awarded Allocation, the Customer shall be responsible for compliance with the Supplemental Commitments notwithstanding that compliance with one or more of the Supplemental Commitments may require dependent upon actions of other Eligible End Users. The Authority shall have the right to reduce the Accepted Allocation and Contract Demand as authorized by this Agreement if the Supplemental Commitments are not met.

2. If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, “Expansion Project”), and the Expansion Project is not completed by the date specified in Schedule B, the Authority may, in its sole discretion, (i) cancel the Allocation, or (ii) 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.

3. 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.

4. 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.

5. In the event of an Expansion Project being completed in multiple phases, at the Customer’s request the Authority may, in its sole 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.

6. 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 IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. 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 customers served from the Hydro Projects, the Authority shall curtail the amount of firm power and energy to which the Customer is entitled as RNY Hydropower under this Agreement in accordance with Service Tariff No. RNY-2B. The provision of RNY Market Power sold to the Customer by the Authority, if any, is not subject to curtailment pursuant to this Article IX. The Authority shall provide Substitute Energy to the Customer and the Customer shall pay for such Substitute Energy in accordance with Service Tariff No. RNY-2B.

2. The Authority may require the Customer and/or the Utility 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

CONFLICTS

In the event of any inconsistencies, conflicts, or differences between the provisions of Service Tariff No. RNY-2B and the Rules, the provisions of Service Tariff No. RNY-2B will govern. In the event of any inconsistencies, conflicts or differences between the Service Tariff No. RNY-2B or the Rules and any provisions of this Agreement, the provisions of this Agreement will govern.

ARTICLE XI

ADDITIONAL ALLOCATIONS

1. Upon proper application by the Customer, the Authority may in its discretion award additional allocations of RNY Power 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 allocations, the Authority may in its sole discretion: (a) modify Schedule A to this Agreement or issue a supplemental Schedule A to reflect any additional allocations, and issue a modified Schedule B if the Authority determines such action to be appropriate; or (b) offer the Customer a separate contract with the Authority for the purchase of any additional allocations.

2. In addition to any other 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 additional allocations and consider the terms and conditions that should be applicable of any additional allocations.

ARTICLE XI-A ENERGY SERVICES

The Authority may periodically communicate with the Customer, the Utility and Eligible End Users 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 provide other benefits, such as support the State’s Clean Energy Standard. The Customer agrees to consider all such Authority communications 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 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 Authority:

Manager, Business Power Allocations & Compliance
New York Power Authority
123 Main Street
White Plains, New York 10601
Telephone: (914) 681-6200
Facsimile: (914) 390-8156
Electronic mail: recharge.newyork@nypa.gov

To Customer:

Daniel Maneen
Authorized Representative
410 Phoenix Drive
Rome, New York 13441-4809
Telephone:
Facsimile:
Electronic mail:

To Utility:

Michael Davis
Vice President, Operations
410 Phoenix Drive
Rome, New York 13441-4809
Telephone:
Facsimile:
Electronic mail:

2. 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; (e) if sent by electronic mail to the appropriate address as set forth above, with written confirmation of receipt; or (f) if sent by electronic file or data transfer as set forth above, with written 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; TRANSFERS; RESALE

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of the Parties hereto, provided that no assignment by any 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 Parties.

2. The sale or transfer of any portion of the Awarded Allocation or Accepted Allocation by the Customer or Utility to any other Person is prohibited unless: (a) done in accordance with this Agreement; (b) the Authority in its discretion agrees in writing to the transfer; and (c) all other requirements applicable to a transfer, including board approvals, are satisfied. In addition, the Authority may require such approvals, consents and other agreements from the Customer and/or other person that the Authority determines are necessary in order to effectuate any authorized sale or transfer. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its sole discretion to suspend Electric Service, or and terminate the Awarded Allocation, the Accepted Allocation and/or this Agreement.

ARTICLE XIV

EFFECTIVENESS; TERMINATION; EFFECT

1. This Agreement shall become effective and legally binding on the Effective Date.

2. Electric Service under this Agreement shall commence as of December 1, 2019, and continue until the earliest of: (a) termination by the Customer with respect to all of the Accepted Allocation upon at least ninety (90) days prior written notice to the Authority; (b) termination by Authority in accordance with this Agreement, Service Tariff No. RNY-2B and/or the Rules; or (c) expiration of the term of the Accepted Allocation. Notwithstanding termination of the Agreement or expiration of the term of the Accepted Allocation, each Party's rights and obligations to render invoices, and to make and receive payments for deliveries and performance rendered prior to termination, and with respect to audit, reporting, review, adjustments and disputes, shall remain in effect until fully discharged.

3. The Customer may exercise a partial termination of the Accepted Allocation upon at least ninety (90) days prior written notice to the Authority. Unless otherwise agreed to by the Parties in writing, the termination shall be effective commencing with the first Billing Period following the required notice. In the event of a partial termination, the Authority will furnish the Customer with a revised Schedule A which reflects the revised Accepted Allocation and a revised Schedule B to the extent the Authority deems it appropriate.

4. A termination, reduction, or other modification in whole or in part of the Accepted Allocation shall apply equally to the RNY Hydropower component and RNY Market Power component (if any) of the Customer's Accepted Allocation.

5. A termination, reduction, or other modification in whole or in part of an Accepted Allocation shall result in a corresponding termination, reduction, or modification of the Customer's Awarded Allocation.

ARTICLE XV

MISCELLANEOUS

1. Choice of Law

Any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to 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 rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

Each Party consents 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.

3. Previous Communications; Modifications

This Agreement, including its schedules, appendices and attachments shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Accepted

Allocation and its other subject matter, and supersedes all previous communications between the Parties hereto, either oral or written, including price estimates, with reference to the sale of the Accepted Allocation. No modifications of this Agreement shall be binding upon the Parties hereto or any of them unless such modification is in writing and is signed by a duly authorized officer of each of them.

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 any 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 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 any 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.

6. Parties

No person other than the Parties, including any Eligible End User, shall have any rights, interest or claims hereunder or on account of this Agreement as a third-party beneficiary or otherwise.

ARTICLE XVI
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 by email as a PDF file or other acceptable file format that appropriately captures the signature, 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:

CUSTOMER

BY: _____

Name and Title (Print): _____

Date: _____

AGREED:

UTILITY

BY: _____

Name and Title (Print): _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

BY: _____

Name and Title (Print): _____

Date: _____

SCHEDULE A

RECHARGE NEW YORK POWER ALLOCATIONS

APPLICANT: GUSC Energy Inc.

CONSOLIDATED FUNDING APP. No: 9668
BP. No: 7540

CUSTOMER: Check the appropriate box below to select one of the options indicated, and confirm your election by signing next to the election made. You may only check one box. If this Schedule A is applicable to an existing Accepted Allocation whose term has been extended, the original option is pre-checked and no selection is necessary.

Option 1 - Customer elects to purchase ALL of the RNY Market Power listed under Accepted Allocation from the Authority:

☐ Customer Signature: _____

Option 1 Allocation Information (will apply if ALL of the RNY Market Power that is part of the Awarded Allocation is purchased from the Authority)

Awarded Allocation	Accepted Allocation	Contract Demand	Term of Accepted Allocation	Trustee Award Date	Facility
RNY Hydropower (kW): 3,365 RNY Market Power (kW):3,365 Total (kW): 6,730	RNY Hydropower (kW): 3,365 RNY Market Power (kW):3,365 Total (kW):6,730	6,730 (kW)*	7 years, beginning on December 1, 2019	October 2, 2018	Griffiss Business & Technology Park, Rome, NY

*The value listed for the Contract Demand is subject to the Takedown Schedule, if any, attached to the Agreement as Schedule C.

OR

APPLICANT: GUSC Energy Inc.

CONSOLIDATED FUNDING APP. No: 9668
BP. No: 7540

Option 2 - Customer elects to purchase NONE of the RNY Market Power listed under Accepted Allocation from the Authority:

☐ Customer Signature: _____

Option 2 Allocation Information (will apply if NONE of the RNY Market Power that is part of the Awarded Allocation is purchased from the Authority)

Awarded Allocation	Accepted Allocation	Contract Demand	Term of Accepted Allocation	Trustee Award Date	Facility
RNY Hydropower (kW): 3,365 RNY Market Power (kW):3,365 Total (kW): 6,730	RNY Hydropower (kW): 3,365 RNY Market Power (kW): 0 Total (kW):3,365	3,365 (kW)*	7 years, beginning on December 1, 2019	October 2, 2018	Griffiss Business & Technology Park, Rome, NY

*The value listed for the Contract Demand is subject to the Takedown Schedule, if any, attached to the Agreement as Schedule C.

SCHEDULE B

RECHARGE NEW YORK POWER SUPPLEMENTAL COMMITMENTS

The provision of RNY Power to the Customer is in consideration of, among other things, the Supplemental Commitments set forth in this Schedule B.

ARTICLE I **RNY POWER SUPPLEMENTAL COMMITMENTS**

1. Employment Commitments

- A. The Customer agrees to the Total Eligible End User Base Employment Level set forth in Appendix 1 of this Schedule B. Unless otherwise provided for in this Schedule B, such Total Eligible End User Base Employment Level shall be the total number of full-time positions held by: (1) individuals employed at the Facility by (a) Eligible End Users listed on Schedule D (including any individuals identified as a new Eligible End User in a Eligible End User Report in accordance with the procedures specified in Section II.8 of the Agreement), and (2) individuals who are contractors or who are employed by contractors retained by such Eligible End Users and assigned to the Facility (collectively, “Eligible End User Base Level Employees”). The number of Eligible End User 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 at least 20 hours but not more than 35 hours per week shall be counted as one Eligible End User Base Level Employee.
- B. The Total Eligible End User Base Employment Level may not be established or maintained by transfers of employees from previously held positions with Eligible End Users or their affiliates located within New York State, except that the Total Eligible End User Base Employment Level may be filled by employees of an Eligible End User laid off by such Eligible End User from other of its facilities for bona fide economic or management reasons.
- C. The Authority may in its sole discretion consider a request to change the Total Eligible End User 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. The Authority shall have the right to request and receive information supporting any such request and the sole discretion to make any such change.

2. Capital Investment Commitments

- A. The Customer agrees to the Aggregate CI Commitment identified in Appendix 2 of this Schedule B. Capital investments made by the Customer, the Utility and other Eligible End Users at the Facility will count toward the Aggregate CI Commitment, provided that the capital investments occur within the time period specified in Appendix 2 to this Schedule B.

SCHEDULE B

3. Power Utilization Commitments

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Accepted Allocation, as represented by the Billing Demand (as such term is described in Service Tariff No. RNY-2B), provided, however, that if only part of the Accepted Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such part of the Accepted Allocation.

4. Energy Efficiency and Conservation Program Commitments

- 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) a Physical Energy Audit of the Facility. Either option shall be at the Customer's own expense.
- B. After the Effective Date, the Authority will 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 in accordance with the NYEM Agreement ("NYEM Participation"); 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.
- C. 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 specified in the NYEM Agreement.
- D. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit at least once during the term of the Accepted Allocation, but in any event not less than once every five years. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited physical energy audit of the Facility, where the Authority 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.
- E. Energy efficiency audits and virtual energy audits (including via NYEM Participation) that have been performed at the facility prior to the Effective Date do not satisfy the requirements for an energy efficiency and conservation program under this Section 1.4.

SCHEDULE B

ARTICLE II **RECORDKEEPING, REPORTING AND FACILITY ACCESS**

1. Employment

- A. A record shall be kept monthly by the Customer for each period from July 1 through June 30 (the "Reporting Period") of the total number of Eligible End User Base Level Employees who are employed at or assigned to the Facility, 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). The Customer shall be responsible for obtaining all information and records from all other Eligible End Users and contractors that are necessary for (i) documenting the number of persons employed at or assigned to the Facility, and (ii) complying with the reporting and record keeping requirements of this Section II.1.
- B. The records and other relevant information required by this Article shall be provided to the Authority on an annual basis in the form of an annual report that shall be provided to the Authority on or before the last day of August immediately following the preceding Reporting Period. The report shall, at a minimum, specify: (i) the number of individuals who are employed by the Customer, the Utility and the each of the other Eligible End Users and who work at the Facility; (ii) the number of individuals who are contractors who are assigned to the Facility; and (iii) the number of individuals who are employed by contractors and who are assigned to the Facility. The report shall be certified to be correct by an officer or management official of the Customer on behalf of the Customer.

2. Capital Investments

The Customer shall comply with the recordkeeping, recording and reporting requirements specified in Appendix 2 to this Schedule B with respect to the applicable capital investment commitment.

3. Power Usage

The Customer shall keep monthly records of the maximum demand utilized each month for each Facility receiving an Accepted Allocation and provide copies and an explanation of such records to the Authority on an annual basis for the Reporting Period on or before the last day of August immediately following the preceding Reporting Period.

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 Agreement; and (b) a description of any energy efficiency or conservation measures that

SCHEDULE B

have been implemented at the Facility in connection with any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access; Information; and Audit

- A. 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 Supplemental Commitments specified in this Schedule B.
- B. The Customer shall provide information requested by the Authority or its designee in surveys, questionnaires and other information requests relating to energy efficiency and energy-related projects, programs and services.
- C. In addition to any reports or other information required by this Agreement, the Authority or its designee shall have the right to examine and audit on reasonable advance written notice to the Customer all non-confidential written and electronic records and data in order to determine the Customer's compliance with the Supplemental Commitments.

ARTICLE III **COMPLIANCE ACTION BY THE AUTHORITY**

1. Employment Levels

If the annual monthly average number of Eligible End User Base Level Employees is less than 90% of the Total Eligible End User Base Employment Level set forth in this Schedule B for the subject Reporting Period, the Authority may reduce the Contract Demand. 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 Reporting Period divided by the Total Eligible End User Base Employment Level. The Authority will round any such reduction 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 Levels

If the capital investment commitment specified in Appendix 2 to this Schedule B is not met, the Authority may reduce the Contract Demand in accordance with the methodology set forth in Appendix 2.

3. Power Utilization Levels

If the average of the Customer's six (6) highest Billing Demands (as such term is defined in Service Tariff No. RNY-2B) is less than 90% of the Customer's Contract Demand in a Reporting Period, the Authority may reduce the Contract Demand in accordance with this Section III.3. The maximum amount by which the Authority may reduce the Contract

SCHEDULE B

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 during such Reporting Period 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 (0), 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 RNY-2B and the Rules, the Authority may suspend Electric Service to the Customer if the Customer fails to comply with any of the requirements of 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 II.1, II.2, or II.3 of this Schedule B, the Authority will provide the GUSC Entities with at least thirty (30) days prior written notice of such reduction, specifying the amount of the reduction of Contract Demand and the reason for the reduction, provided, however, that before making the reduction, the Authority may in its sole discretion consider the Customer's, the Utility's and the Eligible End Users' respective scheduled or unscheduled maintenance or Facility upgrading periods when such events temporarily reduce employment levels or electrical demand, as well as the business cycle.

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SCHEDULE B – APPENDIX 1

TOTAL ELIGIBLE END USER BASE EMPLOYMENT LEVEL

A minimum of 5,120 full-time employees who constitute Eligible End User Base Level Employees shall be employed at or assigned to the Facility (“Total Eligible End User Base Employment Level”). The Total Eligible End User Base Employment Level shall be maintained for the term of the Accepted Allocation.

SCHEDULE B

SCHEDULE B – APPENDIX 2

CAPITAL INVESTMENT COMMITMENT

1. Aggregate Capital Investment Commitment (if applicable, as specified below)
 - A. The following minimum capital investment shall be made at the Facility within five (5) years of December 1, 2019 (“Aggregate CI Commitment”): \$10,000,000.00. Capital investments made at the Facility by the Customer, the Utility and other Eligible End Users shall qualify to be counted toward the Aggregate CI Commitment. Capital investments made prior to December 1, 2019 shall not be counted toward the Aggregate CI Commitment.
 - B. The Customer shall maintain a record of the capital investments made at the Facility for each Reporting Period (“Annual CI Expenditures”). The Customer shall be responsible for obtaining all information and records from all other Eligible End Users that are necessary for (i) documenting the capital investments made at the Facility during the Reporting Period, and (ii) complying with the reporting and record keeping requirements of this Section.
 - C. The records and other relevant information required by this Section shall be provided to the Authority on an annual basis in the form of an annual report that shall be provided to the Authority on or before the last day of August immediately following the preceding Reporting Period. The report shall be certified to be correct by an officer or management official of the Customer on behalf of the Customer.
 - C. The Authority will calculate an aggregate amount of capital investment made by the Customer (“Aggregate CI Expenditures”) at its Facility by summing the first five (5) years of Annual CI Expenditures as reported by the Customer, for the purpose of determining the Customer’s compliance with its Aggregate CI Commitment. If the Aggregate CI Expenditures as determined by the Authority is less than 90% of its Aggregate CI Commitment, the Contract Demand may be reduced. 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 Aggregate CI Expenditures divided by the Aggregate CI 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. A minimum capital investment of \$ N/A shall be made 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:

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Line Item 1 -	\$_____
Line Item 2 -	\$_____
Line Item 3 -	\$_____

Expansion Project Capital Investment Commitment: \$_____

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 B

SCHEDULE C

TAKEDOWN SCHEDULE

N/A

SCHEDULE D

LIST OF ELIGIBLE END USERS (as of Effective Date)

Eligible End Users	Date RNY Power Receipt Commenced	Date RNY Power Receipt Terminated
AFRL/ISOC	December 1, 2019	
Alion Science and Technology Corporation	December 1, 2019	
AmeriCu Credit Union	December 1, 2019	
Assured Information Security, Inc.	December 1, 2019	
BAE Systems, Inc.	December 1, 2019	
Birnie Bus Services, Inc.	December 1, 2019	
Booz Allen Hamilton Inc.	December 1, 2019	
CACI Technologies, Inc.	December 1, 2019	
Cathedral Corporation, Inc.	December 1, 2019	
Defense Finance Accounting Service (DFAS - Rome)	December 1, 2019	
Department of Veterans Affairs	December 1, 2019	
Deployed Resources Inc.	December 1, 2019	
Eastern Air Defense Sector	December 1, 2019	
EGC Properties, LLC	December 1, 2019	
Family Dollar Services, Inc.	December 1, 2019	
Griffiss EC, LLC	December 1, 2019	
Griffiss Local Development Corp	December 1, 2019	
Griffiss Utility Services Corporation	December 1, 2019	
GUSC Energy Inc.	December 1, 2019	
Kris-Tech Wire Company, Inc.	December 1, 2019	
M.A. Polce Consulting, Inc.	December 1, 2019	
MGS Manufacturing, Inc.	December 1, 2019	
Mohawk Glen Associates, LLC	December 1, 2019	
Mohawk Valley Community Action Agency	December 1, 2019	
New York State Technology Enterprises Corp.	December 1, 2019	
Northrop Grumman	December 1, 2019	
Nunn's Hospital Supplies, Inc.	December 1, 2019	
Oneida County Div of Aviation	December 1, 2019	
Peraton	December 1, 2019	
Renmatix	December 1, 2019	
Research Associates of Syracuse	December 1, 2019	

Eligible End Users	Date RNY Power Receipt Commenced	Date RNY Power Receipt Terminated
Roberts Office Interiors, Inc.	December 1, 2019	
Sovena USA, Inc.	December 1, 2019	
SRC, Inc.	December 1, 2019	
Tektronix, Inc. (formerly GEIS)	December 1, 2019	
Upstate Cerebral Palsy	December 1, 2019	
UTC Aerospace Systems (formerly Goodrich Corporation)	December 1, 2019	

SCHEDULE E

MONTHLY CLEAN ENERGY IMPLEMENTATION 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. RNY-2B, or in the Rules.

“Alternative Compliance Payment” means a form of payment of money by an LSE that is authorized by the State in law, regulation, or Regulatory Order as a mechanism for an LSE to satisfy an Annual LSE Obligation.

“Annual LSE Obligation” means the annual obligation of an LSE to supply a defined percentage proportion (or other applicable measure) of its retail load with supply derived from new eligible renewable resources through compliance measures that are authorized in law, regulation, or Regulatory Order for a State Energy Standard. With reference to the Zero Emission Credit Requirement, “Annual LSE Obligation” refers to an obligation of an LSE to purchase a specified number of ZECs representing the LSE’s proportional share of ZECs purchased by NYSERDA based on the load served by the LSE in relation to the total load served by all LSE’s in the New York Control Area.

“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 the CES Order or the CES.

“Clean Energy Compliance Measures” is a collective reference to Zero Emission Credit Requirement Compliance Measures, Renewable Energy Standard Compliance Measures, Offshore Wind Energy Standard Compliance Measures, and any other compliance measures that an LSE is authorized by law, regulation or Regulatory Order to undertake in order to meet an Annual LSE Obligation.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State, as may be amended from time to time.

“Credit” means a certificate or other claim to the environmental attributes associated with energy produced by or from qualifying resources that typically represents proof that one megawatt-hour (1 MWh, or 1000 kilowatt-hours) of qualifying electricity was generated and delivered to the power grid. A Credit includes but is not limited to a ZEC, REC and OREC.

“Load Serving Entity” as used in this Schedule has the meaning provided in the CES Order and generally refers a utility or other entity that supplies load (electricity) to a consumer of electricity.

“Monthly Clean Energy Implementation Charge” means the monthly charge to the Customer established in this Schedule E.

“NYSERDA” means the New York State Energy Research and Development Authority.

“Offshore Wind Energy Credit” or “OREC” refers to a qualifying Offshore Wind Energy Credit as authorized by the State in law, regulation, or Regulatory Order.

“Offshore Wind Energy Standard” means the Offshore Wind Energy Standard adopted by the State as may be amended from time to time.

“Offshore Wind Energy Standard Compliance Measures” means the purchase of ORECs from NYSERDA; the Authority’s procurement of ORECs by Self-Supply; and any other compliance measures that an LSE is authorized by law, regulation, or Regulatory Order to undertake for the purpose of satisfying an Annual LSE Obligation for the Offshore Wind Energy Standard.

“Public Service Commission” or “PSC” means the New York State Public Service Commission.

“Regulatory Order” means an order issued by a regulatory agency or authority of the State of New York, and includes orders issued by the PSC. Regulatory Order includes, by way of example only, the CES Order and any other order of the PSC that establishes, supplements, modifies, or clarifies standards, requirements, obligations, or procedures for implementation of the State Energy Plan or a State Energy Standard, including the CES.

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as authorized by the State in law, regulation, or Regulatory Order.

“Renewable Energy Standard” means the Renewable Energy Standard adopted by the State as may be amended from time to time.

“Renewable Energy Standard Compliance Measures” means the purchase of RECs from NYSERDA; the Authority’s procurement of RECs by Self-Supply; Alternative Compliance Payments to NYSERDA; and any other compliance measures that an LSE is authorized by law, regulation, or Regulatory Order to undertake for the purpose of satisfying an Annual LSE Obligation for the Renewable Energy Standard.

“Self-Supplied Credit Charge” means a supplemental per-Credit charge or adder that the Authority adds to the cost of any Credit that it procures by Self-Supply for the purpose of: (1) enabling the Authority to recover administrative costs that it incurs in connection with the Self-Supply of Credits; and (2) managing risk in the cost of Credits over the term of any contract that

serves as a source of Credits for Self-Supply, including but not limited to mitigating the extent of fluctuations in the cost of Credits that the Authority procures through Self-Supply.

“Self-Supplied Credit Cost” means the annual average per-Credit cost that the Authority establishes pursuant to Section II.3.b of this Schedule E for any Credit that it procures by Self-Supply for the purpose of complying with any Annual LSE Obligation applicable to a State Energy Standard.

“Self-Supply” means the Authority’s procurement of Credits from a source other than NYSERDA.

“State” means the State of New York.

“State Energy Plan” means the 2015 New York State Energy Plan as amended from time to time.

“State Energy Standard” refers to any standard or requirement that is adopted by the State in law, regulation, or Regulatory Order for the purpose of implementing State energy and environmental goals or policies, including goals and policies set forth in the State Energy Plan, that applies to the Authority, or with which the Authority determines it will comply in implementing its business and/or power supply programs. For purposes of this Agreement, State Energy Standard includes the Clean Energy Standard, Renewable Energy Standard, Zero Emission Credit Requirement, Offshore Wind Energy Standard, and any other standard or requirement adopted by the State in law, regulation, or Regulatory Order that applies to the Authority, or with which the Authority determines it will comply, in implementing its business and/or power supply programs.

“Total Monthly CE Compliance Costs” has the meaning provided in Section II.3.c of this Schedule E.

“Total Monthly RNY Load” has the meaning provided in Section II.3.c of this Schedule E.

“Zero Emission Credit” or “ZEC” refers to a Zero Emission Credit as authorized by the State in law, regulation, or Regulatory Order.

“Zero Emission Credit Requirement” means the Zero Emission Credit Requirement adopted by the State as may be amended from time to time.

“Zero Emission Credit Requirement Compliance Measures” means the purchase of ZECs from NYSERDA; and any other compliance measures that an LSE is authorized by law, regulation, or Regulatory Order to undertake for the purpose of satisfying an Annual LSE Obligation for the Zero Emission Credit Requirement.

II. MONTHLY CLEAN ENERGY IMPLEMENTATION CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of Service Tariff No. RNY-2B or the Rules, the Customer shall be subject to a Monthly Clean Energy Implementation Charge as provided in this Schedule E. The Monthly Clean Energy Implementation Charge is in addition to all other charges, fees and assessments provided in the Agreement, Service Tariff No. RNY-2B and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly Clean Energy Implementation Charge.
2. The Monthly Clean Energy Implementation Charge is part of a compliance program (“Compliance Program”) that the Authority has adopted for the purpose of administering the RNY Power program in a manner that is consistent with the State Energy Plan, the CES, and other applicable State Energy Standards. Pursuant to the Compliance Program, the Authority will support the preservation of at risk nuclear zero emission attributes, and support the development of renewable energy resources to serve its RNY Power program customers, through the implementation of various Clean Energy Compliance Measures that the Authority in its discretion determines are appropriate to enable the Authority to meet Annual LSE Obligations that have been established for each State Energy Standard that applies to the Authority, or with which the Authority determines it will comply in implementing its business and/or power supply programs. The purpose of the Monthly Clean Energy Implementation Charge is to enable the Authority to recover costs and other charges as described herein that the Authority incurs for implementing Clean Energy Compliance Measures.
3. The Monthly Clean Energy Implementation Charge will be determined and assessed as follows:
 - a. The Authority will, each calendar year, implement such Clean Energy Compliance Measures as the Authority determines in its discretion to be appropriate to meet the Annual LSE Obligation established for each State Energy Standard with respect to the load that the Authority serves under the RNY Power program, including the Renewable Energy Standard, Zero Emission Credit Requirement and Offshore Wind Energy Standard. The specific Clean Energy Compliance Measures that the Authority determines to use, and the amount or extent of each Clean Energy Compliance Measure taken in any calendar year to meet each Annual LSE Obligation shall be within the Authority’s sole discretion.
 - b. The Authority will, for each calendar year, establish a Self-Supplied Credit Cost for any Credits that it procures through Self-Supply that it will use to meet the applicable Annual LSE Obligation for each State Energy Standard for the calendar year. The Authority may, in its discretion, for any quarter in any calendar year, revise any such Self-Supplied Credit Cost established pursuant to this Section II.3.b for the purpose of addressing unanticipated circumstances that impact or that the Authority reasonably believes could impact the Authority’s costs and risk exposure regarding Self-Supply. Any Self-Supplied Credit Cost so revised shall apply prospectively.

- c. The Authority will, for each month of each calendar year in which it incurs costs for Clean Energy Compliance Measures, calculate the total costs that the Authority has incurred or estimates that it will incur for implementing the Clean Energy Compliance Measures (“Total Monthly CE Compliance Costs”) for the purpose of meeting each Annual LSE Obligation for the total RNY Power kilowatt-hour load for such month (“Total Monthly RNY Load”). The Authority may calculate Total Monthly CE Compliance Costs on the basis of forecasts of the Total Monthly RNY Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly RNY Load that the Authority served for the month.
 - d. Each month, the Authority will calculate a Monthly Clean Energy Implementation Charge applicable to the Customer. The Monthly Clean Energy Implementation Charge will represent the Customer’s share of the Total Monthly CE Compliance Costs assigned to the Total Monthly RNY Load assessed as the proportion of the Customer’s total kilowatt-hour load served by the Authority for such month to the Total Monthly RNY Load served by the Authority for such month.
- 4. The Authority may, in its discretion, include the Monthly Clean Energy Implementation Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly Clean Energy Implementation Charge pursuant to another Authority-established procedure. In any case, the bill will indicate the amount of the Monthly Clean Energy Implementation Charge that is attributable to compliance with each Annual LSE Obligation.
 - 5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly Clean Energy Implementation Charge, conduct a reconciliation process based on the actual costs it incurred for Clean Energy Compliance Measures taken (other than Credits procured through Self-Supply), and the actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Monthly Clean Energy Implementation Charge 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 as provided for in 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 Clean Energy Compliance Measures for the year in which such Electric Service for the Customer is commenced, and as a result the Customer’s load cannot be accounted for in such Clean Energy Compliance Measures, the Authority may in its discretion implement one or more separate Clean Energy Compliance Measures with respect to the Customer’s load for the calendar year in order to meet the Annual LSE Obligation for Customer’s load for the year, and bill the Customer for the costs associated with such separate Clean Energy Compliance Measures.

7. Nothing in this Schedule E 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. RNY-2B or the Rules.

III. ALTERNATIVE CES COMPLIANCE PROGRAM

Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for alternative arrangements to enable the Authority to meet any Annual LSE Obligation with respect to the Customer's allocation, including alternative compliance programs and cost allocation mechanisms, in lieu of the Monthly Clean Energy Implementation Charge established in this Schedule E.



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

**Wholesale Schedule of Rates Relating to Sale of Recharge New
York Power**

**Service Tariff No. RNY-2B
(Griffiss Business and Technology Park)**

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Wholesale Schedule of Rates Relating to Sale of Recharge New York Power

I. Applicability

To the wholesale sale of Recharge New York Power to the Customer for firm Electric Service.

II. Definitions and Abbreviations

Accepted Allocation: This term has the meaning provided for in the Agreement.

Adjusted Energy Usage: This term has the meaning provided for in Section IV.D.3 of this Service Tariff.

Agreement: An executed agreement between the Authority, Customer and Utility setting forth among other things, the terms and conditions applicable to the (i) allocation and sale of RNY Power to the Customer, and (ii) resale of RNY Power to Eligible End Users, including specifically the agreement entitled “Agreement for the Sale of Recharge New York Power and Energy at Wholesale (GUSC Energy Inc. and Griffiss Utility Services Corporation)”.

Authority: The Power Authority of the State of New York (also known as the “New York Power Authority” and “NYPA”) as further described in the Agreement.

Awarded Allocation: This term has the meaning provided for in the Agreement.

Billing Demand: This term has the meaning provided for in Section IV.D.1 of this Service Tariff.

Billing Energy: This term has the meaning provided for in Section IV.D.2 of this Service Tariff.

Billing Period: Any period of approximately thirty (30) days, generally ending with the last day of each calendar month.

Contract Demand: The amount of RNY Power, not to exceed the Customer’s Accepted Allocation, allocated to the Customer which the Customer agrees to take and pay for in accordance with the Agreement and this Service Tariff.

Customer: GUSC Energy Inc., as further described in the Agreement.

Energy Charge Adjustment or **ECA**: This term has the meaning provided for in Section III.H of this Service Tariff.

EDL: New York Economic Development Law.

Electric Service: Firm Power and Firm Energy associated with the Accepted Allocation and sold to the Customer in accordance with the provisions of the Agreement, this Service Tariff and the Rules.

Eligible End User: This term has the meaning provided for in the Agreement.

Estimated Demand: This term has the meaning provided for in Section III.G of this Service Tariff.

Estimated Load Factor or **ELF:** The highest Load Factor for the Facility of the Load Factors for the three Billing Periods immediately preceding the relevant Billing Period, provided that if the Authority does not know the Load Factors for each such Billing Period, the Estimated Load Factor shall be the highest Load Factor of the Load Factors for the three months immediately preceding the relevant Billing Period for which the Authority has such Load Factor information.

Facility: The location specified in the Agreement that will receive or is receiving the Accepted Allocation.

Facility Meter: The Facility electric meter that is used by the Local Electric Utility to measure demand and energy usage at the Facility.

Firm Energy: Firm Hydro Energy and Firm Market Energy (kWh) associated with Firm Power.

Firm Hydro Energy: Firm energy (kWh) associated with Firm Hydro Power.

Firm Hydro Power: Capacity (kW) that is intended to be always available from the Hydro Project subject to the curtailment provisions set forth in this Service Tariff and the Agreement. Firm Hydro Power does not include peaking power.

Firm Market Energy: Firm energy (kWh) associated with Firm Market Power supplied by Authority to the Customer.

Firm Market Power: Capacity (kW) that is intended to be always available from market sources and/or the Authority's non-Hydro Project-based resources as determined to be available for such use by the Authority.

Firm Power: Firm RNY Hydro Power and Firm RNY Market Power.

Hydro Project: The Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000 and/or the Authority's Niagara Power Project, FERC Project No. 2216.

ICAP: This term has the meaning provided for in the Agreement.

kW: kilowatt(s)

kWh: kilowatt-hour(s)

Load Factor: A percentage, calculated by dividing the total metered energy usage for the Facility for a Billing Period (measured in kWh), by the product of (i) the Facility's maximum metered demand for such time period (measured in kW) and (ii) the number of hours in such time period.

Local Electric Utility: This term has the meaning provided for in the Agreement.

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

Maximum Metered Demand: The highest 30-minute integrated interval demand during each Billing Period recorded on the Facility Meter, inclusive of losses.

Minimum Demand Charge: This term has the meaning provided for in Section III.C.1 of this Service Tariff.

Monthly Base Rate Components: This term has the meaning provided for in Section III.B of this Service Tariff.

New Charges: This term has the meaning provided for in Section III.E of this Service Tariff.

NYISO: New York Independent System Operator, Inc. or any successor organization.

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

NYISO Tariffs: The NYISO OATT, the NYISO Market Administration and Control Area Services Tariff, as such tariffs are amended and in effect from time to time.

OATT: NYISO Open Access Transmission Tariff.

Other Charges: This term has the meaning provided for in Section III.C of this Service Tariff.

PAL: New York Public Authorities Law.

PRAP: This term has the meaning provided for in Section III.J of this Service Tariff.

Preservation Power Rate: The rate the Authority charges for Preservation Power as provided for in the PP Service Tariff.

PP Service Tariff: The Authority's service tariff denominated as "Schedule of Rates for Sale of Firm Power to Preservation Power Customers (Local Electric Utility Delivery), Service Tariff No. 20" as of December 1, 2019, as amended from time to time by the Authority, and any successor thereto.

Rate Year or **RY**: The July Billing Period through the June Billing Period of the following year.

RNY: Recharge New York.

Recharge New York Power or **RNY Power**: Firm Power and Firm Energy the Authority is authorized to allocate and sell in accordance with PAL § 1005(13-a) and EDL § 188-a.

RNY Blended Customer: The Customer, if it has elected to accept and purchase RNY Hydropower and RNY Market Power from the Authority. In such case, the Customer's Accepted Allocation shall be comprised of 50 percent RNY Hydropower and 50 percent RNY Market Power.

RNY Hydro Customer: The Customer, if it has elected to accept and purchase only RNY Hydropower from the Authority. In such case, the Customer's Accepted Allocation shall be equal to 50 percent of the Awarded Allocation and consist solely of RNY Hydropower.

RNY Hydropower: This term has the meaning provided for in the Agreement.

RNY ICAP: This term has the meaning provided for in the Agreement.

RNY Market Power: This term has the meaning provided for in the Agreement.

Rules: This term has the meaning provided for in the Agreement.

Service Tariff: This service tariff, denominated as "Wholesale Schedule of Rates Relating to Sale of Recharge New York Power, Service Tariff No. RNY-2B (Griffiss Business and Technology Park)" as amended from time to time by the Authority.

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

Takedown: The portion of the Accepted Allocation the Customer requests to be scheduled for a specific period as provided for in the Agreement.

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

UCAP: Unforced Capacity as defined in the NYISO Market Administration and Control Area Services Tariff.

Utility: Griffiss Utility Services Corporation, as further described in the Agreement.

Zone: The geographical region within New York State in which the Facility is located (sometimes referred to as "load zone" or "energy region"), as designated by the NYISO and identified by letter that is used to facilitate energy transactions and administration of the State's power grid.

Additional terms may be 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. If not defined herein or in the Agreement, any such capitalized terms and abbreviations shall have the meaning ascribed to them in the NYISO Tariffs, if any, unless the context requires otherwise.

III. **Monthly Base Rates and Related Matters**

A. **Monthly Base Rates**

Subject to the Agreement and the other provisions of this Service Tariff, the monthly base rates that the Authority will charge to the Customer are as follows:

RNY Hydro Customer		
Zone	Billing Demand (\$/kW)	Billing Energy (\$/kWh)
E	8.01	0.01368

RNY Blended Customer		
Zone	Billing Demand (\$/kW)	Billing Energy (\$/kWh)
E	4.01	0.02357

B. **Monthly Base Rates and Base Rate Components**

The monthly base rates for a RNY Hydro Customer as referenced in Section III.A above consist of the Preservation Power Rate (*i.e.*, Billing Demand and Billing Energy components). The Preservation Power Rate is established in accordance with Section III.A of the PP Service Tariff. With respect to a RNY Hydro Customer, the Preservation Power Rate currently is inclusive of costs associated with RNY ICAP that the Authority will provide in accordance with this Service Tariff and the Agreement.

The monthly base rates for a RNY Blended Customer as referenced in Section III.A above consist of the following components which are further described below: (1) Preservation Power Price Component; (2) Capacity Component, and (3) Market Energy Component (collectively, the “Monthly Base Rate Components”).

The following is a description of the Monthly Base Rate Components:

Preservation Power Price Component

This component consists of the rate the Authority charges for Preservation Power as established in accordance with Section III.A of the Authority’s PP Service Tariff.

Capacity Component

This component consists of the Authority’s estimated costs to meet the NYISO’s capacity requirements with respect to the Accepted Allocation. This is currently expressed by the NYISO as the UCAP equivalent of the applicable Installed Capacity or “ICAP” obligation. The ICAP obligation is inclusive of any adjustments for reserves needed to meet the installed reserve margin as required by the NYISO.

For a RNY Hydro Customer load, capacity will be secured through the Hydro Project.

For a RNY Blended Customer load, capacity will be secured through a combination of sources consisting of the Hydro Project, bilateral contracts, NYISO auctions, or any other means as determined to be most appropriate by the Authority in its sole discretion.

Market Energy Component

This component, applicable to monthly base rates for an RNY Blended Customer, reflects the Authority's forecast of prices for market purchases to be made by Authority on behalf of the Customer based on current and anticipated market conditions. The Authority intends to procure RNY Market Power using short and long-term purchases, including purchases from the NYISO Day-Ahead Market and/or Real-Time Market (each term as provided for in the NYISO Tariffs), and through requests for proposals to the extent the Authority deems them appropriate. Financial hedging instruments may be used for the purposes of mitigating the risk in price movements. The Authority will include the costs of any financial products used to hedge these purchases. Purchases of RNY Market Power will be made in whichever portfolio combination the Authority deems to be appropriate in its sole discretion.

Bad Debt Risk

This component accounts for risk of loss to the Authority from bad debt associated with the sale of RNY Power across the RNY Power program.

C. Other Charges

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

1. Minimum Demand Charge

The Customer shall be subject to a monthly Minimum Demand Charge calculated as follows: If in any given Billing Period the Customer's Maximum Metered Demand (as calculated and apportioned to the Accepted Allocation in accordance with Section IV.D.1 of this Service Tariff) is less than 75 percent of its Contract Demand, a Minimum Demand Charge equal to 75 percent of the Customer's Contract Demand (or if the Takedown is less than the Contract Demand, 75 percent of the Takedown), multiplied by the applicable Billing Demand rate, as set forth in Section III.A of this Service Tariff, shall apply for that Billing Period. Such Minimum Demand Charge shall be in addition to all other charges provided for in this Service Tariff, including but not limited to Billing Energy and other 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") in connection with the transactions provided for in the Agreement if and to the extent such Taxes are not recovered by the Authority pursuant to another provision of this Service Tariff, except to the extent that Customer is exempt from any such Taxes and has provided evidence, reasonably acceptable to the Authority, to demonstrate such exemption.

3. Curtailments and Substitute Energy

Firm Hydro Power and Firm Hydro Energy are subject to curtailment as provided for in the Agreement and Section IV.B 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.B of this Service Tariff.

4. Local Electric Utility Charges

The Customer shall reimburse the Authority for all charges, assessments, fees and other amounts, if any, the Local Electric Utility imposes on the Authority in any way related to the provision of data and other information the Authority requires from the Local Electric Utility in connection with providing Electric Service to the Customer. In the event that the Local Electric Utility seeks to impose any such charges, assessments, fees and other amounts on the Authority for the provision of data and other information required by the Authority in order to provide Electric Service to the Customer, the Authority shall provide prior notice thereof to the Customer, and the Customer and the Authority will discuss (i) the nature and amount of such charges, assessments, fees and other amounts, and (ii) whether there are alternative means for obtaining and providing such required data and information which are acceptable to the Parties, provided that no Party shall be required to agree to any alternative means for obtaining and providing such required data and information.

5. Monthly Clean Energy Implementation Charge

The Customer shall be subject to a Monthly Clean Energy Implementation Charge to the extent such Charge becomes applicable in accordance with the Agreement.

D. NYISO Charges

The Customer shall be responsible for payment of any and all charges, assessments, fees and other amounts in any way related to the sale, delivery and transmission of power and energy sold to the Customer under this Service Tariff and the Agreement that are imposed by the NYISO for services provided by the NYISO pursuant to NYISO Tariffs, NYISO manuals and NYISO procedures in any way related to the Electric Service sold to the Customer under the Agreement (“NYISO Charges”). Although the Authority is not serving as the LSE for any of the power or energy that is sold to the Customer under this Service Tariff and the Agreement, should the Authority for any reason incur any such NYISO Charges, the Customer shall reimburse the Authority for all such NYISO Charges.

E. New Charges

The Customer shall be responsible for payment of any and all new costs or charges incurred by the Authority in connection with its provision of Electric Service to the Customer, including but not limited to, charges and costs incurred for supplying RNY Hydro Power and/or RNY Market Power, and any 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 applicable monthly base rate or the Energy Charge Adjustment, or bill the Customer separately for such New Charges.

F. Delivery Charges

Unless otherwise agreed to by the Authority in writing, the Customer shall be solely responsible for paying the Local Electric Utility for all charges levied by the Local Electric Utility relating to the delivery or transmission of power and energy to the Facility. Should the Authority incur any such charges from the Local Electric Utility, the Customer shall reimburse the Authority for all such charges.

G. Estimated Demand

If the Authority, in its sole discretion, determines that it lacks reliable data on the Customer's actual demand 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 which includes a charge for estimated demand ("Estimated Demand").

For the purpose of calculating a Billing Demand charge for Estimated Demand, such Billing Demand charge will be calculated based on the Customer's Contract Demand (or, if applicable and less than the Contract Demand, the Takedown [kW]) amount for the Billing Period.

If data indicating the Customer's actual demand for any Billing Period in which a bill was rendered that included Estimated Demand is subsequently provided to the Authority, the Authority will make necessary adjustments to the corresponding bill in accordance with Section III.I of this Service Tariff and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The provisions of Section IV.E of this Service Tariff shall apply to bills containing an Estimated Demand charge.

The Authority's discretion to render a bill containing an Estimated Demand charge is not intended to limit the Authority's rights under the Agreement or otherwise regarding Metering Arrangements.

H. Energy Charge Adjustment

As described above in Section III.B of this Service Tariff, one or more of the Monthly Base Rate Components may be based on estimates or forecasts made by the Authority. Charges to the Customer shall be subject to an Energy Charge Adjustment process ("ECA") administered by the Authority. Pursuant to the ECA, charges for Electric Service shall be subject to adjustment (*i.e.*, increase or decrease) when the Authority determines that actual costs vary from the estimates used by the Authority to formulate the Monthly Base Rate Components.

I. 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.

J. Periodic Rate Adjustment Process

Monthly base rates for a RNY Hydro Customer and RNY Blended Customer as set forth in Section III.A of this Service Tariff, including the Monthly Base Rate Components listed in Section III.B of this Service Tariff, shall be subject to adjustment in accordance with a Periodic Rate Adjustment Process (“PRAP”) that will establish new monthly base rates for the Customer. It is anticipated that PRAP will occur annually and establish new rates that will be effective beginning on the first day of the next succeeding Rate Year, provided however, the Authority may conduct the PRAP more or less frequently to establish new rates with a different effective date as determined to be advisable by the Authority considering market conditions and other appropriate factors.

As provided for in Section III.B of this Service Tariff, the Preservation Power Price Component of the RNY Hydro Customer and RNY Blended Customer rates is based on the Preservation Power Rate as established in accordance with Section III.A of the PP Service Tariff. The Preservation Power Rate has been established for the period through June 2014. Commencing with the Rate Year beginning July 2014, and for each rate year thereafter, the Preservation Power Rate is subject to an Annual Adjustment Factor as provided for in Sections V.A.1, V.A.2, V.A.4 and V.B of the PP Service Tariff.

Unless the Authority determines such notice to be impracticable, the Authority will provide the Customer with at least thirty (30) days written notice of any adjustment of the rates made in accordance with the PRAP.

IV. General Provisions

A. Character of Service

Alternating current; sixty cycles, three-phase.

B. Scheduling; Availability of Energy and Power

1. Subject to Section IV.B.2 of this Service Tariff, in each Billing Period the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, schedule and provide to the Customer Firm Energy associated with Firm Power in an amount equal to the product of: (i) Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for the Billing Period; (ii) the number of hours in the Billing Period; and (iii) Estimated Load Factor. Such Firm Energy shall be scheduled to the load bus established by the NYISO for the Facility (*i.e.*, PTID 305782 [GUSC_NM_MOHAWKVY] or any successor load bus thereto established by the NYISO).

Subject to Section IV.B.2 of this Service Tariff, with respect to each month in which Electric Service is provided to the Customer by the Authority, the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, ensure that it does not schedule to the Customer in any hour more energy than the lesser of Customer's load in such hour, or Customer's Contract Demand (or, if applicable and less than the Contract Demand, the Takedown).

With respect to each month in which Electric Service is provided to the Customer by the Authority, the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, schedule and provide RNY ICAP in an amount equal to the applicable value calculated pursuant to the Agreement.

The Customer and Authority shall reasonably cooperate and coordinate, as necessary, to effectuate the required scheduling and provision of Firm Energy and Firm Power as required by this Service Tariff and the Agreement. The Authority acknowledges and agrees that the Customer may, from time to time, utilize the services of a third party agent, authorized by the NYISO, to assist the Customer with respect to such scheduling activities. In the event that Customer appoints such a third party agent, the Authority shall reasonably cooperate and coordinate with such agent, and the Customer shall ensure that its agent reasonably cooperates and coordinates with the Authority, in the same manner as the Parties are required to cooperate in connection with such scheduling activities.

2. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Project to supply the full power and/or energy requirements of the Authority's firm power customers served from the Hydro Project, curtailments in the amount of Firm Power and Firm Energy to which the Customer is entitled as RNY Hydropower under this Service Tariff and the Agreement will be applied on a pro rata basis to all firm power and firm energy customers served by the Hydro Project. Reductions as a percentage of the otherwise required firm power and firm energy sales will be the same for all firm power and firm energy customers served by the Hydro Project. The provision of RNY Market Power, if any, sold to the Customer by the Authority is not subject to curtailment.

3. The Authority will provide Substitute Energy to the Customer to replace the RNY Hydropower that would otherwise have been supplied under the Agreement but for the curtailment. For each kilowatt-hour of Substitute Energy supplied by the Authority, the Customer shall pay the Authority directly for: (a) the market cost of the Substitute Energy; and (b) all costs the Authority incurs in connection with the provision of Substitute Energy.
4. The Authority will give the Customer advance notice of forecasted Firm Power and Firm Energy curtailments which will advise the Customer of the forecasted shortfall of Firm Power and Firm 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 RNY Hydropower.

C. Delivery of RNY Power

The Customer's Local Electric Utility will deliver RNY Power to the Facility. The Authority has no responsibility for delivering any RNY Power to the Facility.

For the purpose of this Service Tariff, Firm Power and Firm Energy will be deemed to be offered when the Authority is able to supply Firm Power and Firm Energy to the Customer's NYISO-designated load bus (*i.e.*, PTID 305782 [GUSC_NM_MOHAWKVY] or any successor load bus thereto established by the NYISO). If despite such offer, there is a failure of delivery caused by the Customer, the Utility, the NYISO, or the Local Electric Utility, such failure will not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules.

D. Billing and Billing Methodology

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

1. Billing Demand. The Billing Demand to be charged to the Customer each Billing Period will equal an amount calculated by apportioning a share of the Maximum Metered Demand for the Billing Period to the Accepted Allocation. The Authority will calculate and apportion Maximum Metered Demand for the Customer's Accepted Allocation for each Billing Period as follows:
 - A. If the Customer's Maximum Metered Demand for the Billing Period equals or is greater than its Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for such Billing Period, the Maximum Metered Demand that will be apportioned to the Accepted Allocation will equal the amount of the Customer's Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for such Billing Period.

- B. If the Customer's Maximum Metered Demand for the Billing Period is less than its Contract Demand (or, if applicable and less than the Contract Demand, the Takedown) for such Billing Period, the Maximum Metered Demand that will be apportioned to the Accepted Allocation will equal the amount of the Maximum Metered Demand for the Billing Period.

The Customer's Billing Demand each Billing Period will be subject to Section III.C.1 of this Service Tariff.

The Billing Demand for any Billing Period will not exceed the Contract Demand (or, if applicable and less than the Contract Demand, the Takedown).

2. Billing Energy. The Billing Energy to be charged to the Customer each Billing Period will equal the amount of energy scheduled for that Billing Period in accordance with Section IV.B.1 of this Service Tariff.
3. Reconciliation of Adjusted Energy Usage and Billing Energy; Additional Charges.

In any Billing Period in which the Customer's Adjusted Energy Usage is less than the amount of Firm Energy scheduled in accordance with this Service Tariff and the Agreement (hereinafter referred to as an "Under Consumption"), the Authority will bill the Customer and the Customer will pay an additional charge (*i.e.*, in addition to any other amounts due under this Service Tariff and the Agreement) in an amount equal to the amount of the Under Consumption (measured in kWh) multiplied by the positive difference, if any, between (i) the average of the applicable NYISO Real-Time Market Locational Based Marginal Price for the Zone for the Billing Period and (ii) the monthly base rate for Billing Energy applicable to the Customer under Section III.A of this Service Tariff.

For purposes of this provision, "Adjusted Energy Usage" means the product of (i) the Contract Demand (or, if applicable and less than the Contract Demand, the Takedown), (ii) the Load Factor for the Billing Period, and (iii) the number of hours in the Billing Period (*i.e.*, $\text{Adjusted Energy Usage (kWh)} = \text{Contract Demand [or, if applicable and less than the Contract Demand, the Takedown] (kW)} \times \text{Load Factor for the Billing Period (a percentage)} \times \text{hours in the Billing Period}$).

The Authority will perform reconciliations for each Billing Period in accordance with this Section after the Authority obtains actual metered demand and energy data recorded on the Facility Meter from the Local Electric Utility or as otherwise provided for in the Agreement.

E. Rendition and Payment of Bills

1. The Authority will bill the Customer for Electric Service on a regular basis and expects to render bills on or about the fifteenth (15th) business day of the month for charges due for the previous Billing Period and any other amounts due and owing. The Authority's bills are subject to adjustment as provided for in the Agreement, this Service Tariff, 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 within twenty (20) days of the date the Authority renders 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 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.
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 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 sole discretion to suspend Electric Service to the Customer or terminate this Agreement.

F. 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 or the Rules and any provisions of the Agreement, the provisions of the Agreement will govern.

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "4c i-A"
September 25, 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>
COMMERCIAL OPERATIONS - FUEL PLANNING & OPERATIONS	SAYBOLT LP Houston, TX (HQ) Linden, NJ (Branch Office) (QFS-2019-11)	01/20/20	Provide for independent petroleum inspection and other related services	01/19/23	B/S			\$ 50,000*
							*Note: represents total for up to 3-year term	
COMMERCIAL OPERATIONS - PROGRAM OPERATIONS	J.D. POWER Westlake Village, CA (4500312014)	08/30/19	Provide the Voice of Customer (VoC) Platform and Program Support	08/29/24	B/P	\$200,000		\$ 1,673,329*
							*Note: represents total for up to 5-year term including an interim value of \$200,000	
HUMAN RESOURCES & ADMINISTRATION - ORGANIZATIONAL DEVELOPMENT	Q19-6624RM; 3 Awards 1. DELOITTE CONSULTING LLP Hermitage, TN 2. FTI CONSULTING, INC. New York, NY 3. STRATEGY MUSE, INC. Los Angeles, CA	09/25/19 (on or about)	Provide Change Management Employee Value Proposition consulting services	09/24/24	B/P			\$ 2 million*
							*Note: represents total aggregate value for up to 5-year term	
INFORMATION TECHNOLOGY - SERVICE DELIVERY	INFORMATION TECHNOLOGY CORPORATION OF THE TRI-STATES Paramus, NJ (Q19-6674TB)	09/25/19 (on or about)	Provide Apple Desktop Support Services	09/24/22	B/S			\$ 266,868*
							*Note: represents total for up to 3-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

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "4c i-A"
September 25, 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 - ENVIRONMENTAL, HEALTH & SAFETY	Q19-6730CC; 2 Awards 1. BUFFALO ENVIRONMENTAL CONSULTANTS, INC. dba AFI ENVIRONMENTAL Niagara Falls, NY 2. COLDEN CORPORATION Blue Bell, PA	09/25/19 (on or about)	Provide consulting for hygiene occupational health and safety	09/24/24	B/P			\$ 2.5 million*
							*Note: represents total aggregate value for up to 5-year term	
UTILITY OPERATIONS - FACILITY MANAGEMENT	Q19-6735JM; 2 Awards 1. BAYSIDE REFRIGERATION, INC. dba AIRLOGIX ♦ Astoria, NY 2. CAREY & WALSH, INC. Briarcliff Manor, NY	10/01/19	Provide on-call HVAC services for the Clarence D. Rappleyea building in White Plains	09/31/24	B/S			\$ 1.5 million*
							*Note: represents total aggregate value for up to 5-year term	
UTILITY OPERATIONS – PROJECT MANAGEMENT	FERGUSON ELECTRIC CONSTRUCTION COMPANY, INC. Buffalo, NY (4500312577)	08/26/19	Furnish, deliver and install the Emergency Diesel Generator for the Fan building, S&R building and the Lewiston Pump-Generating Plant	08/25/22	B/C	\$100,000		\$ 2,007,000*
							*Note: represents total for up to 3-year term including an interim value of \$100,000.	
UTILITY OPERATIONS – SMALL CLEAN POWER PLANTS – TULSA SENY	SISU ENERGY & ENVIRONMENTAL LLC Tulsa, OK (4500312788)	09/03/19	Provide Catalyst Engineering Services for the Small Clean Power Plants (SCPPs)	09/02/24	B/S	\$500,000		\$ 5 million*
							*Note: represents total for up to 5-year term including an interim value of \$500,000.	

♦ **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

Procurement (Services) and Other Contracts – Awards
(For Description of Contracts See "Discussion")

EXHIBIT "4c i-A"
September 25, 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 - TECHNOLOGY & INNOVATION - AGILE LAB	Q19-6632JGM; 2 Awards	09/25/19 (on or about)	Provide engineering support for the Advanced Grid Innovation Laboratory for Energy (AGILE) Lab	09/24/24	B/P			\$ 5 million*
	1. HATCH ASSOCIATES CONSULTANTS, INC. Amherst, NY							
	2. SNC LTD. Rochester, NY						*Note: represents total aggregate value for up to 5-year term	
UTILITY OPERATIONS – TECHNOLOGY & INNOVATION	EDM INTERNATIONAL, INC. Fort Collins, CO	04/01/20	Provide maintenance, on-site repair, satellite communication service and GridWatch web data hosting for five sagometers installed in critical locations on the Authority's NATL transmission line	03/31/25	S/S			\$ 116,250*
							*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) Contracts – Extensions and/or Additional Funding
(For Description of Contracts See "Discussion")

EXHIBIT "4c i-B"
September 25, 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>
COMMERCIAL OPERATIONS - BUSINESS DEVELOPMENT	THE CADMUS GROUP LLC Waltham, MA (4600003049)	09/29/15	Provide permit expediting services for the K-Solar program	09/10/20	B/P		\$ 405,950	\$ 1 million*
*Note: represents target value for the 5-year term, with no additional funding and 1-year extension requested								
COMMERCIAL OPERATIONS - BUSINESS DEVELOPMENT	U.S. GREEN BUILDING COUNCIL, NEW YORK CHAPTER DBA URBAN GREEN COUNCIL New York, NY (4500301092)	08/31/18	Operations and Maintenance Training and Coaching for the State University of New York (Brockport Workforce Development Program	08/30/20	B/P		\$ 33,000	\$ 33,000*
*Note: represents total value for the 2-year term, with no additional funding and 1-year extension requested								
COMMERCIAL OPERATIONS - BUSINESS DEVELOPMENT	O'BRIEN & GERE / DEWBERRY ENERGY SERVICES JOINT VENTURE Syracuse, NY (4500301917)	10/01/18	Operations and Maintenance Training and Coaching for the State University of New York (Brockport Workforce Development Program	09/09/20	B/P		\$ 56,000	\$ 175,000*
*Note: represents total value for the 23-month term, with no additional funding and 1-year extension requested								
COMMERCIAL OPERATIONS - ENGINEERING & CONSTRUCTION MANAGEMENT	MILLENIUM MAINTENANCE AND ELECTRICAL CONTRACTORS, INC. Brooklyn, NY (4500300477)	08/17/18	To upgrade the lighting equipment at the DCAS Crown Heights Health Center	08/16/20	B/C		\$ 33,665	\$ 33,665*
*Note: represents total value for 2-year term, with no additional funding and 1-year extension requested. Interim approval for the period from 08/17/19 thru 09/25/19 is also requested								
COMMERCIAL OPERATIONS - ENGINEERING & CONSTRUCTION MANAGEMENT	MILLENIUM MAINTENANCE AND ELECTRICAL CONTRACTORS, INC. Brooklyn, NY (4600003534)	10/16/18	To upgrade the lighting equipment at several New York City Police Department sites	10/15/20	B/C		\$ 130,203	\$ 214,100*
*Note: represents target value for 2-year term, with no additional funding and 1-year extension requested.								

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COMMERCIAL OPERATIONS - ENGINEERING & CONSTRUCTION MANAGEMENT	SOURCEONE, INC. (DE) Boston, MA (4600002639)	12/18/12	Provide energy auditing engineering and design, procurement and installation services, construction and trade management	12/31/22	B/C		\$11,189,180	\$40 million*
						*Note: represents target value for 10-year term, with no additional funding and 3-year extension requested		
COMMERCIAL OPERATIONS - ENGINEERING & CONSTRUCTION MANAGEMENT	THREETECH ELECTRIC, INC. Middle Village, NY (4500302206)	10/10/18	To upgrade the lighting equipment at the New York City Police Department's 77 th Precinct	10/09/20	B/C		\$ 76,200	\$ 76,200*
						*Note: represents target value for 2-year term, with no additional funding and 1-year extension requested.		
UTILITY OPERATIONS – FACILITY MANAGEMENT	MICHAEL BELLANTONI, INC. White Plains, NY (4600002864)	11/10/14	Provide snow removal services for NYPA's White Plains Office thru the 2019-2020 snow season	05/11/20	B/S		\$ 410,000	\$ 550,000*
						*Note: represents total for 5-year and 6-month term, with no additional funding and a 6-month extension requested		
UTILITY OPERATIONS – GENERAL MAINTENANCE	BARRETT PAVING MATERIALS, INC. Watertown, NY (4500299373)	08/13/18	To provide time for the completion of reconstruction work on the Hawkins Point Parking Lot Reconstruction Project	12/31/19	B/C		\$ 1,618,235	\$ 1,941,774*
						*Note: represents total for 1-year and 4.5-month term, with no additional funding and a 4.5-month extension requested. Interim approval for the period 08/13/19 thru 09/25/19 is also requested		
UTILITY OPERATIONS – PROJECT MANAGEMENT	BURNS & MCDONNELL CONSULTANTS, INC. dba BURNS & MCDONNELL CONSULTANTS P.C. Kansas City, MO (4500268363)	02/01/16	Provide engineering support for the Moses-Adirondack Smart Path Reliability Project	01/31/21	B/P		\$ 6,467,656	\$ 7,733,248*
						*Note: represents total for up to 5-year term, including additional funding request of \$1,007,800		

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UTILITY OPERATIONS – PROJECT MANAGEMENT	HARTMANN FINE ART CONSERVATION SERVICES, INC. Carlisle, PA (4500303086)	11/09/18	Provide removal, transportation and conservation for two Thomas Hart Benton murals and a wood-cut map located in the STL- FDR Power Project	05/08/20	B/C		\$ 99,079	\$ 116,077*
						*Note: represents total for up to 1-year and 6-month term, with no additional funding and a 6-month extension requested		
UTILITY OPERATIONS – PROJECT MANAGEMENT	BERGMANN ASSOCIATES, ARCHIECTS, ENGINEERS, LANDSCAPE ARCHITECTS & SURVEYORS D.P.C. Rochester, NY (4500301879)	09/28/18	Conduct assessment for the replacement of three roadway bridges within the limits of the Robert Moses Niagara Power Plant	09/27/20	B/P		\$ 399,151	\$ 711,100*
						*Note: represents total for 2-year term, with additional funding of \$300,000 and a 1-year extension requested		
UTILITY OPERATIONS – PROJECT MANAGEMENT	SCIPAR, INC. Williamsville, NY (4500301771)	10/01/18	Provide St. Lawrence Generator Control System (‘GCS’) Human-Machine Interface (‘HMI’) upgrade	09/30/20	B/S		\$110,307.26	\$ 650,000*
						*Note: represents total for up to 2-year, with no additional funding and a 1-year extension requested		

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POWER AUTHORITY OF THE STATE OF NEW YORK
ESTIMATED RECEIPTS AND EXPENDITURES
2019 TO 2023
ACTUAL RECEIPTS AND EXPENDITURES 2018

Exhibit - 4e i-A
September 25, 2019

2801 Report

	Last Year	Curent Year	Proposed	Proposed	Proposed	Proposed
	2018	2019	2020	2021	2022	2023
Revenue & Financial Sources						
Operating Revenues						
Charges for Services	\$ 2,670,478,090	\$ 2,435,482,856	\$ 2,527,465,081	\$ 2,617,021,501	\$ 2,690,091,599	\$ 2,805,544,339
Rentals & Financing Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Revenues						
Investment Earnings	\$ 19,176,307	\$ 28,662,847	\$ 29,059,207	\$ 27,845,518	\$ 28,105,434	\$ 30,632,309
State Subsidies / Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Subsidies / Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Municipal Subsidies / Grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Authority Subsidies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Non-Operating Revenues	\$ 149,571,787	\$ 212,793,624	\$ 386,309,994	\$ 240,782,857	\$ 323,188,102	\$ 406,577,472
Proceeds from the Issuance of Debt	\$ 102,772,000	\$ 305,000,000	\$ 283,086,119	\$ 397,191,303	\$ 247,168,927	\$ 141,359,933
Total Revenues & Financing Sources	\$ 2,941,998,184	\$ 2,981,939,327	\$ 3,225,920,401	\$ 3,282,841,179	\$ 3,288,554,062	\$ 3,384,114,053
Expenditures						
Operating Expenditures						
Salaries and Wages	\$ 241,070,837	\$ 220,690,528	\$ 224,737,626	\$ 230,870,711	\$ 237,045,533	\$ 243,561,365
Other Employee Benefits	\$ 117,547,690	\$ 121,668,690	\$ 123,088,050	\$ 125,732,098	\$ 128,521,236	\$ 131,402,794
Professional Services Contracts	\$ 108,799,112	\$ 48,156,075	\$ 51,729,075	\$ 53,023,538	\$ 54,356,835	\$ 55,730,131
Supplies and Materials	\$ 64,594,442	\$ 205,735,182	\$ 203,155,352	\$ 201,572,259	\$ 206,499,980	\$ 209,043,699
Other Operating Expenditures	\$ 1,932,072,830	\$ 1,620,566,562	\$ 1,656,876,569	\$ 1,686,335,836	\$ 1,715,635,260	\$ 1,791,501,211
Non-Operating Expenditures						
Payment of Principal on Bonds and Financing Arrangements	\$ 123,935,000	\$ 64,090,000	\$ 66,845,000	\$ 54,255,000	\$ 42,935,000	\$ 15,960,000
Interest and other Financing Charges	\$ 53,487,550	\$ 55,823,216	\$ 57,097,112	\$ 64,785,351	\$ 69,632,637	\$ 71,478,036
Subsidies to Other Public Authorities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Asset Outlay	\$ 460,271,406	\$ 773,106,705	\$ 849,424,163	\$ 978,593,554	\$ 875,124,943	\$ 702,534,272
Grants and Donations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Non-Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 3,101,778,867	\$ 3,109,836,958	\$ 3,232,952,947	\$ 3,395,168,347	\$ 3,329,751,424	\$ 3,221,211,508
Capital Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Excess (Deficiency) of Revenues and Capital Contributions over Expenditures	\$ (159,780,683)	\$ (127,897,631)	\$ (7,032,546)	\$ (112,327,168)	\$ (41,197,362)	\$ 162,902,545



President and CEO Report

Gil Quiniones

President & Chief Executive Officer

September 25, 2019

NYPA Overall Performance - July 2019

	YTD Target	YTD Actual
Maintain Infrastructure		
▲ Generation Market Readiness	97.40%	▲ 99.62%
▲ Transmission System Reliability	96.40%	▲ 96.98%
Financial Management		
▲ Debt Coverage Ratio (Q)	2.50	▲ 4.46
▲ O&M Budget Performance (\$M)	\$292.40	▲ \$287.21
Energy Services		
■ Greenhouse Gas (GHG) Saved (Tons)	20,964	■ 20,376
▲ Energy Efficiency Investment in State Facilities (\$M)	\$72.58	▲ \$83.46
Workforce Management		
▲ Skilled Workforce: Retention (Q)	1,044	▲ 1,347
Safety Leadership		
■ DART Rate	0.78	■ 0.98
Environmental Responsibility		
▲ Environmental Incidents	16	▲ 13

YTD Performance Measure Status

▲	Meeting or exceeding target
■	Missing target
●	Significantly missing target
◆	No updated data

Vision 2030 - Influencers

The convergence of three key drivers are transforming our economy



Progressive Clean Energy Policy

- Climate change imperative
- Climate Leadership and Community Protection Act (CLCPA)



Rapid Advancements in Technology

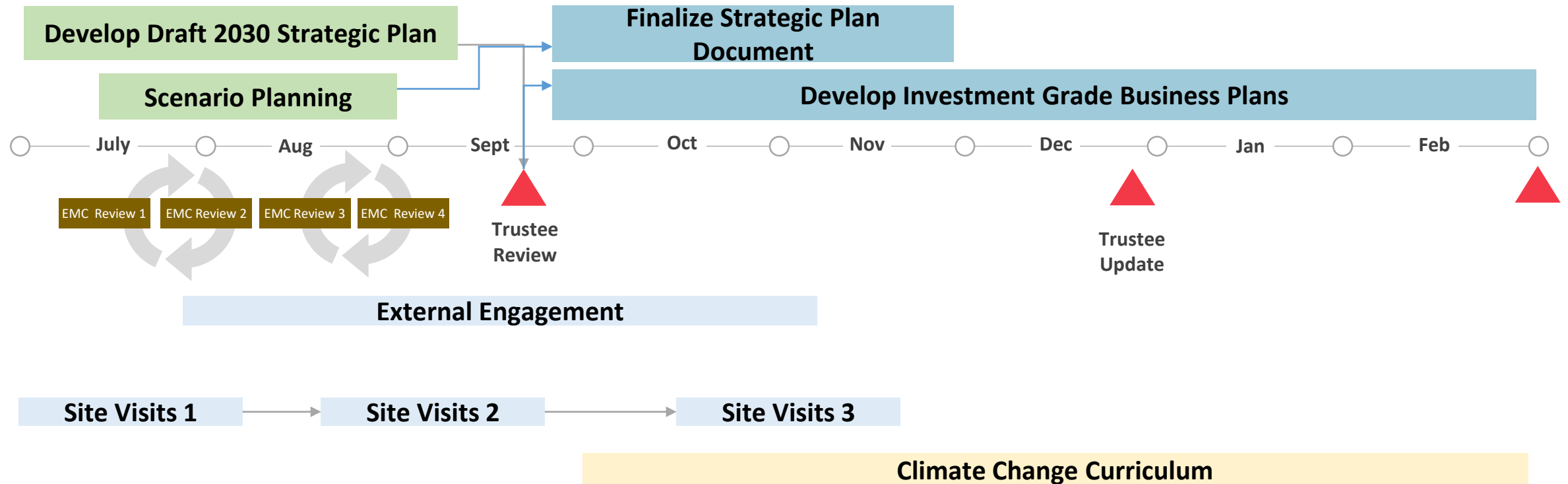
- Lowering costs of clean tech
- Data, analytics & platform technologies



Growing Consumer Interest in Sustainability

- Corporate and government sustainability targets
- Green energy job creation

Vision 2030 - Strategic Planning Process



Reimagine the Canals



Governor to Create Task Force to Recommend Best Ideas to Revitalize Canal Corridor

New Tugboat Named after Elizabeth Cady Stanton at Rochester Canal Opening

Governor Andrew M. Cuomo today announced a sweeping initiative to examine how the 195-year-old Erie Canal can be reimagined for the 21st century in an effort to boost local economies, inspire new opportunities for tourism and recreation, and strengthen environmental resiliency along the historic waterway. A key pillar of this initiative is the Governor's Reimagine the Canal Task Force.

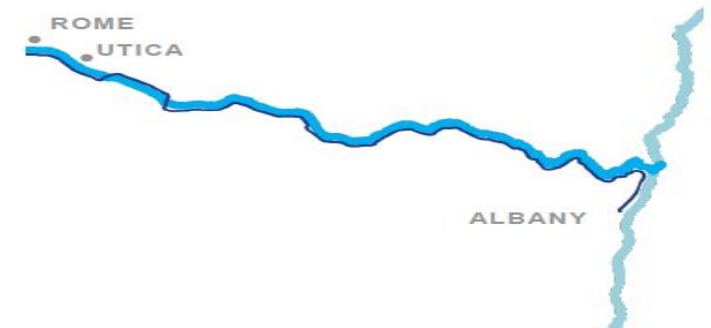
"The Erie Canal corridor is one of New York's most iconic assets and remains a key economic driver for the region and the state," **Governor Cuomo said.** "The Canal helped make New York the Empire State and this initiative will reimagine the canal and adapt it for new uses in upstate communities, furthering upstate New York's unprecedented growth."

Reimagine the Canals

TASK FORCE SUBCOMMITTEE STRUCTURE



-  Erie Canal
-  Empire State Trail
-  lakes and other waterbodies



Reimagine the Canals

TASK FORCE MEMBERS

Western New York (Buffalo to Rochester)

Bob Duffy (Co-Chair), Andy Beers, Ron Bierstine, John Courain, Bruce Van Hise, Jill Jedlicka, Robert King, Jeff Williams, David Wolfe

Central New York (Rochester to Rome)

Joanie Mahoney (Chair), Marie Cramer, Maureen Doyle, Chris Lajewski, Neil Murphy, Derrick Pratt, Bob Radliff

Mohawk Valley (Rome to Albany)

Joe Martens (Co-Chair), Mike Arcuri, David Buicko, Leslie Becraft-Corrigan, Robin Dropkin, John Garver, Stu Gruskin, Bill Nechamen, John Robinson

Ex-officio members (all subcommittees): NYS Canal Corporation, Department of Environmental Conservation, Empire State Development, NYS Office of Parks, Recreation and Historic Preservation, Department of Agriculture and Markets, Department of State



Reimagine the Canals

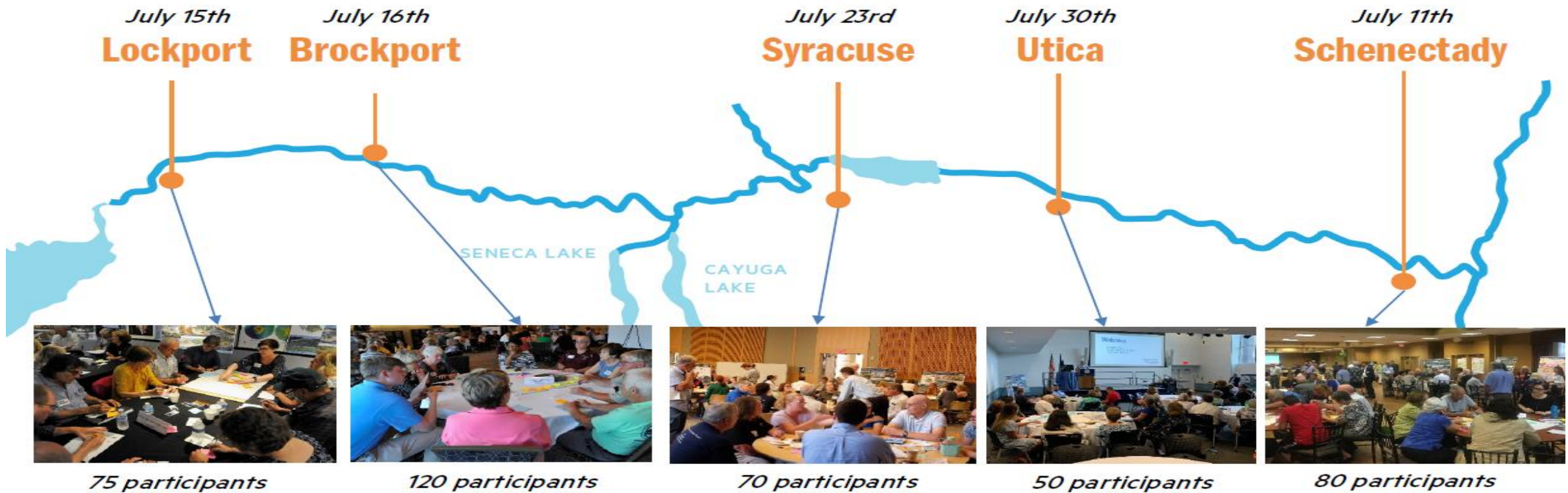
COMMUNITY OUTREACH

- A series of public workshops run by the Rockefeller Institute in July introduced *Reimagine* to the public and gathered input from Canal communities.
- A series of focus groups in September is being conducted with topical stakeholders, such as those working in agriculture or ecological conservation.
- An online platform is enabling all community members to submit feedback regardless of attendance.



Reimagine the Canals

COMMUNITY OUTREACH MEETINGS





**NY Power
Authority**

**Canal
Corporation**

Vision 2030

Update on NYPA's Strategic Planning Process

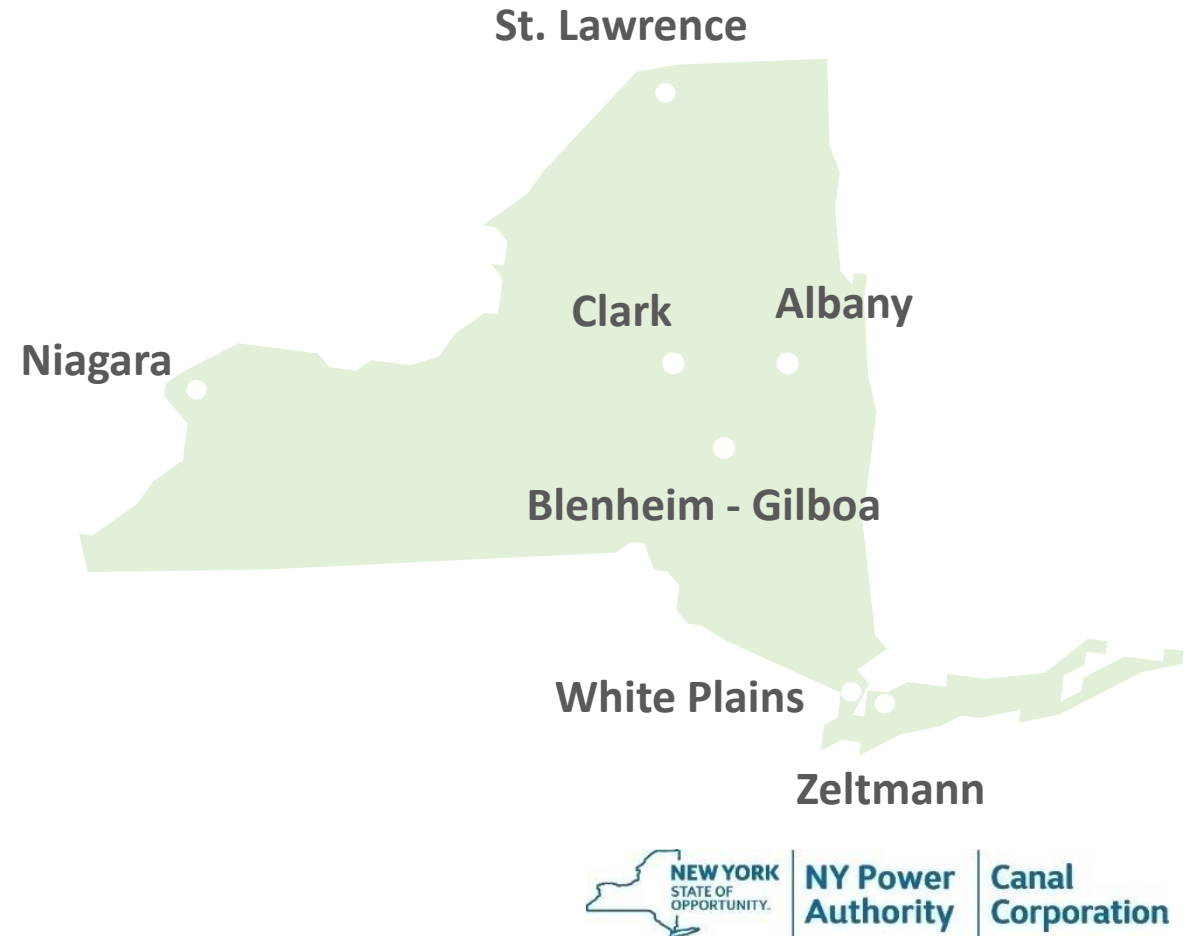
Doug McMahon

Vice President, Strategy

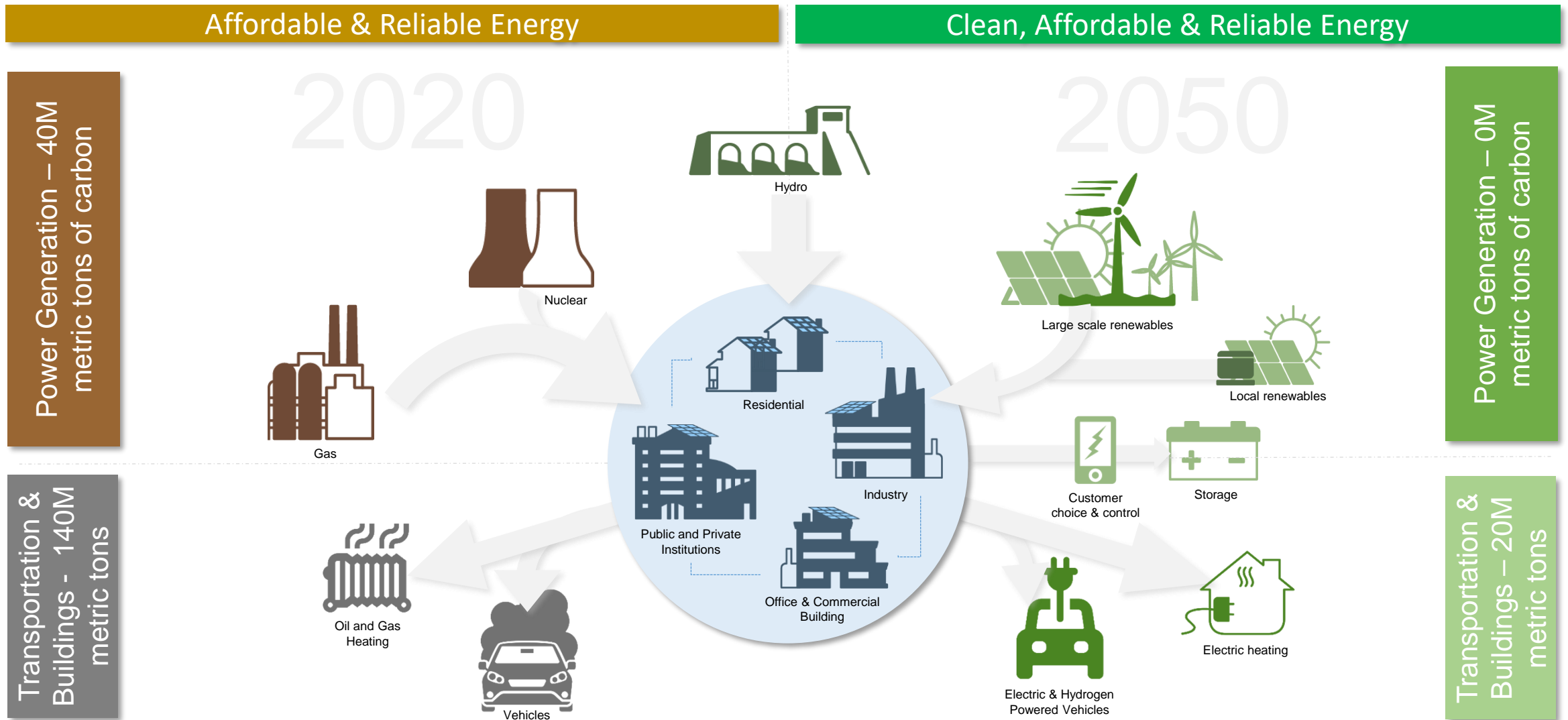
September 25, 2019

During the last six months, over 250 NYPA employees and outside subject matter experts provided guidance on the development of *Vision 2030*.

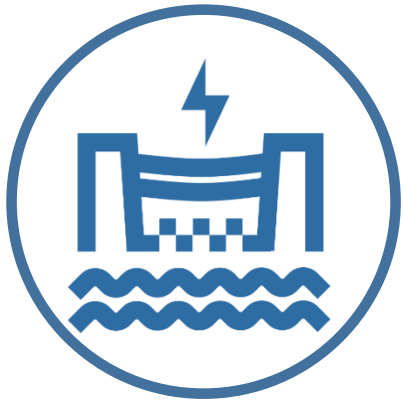
- Strategic planning workshops
- Two visits to each site
- EMC reviews
- External interviews
- Scenario planning exercise
- Working groups
- Business unit presentations



New York has put into law a set of clean energy targets that puts New York State on a path to carbon neutrality by 2050.



The decarbonized economy: NYPA is already using the clean electricity it generates to accelerate economic development in NY.



CLEAN POWER

20% of statewide electricity – over 80% of which is carbon free



\$ SAVED

\$226M¹ per year electricity savings through our power contracts



JOBS

410,000 jobs created or retained since 2012



CAPITAL COMMITMENTS

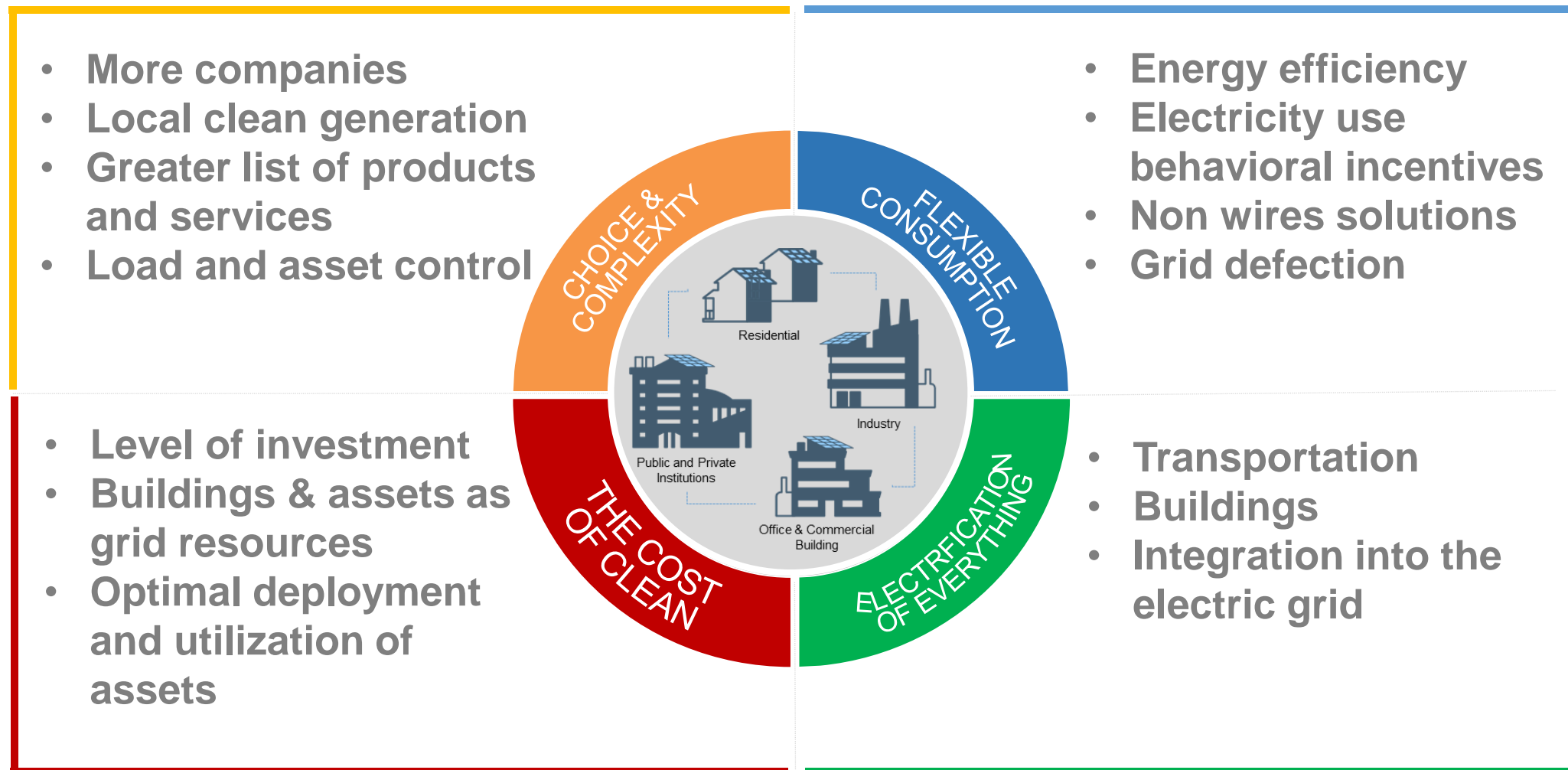
\$28bn in capital commitments across our economic development power programs since 2012

¹ Based on comparing to market prices for that zone - average between 2013 and 2018

Turning ambition into action: What is different about *Vision 2030*?

- Placing the **customer's** journey to addressing the challenges and opportunities of **moving to a decarbonized economy** at the **heart** of our strategic plan
- **Aligning** our **customer's success** to NYPA's success
- NYPA as a **first mover** in decarbonization

NYPA is putting the consumer's journey to a decarbonized energy future at the center of the NYPA 2030 plan.



Proposed Vision 2030 Strategic Goals: Measuring Success

Measuring the impact we make on those we serve

NYPA 2030 Strategic Goals

- 1 Customer decarbonization
- 2 Consumer value
- 3 Clean economic development

Measuring the health of our business – the healthier our business, the better we are positioned to positively impact those we serve

Key Operational Metrics



Reliability



Safety



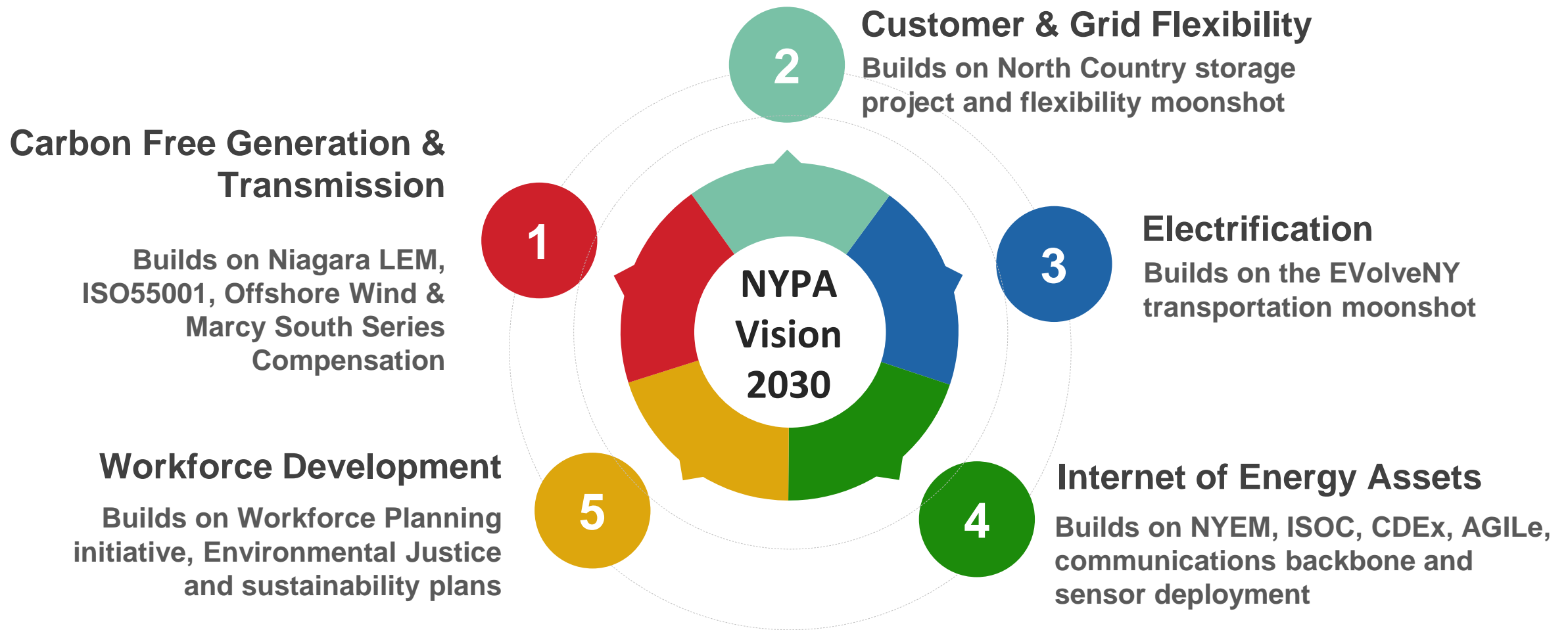
Financial – EVA, O&M and bond rating



Employee engagement

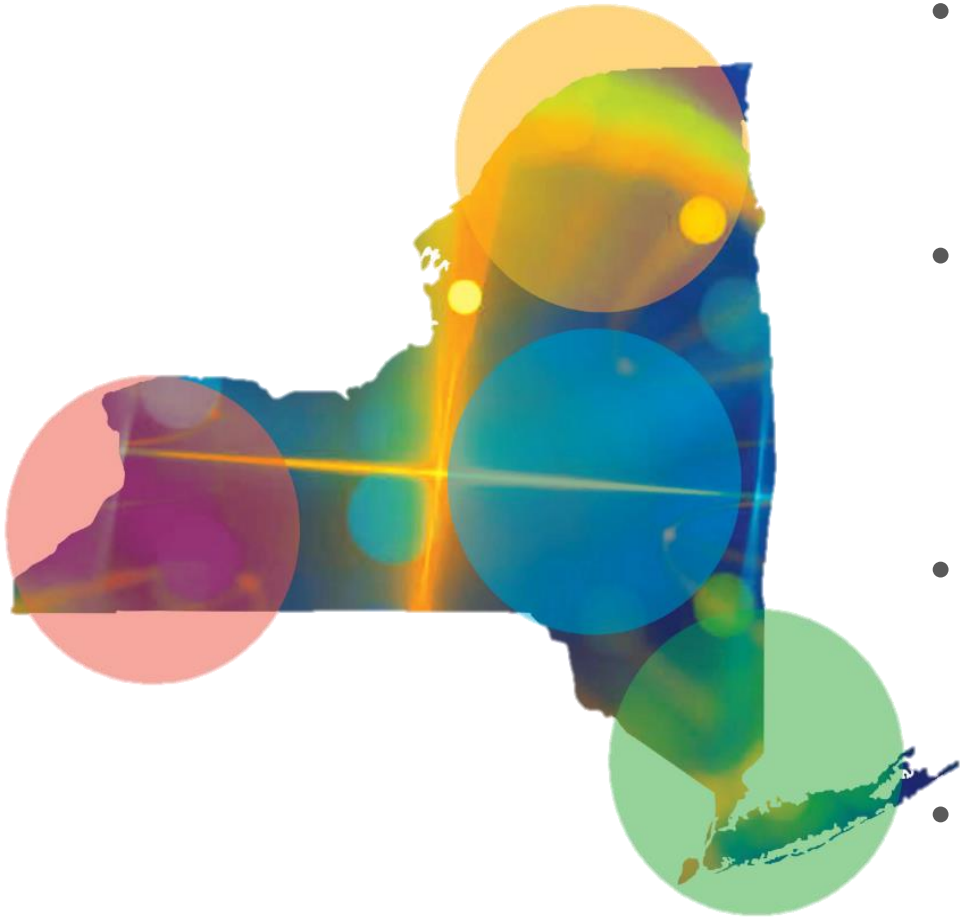
Vision 2030: Strategic Themes

A balance of no-regret investment areas and necessary big bets that achieve significant strides toward carbon neutrality.



Vision 2030: The regional perspective

Linking NYPA 2030 to our employees and the communities in which we operate.



- Highlight the role **each site is already playing** in supporting NYPA 2030
- Outline the **importance of our assets**, both currently and in the transition to a decarbonized future
- Help our employees understand **how their work ties into the goals** of NYPA 2030
- Demonstrate the **vital role NYPA plays** in the **communities** that we operate



**NY Power
Authority**

**Canal
Corporation**



**NY Power
Authority**

**Canal
Corporation**

Exhibit 5a i-1-A
September 25, 2019

Vision 2030

Update on NYPA's Strategic Planning Process

Doug McMahon

Vice President, Strategy

September 25, 2019

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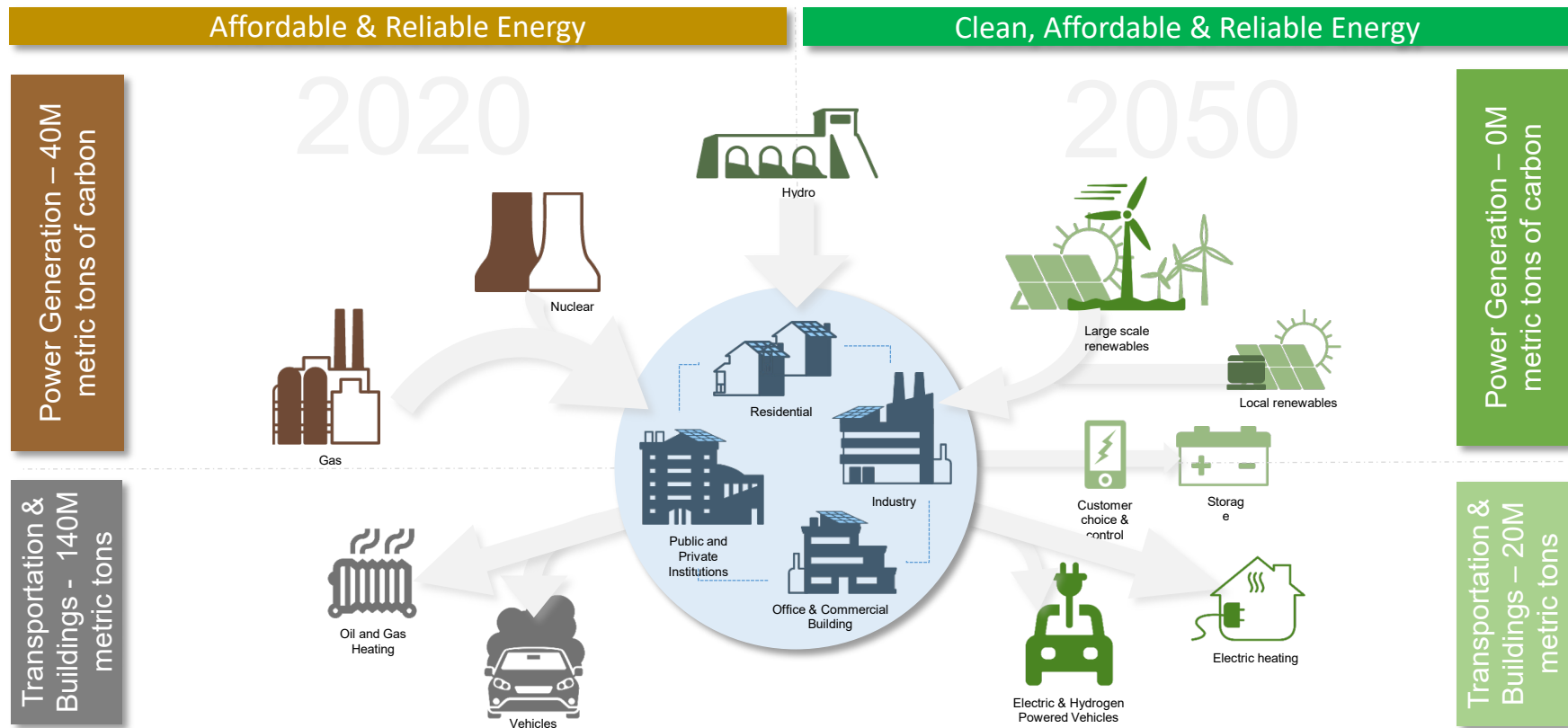
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NY Power
Authority

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Corporation

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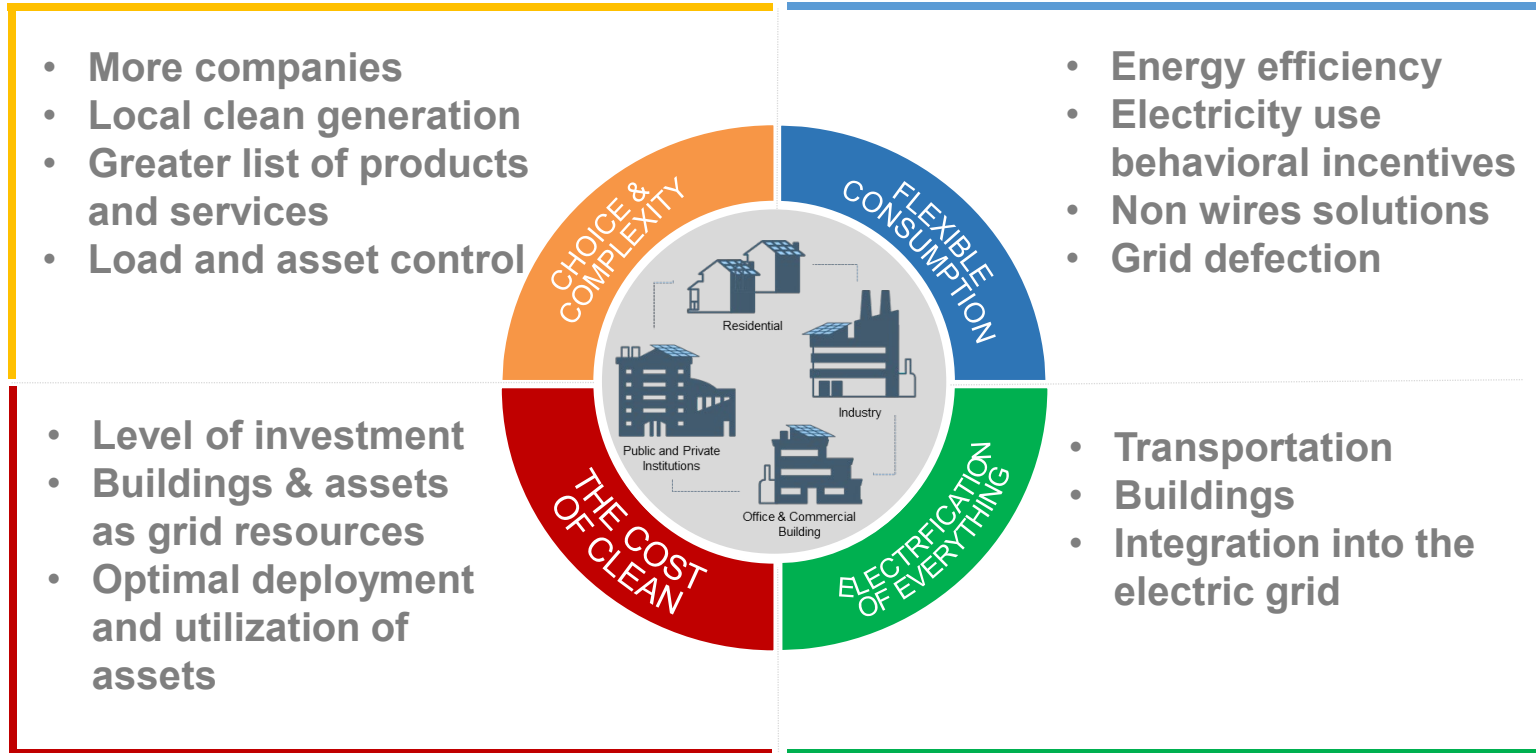
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Safety



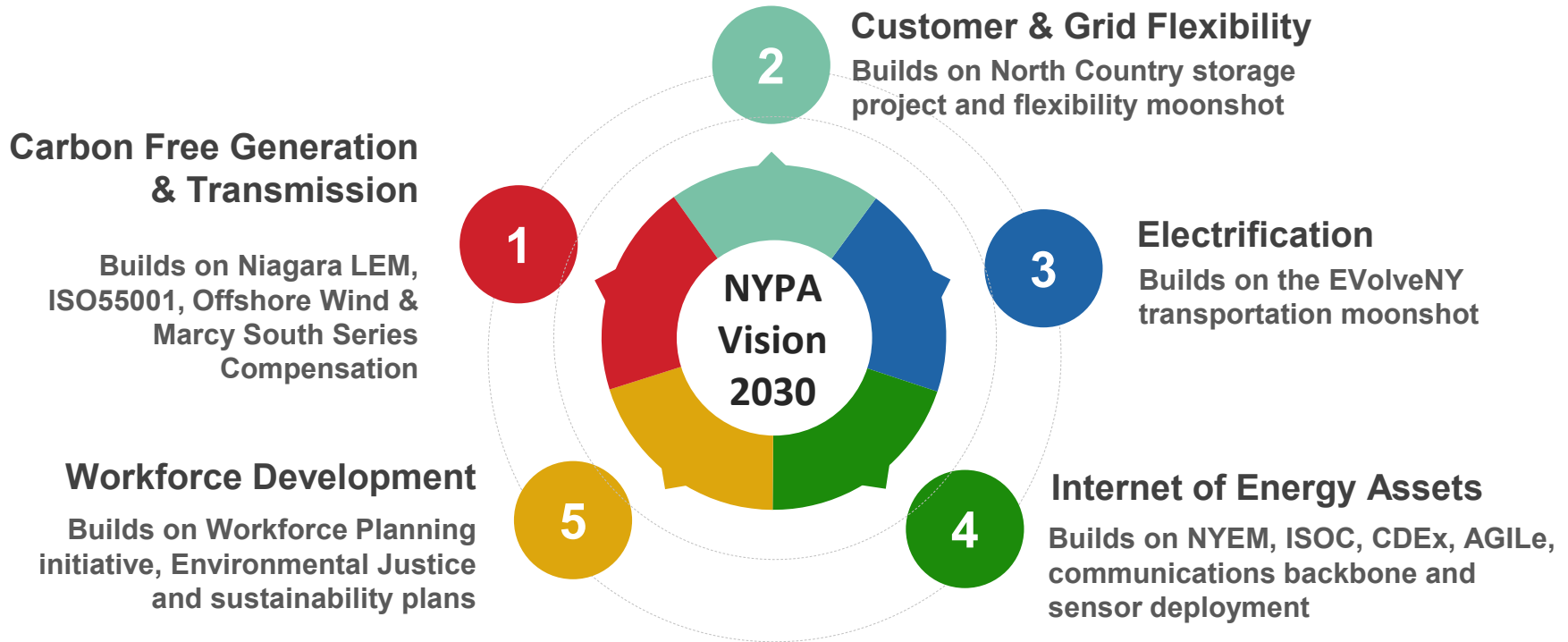
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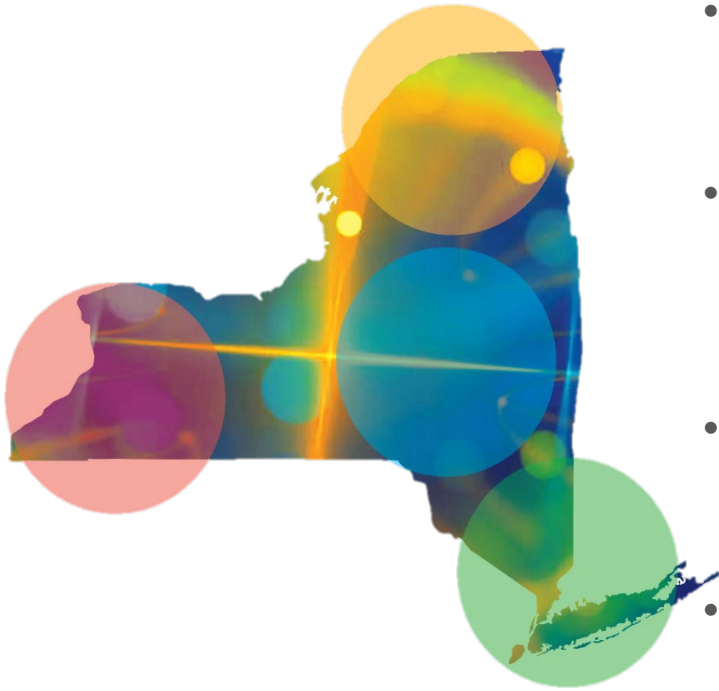
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**NY Power
Authority**

**Canal
Corporation**



**NY Power
Authority**

**Canal
Corporation**



**NY Power
Authority**

**Canal
Corporation**





Exhibit 5b i-A
September 25, 2019




Chief Operations Officer's Report

**Joseph F. Kessler, P.E.
EVP & Chief Operating Officer**

September 25, 2019

Level 1 KPIs: Year-to-Date July 2019

KPI	YTD July 2019			
	Status	Target	Actual	Variance
Generation Market Readiness		97.40%	99.62%	2.22%
Transmission System Reliability		96.40%	96.98%	0.58%
Environmental Incidents (Corporate)		16	13	-3
Dart Rate (Corporate)		0.78	0.98	0.20

Status	
	Within Target
	Outside of Target
	Significantly Outside of Target Range

Moses-Adirondack Smart Path Reliability Project

Background:

- Replace approximately 78 miles of the Moses-Adirondack 1 and 2 transmission lines
- Article VII Application submitted in Spring 2018; Certificate expected November 2019
- Total project estimated to cost \$483.8 million
- Project completion is expected in mid-2023

Authorization To Date:

- Current approved expenditure authorization of \$124 million
- Material and services contracts approved to date:
 - Engineering Services - January 2016, September 2017 and September 2019
 - Steel Poles - December 2018
 - Aluminum Conductor Steel-Reinforced Cable - May 2019
 - Line Hardware & Glass Insulators - July 2019

Moses-Adirondack Smart Path Reliability Project

Highlight:

- Setup, manage, and maintain two laydown yards required for storing all material purchased by the Authority

Requested Trustee Action:

- Approve the award of a five-year term contract to Kenny Construction Company in the amount of \$9.2 million and an additional \$1.9 million for a total authorization of \$11.1 million

On-Call Engineering Services-Contract Award

Background:

- The on-call contracts for engineering services are retainer-type contracts that provide a vehicle for rapid response to a wide variety of tasks. The award of multiple contracts ensures that adequate skill and expertise coverage will be available as required, supplementing the Authority staff.

Highlights:

- RFP advertisement began in May 2019 with proposals due June 2019.
- 23 proposals received with 12 firms selected by evaluation committee.
- The on-call contracts will be funded through the annual budget the trustees approved or will approve over the five year term of the contracts.

On-Call Engineering Services-Contract Award

Trustee Action:

- Approval of (12) on-call value contracts for Engineering Services for a five year period having an aggregate amount of \$25 million.



**NY Power
Authority**

**Canal
Corporation**



**NY Power
Authority**

**Canal
Corporation**

Exhibit 5c i-A
September 25, 2019






Chief Commercial Officer's Report

Sarah Salati




EVP & Chief Commercial Officer

September 25, 2019




Commercial Operations KPI – July 2019

GOAL	KPI	YTD July 2019			
		Status	Target	Actual	Variance
Wholesale	Customer Usage (twh)		14.2	14.1	-1%
	Generation (twh)		16.2	17.5	8%
	Electric Prices (\$/mwh)		\$36.56	\$28.58	-22%
	Fuel Price (\$/mmbtu)		\$4.33	\$3.45	-20%
	Merchant Gross Margin (\$M)*		\$197.3	\$180.9	-8%




* Excludes Astoria Energy II and NYPA Zeltman Power Project

Status	
	Within Target (>0%)
	Outside of Target (-1% to -10%)
	Significantly Outside Target range (<-11%)

Commercial Operations KPI – July 2019

GOAL	KPI	YTD July 2019			
		Status	Target	Actual	Variance
Economic Development	Recharge NY (MW) Allocated			728/910	
	All Programs - Jobs Retained			410,295	
	Capital Committed (\$B)			\$28.0	
Energy Efficiency	Customer Investments (\$M)		\$129.0	\$142.3	10%
	Non-Utility Revenues (\$M)		\$10.0	\$15.7	57%
	Operating Expenses (\$M)		\$18.0	\$18.8	4%

Status

	Within Target (>0%)
	Outside of Target (-1% to -10%)
	Significantly Outside Target range (<-11%)



NY Power
Authority

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Corporation



**NY Power
Authority**

**Canal
Corporation**



**NY Power
Authority**

**Canal
Corporation**

Economic Development Program Allocations

Keith Hayes

Senior Vice President, Clean Energy Solutions

September 25, 2019

ReCharge NY Power Allocations & ReCharge NY Power Allocation Extensions and Modifications

Discussion:

- 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”)
- Out of the 182.3 MW of power remaining in the program:
 - 87.2 MW remain for large business expansion projects,
 - 93.0 MW remain for large business retention, and
 - 2.1 MW are left for small business and not-for-profits

ReCharge NY Power Allocations & ReCharge NY Power – Allocation Extensions and Modifications

Requested Trustee Action:

- As recommended by the Economic Development Power Allocation Board on September 24, 2019, the Trustees are requested to approve:
 - Conditional extensions of the term of 4 existing RNY allocations totaling 13.5 MW supporting over 15,800 jobs and capital investment commitments of \$105 million
 - Modifications to previously approved RNY extension allocations to address adjustments to awarded amounts and/or supplemental commitments
 - Ten (10) ReCharge NY Allocations totaling 5.3 MW supporting over 3,700 jobs and capital investment commitments of \$37million

Preservation Power Allocation

Discussion:

- The recommended allocation will create at least 240 new jobs with a capital investment commitment of at least \$110 million

Requested Trustee Action:

- The Trustees are requested to approve a:
 - 16,000 kW allocation of Preservation Power to Confluent Energies, Inc., which is planning to build hydroponic greenhouse facilities on 40 acres of property in Massena (St. Lawrence County).
- The Trustees are also being asked to authorize a public hearing on the proposed contract for Confluent Energies, Inc.

Replacement Power Allocation

Discussion:

- The recommended allocation will create at least 88 new jobs with a capital investment commitment of at least \$83.801 MM.

Requested Trustee Action:

- The Trustees are requested to approve:
 - 2,000 kW allocation of Replacement Power to Thinking Robot Studios, Inc., which is planning to build a new medical device manufacturing facility in Buffalo (Erie County).
- The Trustees are also being asked to authorize a public hearing on the proposed contract for Thinking Robot Studios, Inc.

Annual Compliance Review – Expansion Power, Replacement Power, and Preservation Power Hydropower Programs

Discussion:

- Staff conducted its annual review of contract compliance of 110 customers
- Compliance was evaluated at a 90% threshold and reductions are proportional to the company's shortfall as the contract allows
- Adjustments associated with this action include a reduction of 345 job commitments and \$90,580 in reductions to capital investment commitments

Annual Compliance Review – Expansion Power, Replacement Power, and Preservation Power Hydropower Programs

Requested Trustee Action:

- The Trustees are requested to approve allocation reductions totaling 2,700 kW regarding 11 customers that reported below their ReCharge New York allocation commitment levels for reporting period January 2018 – December 2018

(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.

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	Current kW Amount	Recommended kW Amount	Job Commitments	Capital Investment Commitment (\$)	Contract Term (years)
1	BASF Corporation	Peekskill	Westchester	Mid-Hudson	CONED	Research & development lab	1,250	1,240 ⁽¹⁾	187	\$4,000,000	7
2	Citigroup Global Markets Inc.	New York	New York	New York City	CONED	Banking & financial services	8,146	8,146	10,000 ⁽²⁾	\$5,000,000 ⁽²⁾	7
3	Data Device Corporation	Bohemia	Suffolk	Long Island	LIPA	Manufacturer of data networking products	480	480	284	\$1,800,000	7
4	Kaleida Health	Buffalo, North Tonawanda, & Williamsville	Erie & Niagara	Western New York	NGRID	Hospitals & healthcare centers	3,636	3,636	5,358 ⁽²⁾	\$94,529,167 ⁽²⁾	7
Totals							13,512	13,502	15,829	\$105,329,167	

(1) Represents modified amount.
(2) Commitments will apply to multiple facilities/addresses. The change will be implemented in customer's power contract.

Retention-Based Allocations

Line	Company	City	County	Economic Development Region	IOU	Description	Recommended kW Amount	Final Job Commitments	Final Capital Investment Commitment (\$)	Contract Term (years)
1	Matt Industries Inc.	Syracuse	Onondaga	Central New York	NGRID	Commercial printing services	532 ⁽¹⁾	236 ⁽¹⁾	\$2,000,000	7
2	Morton Salt, Inc.	Silver Springs	Wyoming	Finger Lakes	NYSEG	Salt production	1,186	155	\$15,000,000 ⁽¹⁾	7
3	Owens-Brockway Glass Container Inc.	Auburn	Cayuga	Central New York	NYSEG	Manufacturer of glass containers	3,500	257	\$10,000,000 ⁽¹⁾	7
4	Southern Glazer's Wine and Spirits of Upstate New York, LLC	Syracuse	Onondaga	Central New York	NGRID	Wine & spirits distributor	300 ⁽¹⁾	600	\$3,000,000	7
5	United Health Services Hospitals, Inc.	Vestal	Broome	Southern Tier	NYSEG	Healthcare services & medical offices	170	3,078	\$10,000 ⁽¹⁾	7

(1) Represents modified/corrected amount.

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	Nordon, Inc.	Rochester	Monroe	Finger Lakes	RGE	Manufacturer of injection molded plastic parts	1,386	690	160	0	160	\$2,500,000		7
	Finger Lakes Region Sub-totals:							690	160	0	160	\$2,500,000		
2	Spellman High-Voltage Electronics Corporation	Hauppauge	Suffolk	Long Island	LIPA	Supplier of high-voltage power supplies	415	206	379	0	379	\$1,500,000	(1)	7
	Long Island Region Sub-totals:							206	379	0	379	\$1,500,000		

Totals	896	539	0	539	\$4,000,000
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(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	Syracuse Label Co., Inc.	North Syracuse	Onondaga	Central New York	NGRID	Manufacturer of custom-made labels	500	200	94	2	\$3,200,000	⁽⁴⁾	7
	Central New York Region Sub-totals:							200	6	2	\$3,200,000		
2	Spellman High-Voltage Electronics Corporation	Hauppauge	Suffolk	Long Island	LIPA	Supplier of high-voltage power supplies	200	140	379	10	\$3,300,000	⁽²⁾	7
	Long Island Region Sub-totals:							140	0	10	\$3,300,000		
3	Cayuga Operating Company LLC	Lansing	Tompkins	Southern Tier	NYSEG	Repurposed coal plant as enterprise data center	25,000	2,000	0	20	\$25,000,000		7
	Southern Tier Region Sub-totals:							2,000	0	20	\$25,000,000		

Totals

2,340	6	32	\$31,500,000
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- (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	Fieldtex Products Inc.	Rochester	Monroe	Finger Lakes	RGE	Manufacturer of first aid & medical kits	178	86	180	0	\$200,000	(1)	7
	Finger Lakes Region Sub-totals:							86	0	0	\$200,000		
2	Clad Metal Specialties, Inc.	Bay Shore	Suffolk	Long Island	LIPA	Metal fabrication & processing	215	106	21	0	\$80,000		7
3	North Shore University Hospital	Lake Success	Nassau	Long Island	LIPA	Medical offices facility	4,552	1,516	2,629	0	\$1,500,000		7
4	Northwell Healthcare, Inc.	Bethpage	Nassau	Long Island	LIPA	Medical instrument sterilization facility	716	236	420	0	\$75,000		7
	Long Island Region Sub-totals:							1,858	3,070	0	\$1,655,000		
5	Otis Products, Inc.	Lyons Falls	Lewis	North Country	NGRID	Manufacturer of firearms cleaning kits	281	140	121	11	\$250,000		7
	North Country Region Sub-totals:							140	121	11	\$250,000		

Retention-Based Totals

2,084	3,191	11	\$2,105,000
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(1) This applicant was previously approved for an RNY Expansion-Based Power allocation. The job retention level refers to the applicant's previously approved base employment jobs, which are already associated with their existing RNY Expansion-Based Power allocation.

**New York Power Authority
ReCharge New York Power Program
Informational Item - Terminate Application/Review Process**

**Exhibit "5c i-2-D"
September 25, 2019**

Line	Company	City	County	Economic Development Region	IOU	Description	Reason
1	Allen Farms, LLC	Scipio Center	Cayuga	Central New York	NYSEG	Dairy farm	Applicant has been unresponsive to requests by staff for additional information, preventing a complete analysis of the application.
2	Bostrom Farms LLC	Stanley	Ontario	Finger Lakes	NYSEG	Beef, pork, & chicken farm	Applicant has been unresponsive to requests by staff for additional information, preventing a complete analysis of the application.
3	LOOP Recycled Products of New York	Syracuse	Onondaga	Central New York	NGRID	Recycling center for paint products	Applicant has been unresponsive to requests by staff for additional information, preventing a complete analysis of the application.
4	PPC Broadband, Inc.	East Syracuse	Onondaga	Central New York	NGRID	Manufacturer of connective technology products	Applicant has been unresponsive to requests by staff for additional information, preventing a complete analysis of the application.
5	RT Solutions, LLC	Avon	Livingston	Finger Lakes	NGRID	Compost to soil agribusiness	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
Preservation Power ("PP")

Company:	Confluent Energies, Inc. ("CEI")
Location:	Town of Massena
County:	St. Lawrence County
IOU:	National Grid
Business Activity:	Producer of leafy green vegetables grown in Advanced Technology Greenhouses.
Project Description:	A four-phased project to build hydroponic greenhouse facilities on 40 acres of property to be located in the Town of Massena.
Existing Allocation(s):	None
Power Request:	24,000 kilowatts ("kW") of Preservation Power ("PP")
Power Recommended:	16,000 kW
Job Commitment:	
Base:	0
New:	At least 240 jobs
New Jobs/Power Ratio:	15 jobs/MW
New Jobs - Avg. Wage and Benefits:	\$66,900
Capital Investment:	At least \$110 million
Capital Investment/MW:	\$6.8 million/MW
Other ED Incentives:	(1) Empire State Development Regional Council Capital Grant Fund of \$1,220,000; and (2) St. Lawrence County IDA Local Development Corporation assistance benefits.
Summary:	CEI is looking to develop an industry sector for controlled environmental agriculture with its first facility in Massena, but is also looking at potential locations in Massachusetts and Tennessee. It is expected that an allocation of PP, along with other NYS support, would cause CEI to choose northern New York for this project.

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

Confluent Energies, 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 Confluent Energies, Inc. (“Customer”) having offices at County Road 42 & Dennison Road, Massena, New York 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 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.

“Prior Agreement” has the meaning set forth in the recitals to this Agreement.

“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, 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

Confluent Energies, Inc.
County Road 42 & Dennison Road
Massena, New York 13662
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:

CONFLUENT ENERGIES, 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: Confluent Energies, Inc.				
Type of Allocation	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Preservation Power	16,000 kW	County Road 42 & Dennison Road Massena, New York 13662	September 25, 2019	Ten (10) 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 240 full-time, permanent 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 \$110,000,000 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:

\$27,500,000 – Phase I Construct 10 acre greenhouse, Machinery,
Equipment, Lighting, Cooling, and Circulating Pumps
\$27,500,000 – Phase II Construct 10 acre greenhouse, Machinery,
Equipment, Lighting, Cooling, and Circulating Pumps
\$27,500,000 – Phase III Construct 10 acre greenhouse, Machinery,
Equipment, Lighting, Cooling, and Circulating Pumps
\$27,500,000 – Phase IV Construct 10 acre greenhouse, Machinery,
Equipment, Lighting, Cooling, and Circulating Pumps

\$110,000,000 – Minimum 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 September 25, 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. 20, 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. 20, 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.

APPLICATION SUMMARY
Replacement Power ("RP")

Company:	Thinking Robot Studios Inc.
Location:	Buffalo
County:	Erie County
IOU:	National Grid
Business Activity:	The company specializes in mass customization & manufacturing of medical devices utilizing industrial grade 3D printing.
Project Description:	A three-phased project to build a 63,500 square foot medical device manufacturing facility in Buffalo, NY.
Existing Allocation(s):	None
Power Request:	2,700 kW of RP
Power Recommended:	2,000 kW
Job Commitment:	
Base:	0
New:	At least 88 jobs
New Jobs/Power Ratio:	45 jobs/MW
New Jobs - Avg. Wage and Benefits:	\$130,347
Capital Investment:	At least \$83.801 million
Capital Investment/MW:	\$41.9 million/MW
Other ED Incentives:	(1) Empire State Development Excelsior Award of over \$6.7 million; and (2) Erie County IDA sales tax abatement and property tax abatement benefits of over \$6 million.
Summary:	Thinking Robot Studios Inc. is looking to establish a presence in Western New York by constructing a new medical device manufacturing facility. The company is also considering potential locations in Canada, New Zealand, and other U.S. cities (Boston and Seattle). An allocation of low cost hydropower, along with additional state support, could incentivize Thinking Robot Studios Inc. to choose Western New York as the site for its new manufacturing plant.

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

Thinking Robot Studios 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 the Sale of Expansion Power and/or Replacement Power (“Agreement”) with Thinking Robot Studios Inc. (“Customer”) with offices and principal place of business at 193 Ship Canal Parkway, Buffalo, New York 14218. 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

Thinking Robot Studios Inc.
193 Ship Canal Parkway
Buffalo, New York 14218

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:

THINKING ROBOT STUDIOS INC.

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: Thinking Robot Studios Inc.				
Type of Allocation	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
RP	2,000 kW	193 Ship Canal Parkway Buffalo, New York 14218	September 25, 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 88 full-time, permanent 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 \$83,801,000 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:

DESCRIPTION	EXPENDITURE
Phase I: Development of the designing and manufacturing platform (including the purchase of 3D printers, CNC machines, finishing products, and other equipment).	\$ 9.427 million
Phase II: Further development of the designing and manufacturing platform (including the purchase of 3D printers, CNC machines, finishing products, and other equipment).	\$68.885 million
Phase III: Development of new imaging center.	\$5.489 million
Total Minimum Expansion Project Capital Investment Commitment:	<u>\$83,801,000</u>

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 September 25, 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.

“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.

EXHIBIT A (2 customers)

**NON-COMPLIANCE WITH JOB COMMITMENTS;
RECOMMENDED FOR (1) REDUCTIONS IN ALLOCATION/CONTRACT DEMAND, AND (2)
ADJUSTMENTS TO JOB COMMITMENTS¹**

Air Products Inc. - Medina (Medina, Orleans County)

Allocation: 350 kW of Replacement Power (“RP”)
Contract Demand: 350 kW of RP
Power Utilization: 100%
Capital Spending: \$314,903 or 954%
Job Commitment: 7 jobs
Jobs Reported: 5 jobs, or 71%

Background: Air Products, Inc. manufactures purified liquid carbon dioxide. It sells its products to both wholesalers and end users of carbon dioxide. Due to challenging market conditions in the industry, Air Products had to reduce its employment level. Air Products is optimistic that it will be able to hire additional employees in the future.

Recommendation: *Staff recommends that the Trustees reduce the allocation and contract demand to 300 kW, and authorize an adjustment of the job commitment to not less than 5 jobs.*

DuPont Specialty Products USA, LLC (E. I. DuPont de Nemours & Co) (Buffalo, Erie Niagara County)

Allocation: 2,475 kW of RP and 1,800 kW of Expansion Power (“EP”)
Contract Demand: 2,475 kW of RP Power and 1,800 kW of EP
Power Utilization: 94%
Capital Spending: \$20,011,500 or 235%
Job Commitment: 605 jobs
Jobs Reported: 514 jobs, or 85%

Background: E. I. DuPont is a manufacturer of high-performance resins, adhesives, and lubricants for the aerospace and automotive industries. The company stated that employment has dropped due to recent attrition and reduced product demand. The company indicates that it expects to hire 16 more employees during the second half of 2019.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the EP allocation and contract demand to not less than 1,700 kW, a reduction in the RP allocation and contract demand to not less than 2,375 kW, and authorize an adjustment of the job commitment to not less than 514 jobs.*

¹ Unless otherwise indicated or apparent, the discussion in “Background” sections is based on information supplied by the customer.

EXHIBIT B (5 customers)

**NON-COMPLIANT WITH JOB COMMITMENTS;
RECOMMENDED FOR ADJUSTMENTS TO JOB COMMITMENTS**

CCL Label, Inc. LLC (Buffalo, Erie County)

Allocation: 250 kW of RP
Contract Demand: 250 kW of RP
Power Utilization: 94%
Capital Spending: \$2,596,000 or 1,001%
Jobs Commitment: 106 jobs
Jobs Reported: 90 jobs, or 85%

Background: CCL Label, Inc., manufactures label products. The company reduced staff by 12 employees mainly due to the loss of a major customer. 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 no reduction to the contract demand/allocation, and the Trustees authorize an adjustment to the customer's job commitment to not less than 90 jobs.*

Habasit America, Inc. (Buffalo, Erie County)

Allocation: 200 kW of RP
Contract Demand: 200 kW of RP
Power Utilization: 100%
Capital Spending: \$339,457 or 170% based on audit review
Job Commitment: 80 jobs
Jobs Reported: 55 jobs, or 69%, based on audit review

Background: Habasit America, Inc. manufactures conveyor belts for the food industry. The company did not provide an explanation regarding its job shortfall. This year, the company was randomly selected for an audit of its reported figures, and the audit confirmed employment to be at 55 jobs. 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 no reduction to the contract demand/allocation, and the Trustees authorize an adjustment to the customer's job commitment to not less than 55 jobs.*

I Squared R Element (Akron, Erie County)

Allocation: 400 kW of RP
Contract Demand: 400 kW of RP
Power Utilization: 96%
Capital Spending: Not Applicable

Job Commitment: 93 jobs

Jobs Reported: 79 jobs, or 85%, based on audit review

Background: I Squared R Element produces silicon carbide heating elements and hot surface igniters. The company was selected for an audit of its reported figures, and the audit confirmed employment to be at 79 jobs. The company did not provide an explanation regarding its job shortfall. 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 no reduction to the contract demand/allocation, and the Trustees authorize an adjustment to the customer's job commitment to not less than 79 jobs.*

Kreher's Sunrise Farm LLC (Basom, Genesee County)

Allocation: 100 kW of RP

Contract Demand: 100 kW of RP

Power Utilization: 94%

Capital Spending: Not Applicable

Jobs Commitment: 29 jobs

Jobs Reported: 25 jobs, or 86%

Background: Kreher's Sunrise Farm LLC. supplies agriculture products. The company has employees that do not meet the minimum total weekly hour requirement to be counted per the contract 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 no reduction to the contract demand/allocation, and the Trustees authorize an adjustment to the customer's job commitment to not less than 25 jobs.*

MOD-PAC Corporation (Buffalo, Erie County)

Allocation: 400 kW of EP

Contract Demand: 400 kW of EP

Power Utilization: 100%

Capital Spending: Not Applicable

Job Commitment: 405 jobs

Jobs Reported: 347 jobs, or 86%

Background: MOD-PAC manufactures containers. MOD-PAC stated it has had difficulty finding qualified employees over the past several years. 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 no reduction to the contract demand/allocation, and the Trustees authorize an adjustment to the customer's job commitment to not less than 347 jobs.*

EXHIBIT C (3 customers)

**NON-COMPLIANT WITH POWER UTILIZATION COMMITMENT;
RECOMMENDED FOR (1) REDUCTIONS IN ALLOCATION/CONTRACT DEMAND, AND (2)
ADJUSTMENT TO JOB COMMITMENTS**

GM Components Holdings LLC (Lockport, Niagara County)

Allocation: 19,950 kW of EP
Contract Demand: 19,950 kW of EP
Power Utilization: 15,960 kW or 80%
Capital Spending: \$21,119,154 or 409%
Jobs Commitment: 779 jobs
Jobs Reported: 1,529 jobs, or 196%

Background: GM Components Holdings manufactures automotive compressors at this facility. This is the fourth consecutive year that GM fell below the 90% threshold for kW utilization. The company stated that two electric braze furnaces were taken out of service and rebuilt during 2018, reducing the company's monthly electric load. The two furnaces were scheduled to resume production during the second quarter of 2019. Staff obtained recent power utilization data for the first quarter of 2019, which indicates no additional increase in demand.

Recommendation: Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 17,950 kW, and authorize an adjustment to the job commitment to not less than 701 jobs.

Maclean Curtis, LLC (Buffalo, Erie County)

Allocation: 1,750 kW of RP
Contract Demand: 1,750 kW of RP
Power Utilization: 1,432 kW or 82%
Capital Spending: \$2,614,301 or 240%
Jobs Commitment: 150 jobs
Jobs Reported: 168 jobs, or 112%

Background: Maclean Curtis, LLC is a leading manufacturer of precision machined components and assemblies. This is the second year Maclean Curtis fell below the 90% threshold for kW utilization. The company stated that it did not fully utilize its allocation because of a delay in an expected ramp up of new automotive business. The company indicated that it has implemented a plan to increase power utilization this year (2019). Staff obtained recent power utilization data for the first quarter of 2019, which indicates no additional increase in demand on the meter.

Recommendation: Staff recommends that the Trustees authorize a reduction in the allocation and contract demand to not less than 1,600 kW, and authorize an adjustment to the job commitment to not less than 138 jobs.

Metaullics Systems Co. L.P. (2050 Cory Rd) (Sanborn, Niagara County)

Allocation:	1,050 kW of EP and 500 kW of RP
Contract Demand:	1,050 kW of EP and 500 kW of RP
Power Utilization:	756 kW and 360 kW or 72%
Capital Spending:	\$270,159 or 1,081%, based on audit review
Job Commitment:	30 jobs and 7 jobs respectively
Jobs Reported:	30 jobs, or 100% and 429% respectively, based on audit review

Background: Metaullics Systems is a specialty graphite business. The company has underutilized its allocation for the past several years. The company reports that the facility's power demand has been lower due to reduced operations. Staff obtained recent power utilization data for the first quarter of 2019, which indicates no additional increase in kW utilization.

Recommendation: *Staff recommends that the Trustees authorize a reduction in the EP allocation and contract demand to not less than 850 kW, a reduction in the RP allocation and contract demand to not less than 400 kW, and authorize an adjustment of the job commitments for these allocations to not less than 25 jobs and 6 jobs, respectively.*

EXHIBIT D (1 customer)

**NON-COMPLIANT WITH JOB COMMITMENT AND CAPITAL INVESTMENT
COMMITMENT; RECOMMENDED FOR (1) REDUCTION IN ALLOCATION/CONTRACT
DEMAND, AND (2) ADJUSTMENTS TO JOB COMMITMENT AND/OR CAPITAL INVESTMENT
COMMITMENT**

API Heat Transfer Inc. (Buffalo, Erie County)

Allocation: 250 kW of RP
Contract Demand: 250 kW of RP
Power Utilization: 100%
Capital Investment Commitment: \$384,000
Capital Spending: \$293,920 or 77%
Job Commitment: 238 jobs
Jobs Reported: 199 jobs, or 84%

Background: API Heat Transfer, Inc. is a global leader in the design and manufacturing of specialty heat exchangers and heat transfer solutions. This is the second year API Heat Transfer fell below its job commitment. The company did not provide any explanation regarding its job shortfall. However, given the amount of the allocation and the degree of the company's jobs 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 the Trustees authorize an adjustment to the customer's job commitment to not less than 199 jobs and capital investment to not less than \$293,920.*

EXHIBIT E (8 customers)

**NON-COMPLIANT WITH SUPPLEMENTAL COMMITMENTS;
RECOMMENDED FOR NO COMPLIANCE ACTION AT THIS TIME**

1) Job Commitment (1 customer)

Try-It Distributing Co., Inc. (Lancaster, Erie County)

Allocation:	200 kW of EP
Contract Demand:	200 kW of EP
Power Utilization:	100%
Capital Spending:	Not Applicable
Job Commitment:	265 jobs
Jobs Reported:	211 jobs, or 80%

Background: Try-It Distributing Co., Inc. is a wholesaler and distributor of beer, wine, liquor and non-alcoholic beverages. Although this company did not meet its job commitment, given the amount of the allocation and the degree of the jobs shortfall, application of the methodology used to calculate potential reductions in contract demand and allocation does not result in a reduction in the allocation and contract demand.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

2) Power Utilization Commitments (7 Customers)

DKP Buffalo, LLC (Tonawanda, Erie County)

Allocation:	750 kW of EP
Contract Demand:	750 kW of EP
Power Utilization:	663 kW or 88%
Capital Spending:	\$994,957 or 284%
Jobs Commitment:	57 jobs
Jobs Reported:	128 jobs, or 225%

Background: DKP Buffalo manufactures steel blanks for stamping plants for various auto body parts. The company achieved lower than expected production during peak months because of outages by its primary customer. Given that the power utilization shortfall is relatively minor, the methodology used to calculate reduction of contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

Dunkirk Specialty Steel, LLC (Dunkirk, Chautauqua County)

Allocation: 5,250 kW of EP
Contract Demand: 5,250 kW of EP
Power Utilization: 4,639 kW or 88%
Capital Spending: \$5,703,389 or 571%
Job Commitment: 146 jobs
Jobs Reported: 285 jobs, or 195%

Background: Dunkirk Special Steel produces stainless and specialty steel products. Dunkirk has underutilized its power allocation over the past several years. Dunkirk indicated that its shortfall this year was due to operating fewer of its machines because of slow business conditions. The company anticipates utilization will increase to the full allocation during 2019. Staff obtained recent power utilization data for the first quarter of 2019 which indicated an increase in demand, exceeding the commitment threshold. Staff will continue to monitor power utilization over the course of the next reporting period.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

International Imaging Materials (Amherst, Erie County)

Allocation: 650 kW of RP and 2,250 kW of EP
Contract Demand: 650 kW of RP and 2,250 kW of EP
Power Utilization: 2,380 kW or 82%
Capital Spending: \$2,743,029 or 225%
Jobs Commitment: 358 jobs
Jobs Reported: 376 jobs, or 105%

Background: International Imaging Materials manufactures thermal transfer ribbons. The company's power utilization shortfall was due in part to automated processes that improved the company's efficiency. In addition, a malfunctioning meter during part of 2018 may not have been measuring power utilization accurately. The meter is now working properly. Staff obtained recent power utilization data which indicates the corrected usage is within the compliance threshold. Staff will continue to monitor power utilization over the course of the next reporting period.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

M&T Bank Corporation (Amherst, Erie County)

Allocation: 1,050 kW of EP (effective 12/1/2018)²
Contract Demand: 1,050 kW of EP (effective 12/1/2018)
Power Utilization: 908 kW or 86%
Capital Spending: Not Applicable
Jobs Commitment: 116 jobs (effective 12/1/2018)
Jobs Reported: 6,151 jobs, or 5,303%

² Whenever the discussion indicates that an allocation, contract demand or supplemental commitment is effective as of a date indicated, these matters were subject to modification during the reporting period as a result of previous compliance action or some other circumstance (e.g., voluntary reduction, operational changes).

Background: M&T Bank Corporation (“M&T”) is a data center and provides back office financial services. M&T has historically underutilized its allocation. M&T stated that the facility’s power demand fluctuates due to the integration of new technologies into its operations. While the company has underutilized its allocation during the current reporting period, given the amount of the allocation and the degree of the kW shortfall, 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 action at this time.*

Oath Holdings, Inc. (Enterprise Drive) (Lockport, Niagara County)

Allocation: 15,000 kW of EP
Contract Demand: 15,000 kW of EP
Power Utilization: 11,343 kW or 76%
Capital Spending: Not Applicable
Job Commitment: 125 jobs
Jobs Reported: 125 jobs, or 100%

Background: Oath Holdings, Inc. is a data center. Its load is almost entirely comprised of computer equipment (servers, network, and storage devices). The demand curve experienced throughout 2018 coincided with an effort to retire some computer equipment that had reached the end of its useful life. Based on staff’s assessment, the replacement of old equipment with new, more efficient equipment has generally reduced the customer’s energy consumption. Given that the reduction in energy usage appears result at least in part from equipment efficiency, no kW reduction is recommended at this time. Staff will continue to monitor power utilization for this customer over the course of the next reporting period.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

RubberForm Recycled Products, LLC (Lockport, Niagara County)

Allocation: 100 kW of EP
Contract Demand: 100 kW of EP
Power Utilization: 85 kW or 85%
Capital Spending: \$184,700 or 6,157%
Job Commitment: 18 jobs
Jobs Reported: 18 jobs, or 100%

Background: RubberForm Recycled Products, LLC makes products from recycled rubber from car and truck tires. The company did not provide any explanation regarding its power utilization shortfall. However, because the shortfall is relatively minor, the methodology used to calculate reduction of contract demand and allocation does not result in a reduction of the contract demand and allocation.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

Washington Mills Electro Minerals Corporation (Niagara Falls, Niagara County)

Allocation: 5,250 kW of RP (effective 1/1/2019)
Contract Demand: 5,250 kW of RP (effective 1/1/2019)
Power Utilization: 4,463 kW or 85%

Capital Spending: \$2,719,317 or 184%
Job Commitment: 53 jobs (effective 1/1/2019)
Jobs Reported: 106 jobs, or 200%

Background: Washington Mills Electro Minerals Corporation manufactures abrasive grains for sandpaper and grinding wheels. Washington Mills Electro Minerals Corporation power utilization has increased since the previous reporting period. According to the company, efficiency gains resulted in higher productivity but less power usage. Staff obtained recent power utilization data for the first quarter of 2019 which indicates a slight increase in kW utilization. Staff will continue to monitor power utilization over the course of the next reporting period, but recommends no reduction in allocation and contract demand at this time.

Recommendation: *Staff recommends that the Trustees take no action at this time.*

Exhibit A: Non-Compliance with Job Commitments – Recommended For (1) Reductions in Allocation/Contract Demand, And (2) Adjustments to Job Commitments

Customers (2)	Allocation	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Usage Compliance %	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Revised Commitments			Reductions			City	County
									kW	Jobs	Capital Investment	KW	Jobs	Capital Investment		
Air Products, Inc.	350	7	5	71%	100	\$ 33,000	\$ 314,903	954%	300	5	\$ 33,000	50	2	\$ -	Medina	Orleans
DuPont Specialty Products USA, LLC (E. I. DuPont de Nemours & Co.)	4,275	605	514	85%	94	\$ 8,533,333	\$ 20,011,500	235%	4075	514	\$ 8,533,333	200	91	\$ -	Buffalo	Erie
TOTALS: (A)												250	93	\$ -		

Exhibit B: Non-Compliance with Job Commitments – Recommended For (1) Adjustments to Job Commitments

Customers (5)	Allocation	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Usage Compliance %	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Revised Commitments			Reductions			City	County
									kW	Jobs	Capital Investment	KW	Jobs	Capital Investment		
CCL Labels, Inc. Buffalo, LLC	250	106	90	85%	94%	\$ 259,216	\$ 2,596,000	1001%	250	90	\$ 259,216	0	16	\$ -	Buffalo	Erie
Habasit America, Inc.	200	80	55	69%	100%	\$ 200,000	\$ 339,457	170%	200	55	\$ 200,000	0	25	\$ -	Buffalo	Erie
I Squared R Elements	400	93	79	85%	96%	\$ -	\$ -	n/a	400	79	\$ -	0	14	\$ -	Akron	Erie
Kreher's Sunrise Farm LLC	100	29	25	86%	94%	\$ -	\$ -	n/a	100	25	\$ -	0	4	\$ -	Basom	Genesee
MOD-PAC Corporation	400	405	347	86%	100%	\$ -	\$ -	n/a	400	347	\$ -	0	58	\$ -	Buffalo	Erie
TOTALS: (B)												0	117	\$ -		

Exhibit C: Non-Compliance with Power Utilization Commitment – Recommended For (1) Reduction in Allocation/Contract Demand, And (2) Adjustment to Job Commitments

Customers (3)	Allocation (kW)	Employment Commitment (# of Jobs)	Usage Reported	Usage Compliance %	Revised Commitments		Reductions		City	County
					kW	Jobs	kW	Jobs		
GM Components Holdings, LLC	19,950	779	15960	80%	17950	701	2,000	78	Lockport	Niagara
Maclean Curtis, LLC	1,750	150	1,432	82%	1,600	138	150	12	Buffalo	Erie
Metaullics Systems Co. L.P. (2050 cory)	1,050	30	756	72%	850	25	200	5	Sanborn	Niagara
Metaullics Systems Co. L.P. (2050 cory)	500	7	360	72%	400	6	100	1	Sanborn	Niagara
TOTALS: (C)						2,450		96		

Exhibit D: Job Commitments and Capital Investment Commitments

Customer (1)	Allocation (kW)	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Revised Commitments			Reductions			City	County
								kW	Jobs	Capital Investment	kW	Jobs	Capital Investment		
API Heat Transfer Inc.	250	238	199	84%	\$ 384,500	\$ 293,920	77%	250	199	\$ 293,920	0	39	\$ 90,580	Buffalo	Erie

Exhibit E: Reported Non-Compliance With Supplemental Commitment – Not Recommended for (1) Reductions in Allocation/Contract Demand, Or (2) Adjustments to Job or Capital Investment Commitments

1) Job Commitments

Customer (1)	Allocation (kW)	Employment Commitment (# of Jobs)	Jobs - Reported	Jobs Compliance %	Capital Investment Commitment	Capital Investment Reported	Capital Investment Compliance %	Revised Commitments			Reductions			City	County
								kW	Jobs	Capital Investment	kW	Jobs	Capital Investment		
Try-It Distributing Company	200	265	211	80%	n/a	n/a	n/a	200	265	n/a	0	0	\$ -	Lancaster	Erie

2) Power Utilization Commitments

Customers (7)	Allocation (kW)	Employment Commitment (# of Jobs)	Capital Investment Commitment	Usage Reported	Usage Compliance %	Revised Commitments			Reductions				City	County
						kW	Jobs	Capital Investment	kW	Jobs	Capital Investment			
DKP Buffalo, LLC	750	57	\$ 350,000	663	88%	750	57	\$ 350,000	0	0	0		Tonawanda	Erie
Dunkirk Specialty Steel, LLC	5250	146	\$ 998,382	4,639	88%	5250	146	\$ 998,382	0	0	0		Dunkirk	Chautauqua
International Imaging Materials	2900	358	\$ 2,743,029	2,380	82%	2900	358	\$ 2,743,029	0	0	0		Amherst	Erie
M&T Bank Corporation	1050	116	\$ -	908	86%	1050	116	\$ -	0	0	0		Amherst	Erie
Oath Holdings, Inc.	15000	125	\$ -	11,343	76%	15000	125	\$ -	0	0	0		Lockport	Niagara
RubberForm Recycled Products, LLC	100	18	\$ 3,000	85	85%	100	18	\$ 3,000	0	0	0		Lockport	Niagara
Washington Mills Electro Mineral Corp.	5,250	53	\$ 1,475,667	4,463	85%	5250	53	\$ 1,475,667	0	0	0		Niagara Falls	Niagara



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Exhibit 5d i-A
September 25, 2019

Chief Financial Officer's Report

Adam Barsky

Executive Vice President & Chief Financial Officer

September 25, 2019

In \$ Millions

	YTD ACTUALS (JAN-JUL 2019)				
	Budget	Current	Variance		
Operating Income					
Customer Revenue	\$1,075.6	\$965.0	(\$110.6)		
Market-Based Power Sales	\$333.0	\$269.2	(\$63.8)		
Non Utility Revenue	\$12.2	\$16.6	\$4.4		
Ancillary Service Revenue	\$24.9	\$27.0	\$2.1		
NTAC and Other	\$106.3	\$111.6	\$5.3		
Operating Revenue	\$1,552.0	\$1,389.4	(\$162.6)		
Purchase Power	(\$396.3)	(\$295.6)	\$100.6		
Ancillary Service Expense	(\$32.6)	(\$30.6)	\$2.1		
Fuel Consumed	(\$116.6)	(\$90.6)	\$26.0		
Wheeling	(\$367.1)	(\$359.9)	\$7.1		
Operations & Maintenance	(\$343.7)	(\$340.7)	\$3.0		
Other Expense	(\$69.1)	(\$55.5)	\$13.7		
Depreciation	(\$142.4)	(\$141.0)	\$1.4		
Allocation to Capital	\$9.5	\$7.9	(\$1.6)		
Operating Expense	(\$1,458.3)	(\$1,306.0)	\$152.3		
Net Operating Income Total	\$93.7	\$83.4	(\$10.3)		(\$10.3)
Non Operating Income					
Investment Income	\$23.5	\$18.5	(\$5.0)		
Mark to Market Adjustments	(\$5.9)	\$12.1	\$18.0		
Interest Expenses	(\$86.7)	(\$75.1)	\$11.6		
Interest & Other Expenses	(\$69.1)	(\$44.5)	\$24.6		
Total	\$24.6	\$38.9	\$14.3		\$14.3



In \$ Millions

	YE ACTUALS/FORECAST (JAN-DEC 2019)				
	Budget	Current	Variance		
Operating Income					
Customer Revenue	\$1,825.2	\$1,699.3	(\$125.9)]	Margins - Generation (\$17.0)
Market-Based Power Sales	\$541.8	\$493.7	(\$48.1)		
Non Utility Revenue	\$20.9	\$25.5	\$4.5		
Ancillary Service Revenue	\$43.1	\$45.4	\$2.4		
NTAC and Other	\$177.8	\$189.1	\$11.3		
Operating Revenue	\$2,608.8	\$2,452.9	(\$155.9)		Margins - Transmission \$7.7
Purchase Power	(\$641.6)	(\$532.4)	\$109.2]	Margins - Non Utility \$4.5
Ancillary Service Expense	(\$55.3)	(\$54.8)	\$0.5		
Fuel Consumed	(\$189.2)	(\$154.2)	\$35.0		
Wheeling	(\$644.1)	(\$637.7)	\$6.4		
Operations & Maintenance	(\$596.3)	(\$602.6)	(\$6.4)]	Operating Expenses (\$17.2)
Other Expense	(\$117.2)	(\$123.8)	(\$6.6)		
Depreciation	(\$244.1)	(\$248.3)	(\$4.2)		
Allocation to Capital	\$18.3	\$18.3	(\$0.0)		
Operating Expense	(\$2,469.4)	(\$2,335.6)	\$133.9		
Net Operating Income Total	\$139.4	\$117.4	(\$22.0)		(\$22.0)
Non Operating Income					
Investment Income	\$40.6	\$29.5	(\$11.1)]	Interest Expense, Net \$24.5
Mark to Market Adjustments	(\$10.1)	\$11.0	\$21.1		
Interest Income	(\$149.0)	(\$134.4)	\$14.6		
Interest & Other Expenses	(\$118.5)	(\$93.9)	\$24.5		
Total	\$20.9	\$23.4	\$2.5		\$2.5

Asset Management ISO 55001 Certification

Ricardo DaSilva
VP Strategic Operations

ISO 55001 – A Global Excellence Standard



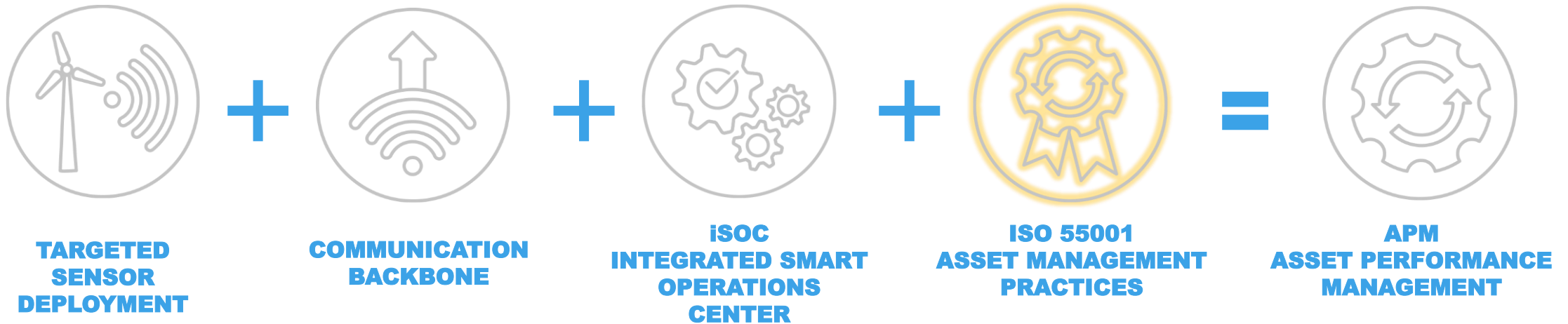
What is it?

A set of requirements that an organization must meet to employ a systematic approach to optimize the value of assets by making quality whole-lifecycle decisions

Why is it important?

Compliance with the standard tells the world that we have the people, process and technology to meet NYPA's goals and mission

Supporting NYPA's Digital Journey



Working together to optimize

COST

RISK

PERFORMANCE

ASSET SAVVY

Policy Implementation

NYPA will make decisions based on a **fiscally prudent**, whole-life value Asset Management approach, to optimize the **performance, cost** (capital and operating), and **risk** of the assets throughout their lifecycle, while ensuring **safety, reliability, environmental**, and **regulatory compliance** to support achievement of customer, stakeholder, New York State, and organizational goals.





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