



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

January 30, 2019

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Minutes of the regular joint meeting of the New York Power Authority and Canal Corporation held, via video conference, at the Clarence D. Rappleyea Building at 123 Main Street, White Plains, New York at approximately 10:06 a.m.

Members of the Boards present were:

John R. Koelmel, Chairman
Eugene L. Nicandri, Vice Chairman
Tracy McKibben
Michael A.L. Balboni
Dennis G. Trainor

Dr. Anne M. Kress - Excused
Anthony J. Picente, Jr. - Excused

Gil Quiniones	President and Chief Executive Officer
Justin Driscoll	Executive Vice President and General Counsel
Joseph Kessler	Executive Vice President and Chief Operating Officer
Robert Lurie	Executive Vice President and Chief Financial Officer
Sarah Salati	Executive Vice President and Chief Commercial Officer
Lee Garza	Senior Vice President – Financial Operations & Acting Controller
Angela Gonzalez	Senior Vice President – Internal Audit
Robert Piascik	Senior Vice President and Chief Information Officer
Kristine Pizzo	Senior Vice President – Human Resources
Karen Delince	Vice President and Corporate Secretary
John Canale	Vice President – Strategic Supply Management
Keith Hayes	Vice President – Economic Development
Daniella Piper	Vice President – Digital Transformation Office / Acting Chief of Staff
Marie Berninger	Director – Business Development
Michael Midden	Director – Corporate Finance
Sylvia Louie	Senior Business Development Manager
Mary Cahill	Manager – Executive Office
Gerard McLoughlin	Manager – Business Power Allocations & Compliance
Lynne Smith	Media Relations Specialist II
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Quatrocci	Associate Corporate Secretary

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

Introduction

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

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

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

Conflicts of Interest

Chairman Koelmel, Vice Chairman Nicandri and members McKibben, Balboni and 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 Board conduct an Executive Session to discuss the financial and credit history of a particular corporation.” On motion made by Vice Chairman Nicandri and seconded by member Tracy McKibben, 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 member Dennis Trainor and seconded by member Michael Balboni, 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 Michael Balboni, the Consent Agenda was approved.

a. Governance Matters:

i. Approval of the Minutes

The Minutes of the Regular Joint Meeting of the New York Power Authority's Trustees and Canal Corporation's Board of Directors held on December 11, 2018 were unanimously adopted.

ii. **Environmental Justice Implementation Plan (2019 – 2023) - Authorization**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to extend for a period of five years, ending on January 30, 2023, the Authority's Environmental Justice Implementation Plan (Exhibit '4a ii-A'), which follows the prior Plan's approval in March 2016. This report provides a summary of the 2019 – 2023 Environmental Justice Plan ('Plan') and seeks to expand ongoing efforts that leverage the Authority's expertise by promoting meaningful programs, projects and services as part of its commitment to Environmental Justice stakeholders.

BACKGROUND

The Authority's Environmental Justice ('EJ') commitment is based on a longstanding history of benefiting communities surrounding the locations of the Authority's facilities, and in understanding and respecting the concerns of these communities for their quality of life. Guided by the Authority's mission to provide innovative energy infrastructure and services, the Plan is supported by four pillars: Science, Technology, Engineering and Math ('STEM') Education; Community Energy Literacy; Energy Services Projects; and Community Outreach and Advocacy.

The 2016 Environmental Justice Implementation Plan established geographic boundaries for entities eligible for EJ projects and programs. The boundary followed criteria defined by the New York State Department of Conservation ('DEC') Potential Environmental Justice Areas, and limited scope to within two miles of a NYPA facility in an urban area and within six miles in a rural area. The Authority's footprint in the State is increasing as it undertakes new strategic initiatives including large-scale transmission and renewable energy programs. Consequently, its reach into new EJ communities will grow beyond the parameters set forth in the 2016 Plan.

The 2019 – 2023 Plan proposes an expansion of the geographical boundaries for eligible recipients for EJ projects, programs or services to within four miles of an Authority facility in an urban area and within ten miles in a rural area. Additionally, the Plan expands outreach to stakeholders impacted by projects under development or where the Authority is an owner or an investor in a project with the objective of securing ongoing community support for Authority projects. The increased reach of the program will include EJ communities identified by the DEC and in accordance with the Authority's enabling legislation and policies.

GOALS

The Trustees are requested to extend the Plan with the following goals, consistent with the Authority's enabling legislation, mission and applicable laws, policies and regulations:

- Establish EJ as a core value and an integral part of the Authority's strategic vision in order to improve outcomes for the communities that host its statewide facilities.
- Ensure the Authority is a vital component of New York State's commitment to provide access to clean, renewable energy for low income and minority communities; that the Authority's EJ strategy leads by example; and establishes a best practice model for other State entities.
- Foster open, proactive and empathic dialogue with EJ communities, and broaden and deepen relationships with stakeholders and influencers that will offset potential reputational risk for the Authority in EJ communities.

- Catalyze STEM learning opportunities for EJ communities, and foster pathways for training and workforce development in the utility industry.
- Deliver Community Energy Literacy programs for adults, community educators and teachers living in the Authority's EJ communities.
- Develop energy efficiency, clean energy, and electrification demonstration projects for the benefit of the Authority's EJ communities and stakeholders.
- Establish metrics and a tracking and reporting system to measure the Authority's corporate-wide engagement in EJ communities.

KEY FOCUS AREA

The Plan includes four strategic focus areas:

- STEM education and workforce development; community energy literacy; energy efficiency projects; and community outreach and advocacy. A system of goals and metrics for each initiative will be developed to measure success and identify gaps.

STEM Education

- The Authority will expand and enhance its STEM educational programs and curriculum development for students in grades K-12 to a wider catchment area throughout the State, including the development of a STEM-to-Work pipeline.
- In an effort to fill the Authority's workforce pipeline, staff plans to capitalize on STEM education opportunities for high school students in EJ communities. Specifically, initiatives will be developed to link EJ programs to real-world job opportunities. An important component of this initiative will be to expose students to the application of digital technology in the electric power industry, particularly at the Authority. This effort will assist with the Authority's strategic goal of becoming the first end-to-end digital utility.

Community Energy Literacy

The Authority will continue to provide community energy literacy workshops for adults living in the Authority's EJ communities including Home Weatherization workshops for low-income homeowners and renters and Community Educator workshops for teachers, afterschool educators and parents. These workshops will teach participants about energy efficient use and increase awareness about the Authority's strategic initiatives, including renewable energy technology, Evolve NY and advances in the utility industry.

Energy Services Projects

Subject to statutory authorities, the Authority will continue and expand financing of non-recoverable energy related projects, programs and services to benefit eligible EJ communities near the Authority's facilities and projects. EJ will identify project opportunities and work with Authority business units to develop pilot projects in EJ communities including solar PV, solar thermal, energy storage and electric vehicles. EJ will connect STEM programming with these projects in EJ communities.

Community Outreach and Advocacy

Ongoing relationship building and management is key to the success of the Authority's programs. The Authority will continue and expand its community outreach programs to engage and cultivate

relationships with EJ community leaders and stakeholders. Critical stakeholder activity and advocacy will be shared among business units to inform Authority program development and execution.

As part of its outreach, the Authority will develop a formal EJ Communications Plan that will ensure community engagement is standardized throughout the State. This plan will include procedures for each EJ event type including, coordination with Corporate Communications for media outreach, and the optimization of digital and editorial platforms to broaden knowledge of the Authority's EJ programs.

The Authority will also continue participation in state-wide EJ initiatives, such as Governor Cuomo's Environmental Justice and Just Transition Working Group. In addition, the Authority will participate in the Electric Power Research Institute's industry study on 'The Practice of Environmental Justice: Fundamentals and Peer Insights.' The EJ plan includes an assessment of the merits of establishing regional environmental justice councils to solicit ideas and input on community projects.

FISCAL INFORMATION

The estimated cost for the 2019-2023 Plan is approximately \$5,400,000 over five years, including an increase of three additional staff members. Detailed requests and justifications for funding for specific components of the Plan will be presented during future budget proposals. Funding for each of the components: Stem Education; Community Energy Literacy; Energy Services Projects and Community Outreach and Advocacy, will be provided from the Operating Fund.

RECOMMENDATION

The Vice President – Environmental Justice and Sustainability and the Manager – Environmental Justice recommend that the Trustees extend the Environmental Justice Implementation Plan as described in the foregoing report.

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 the extension of the Authority's Environmental Justice Implementation Plan 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.

b. Rate Making

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

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve a decrease in the production rates for the sale of firm power to the Westchester County Governmental Customers ('Customers') in 2019. This proposed action is consistent with the rate-setting process set forth in the 2006 Supplemental Electricity Agreements executed by the Customers and the Authority and in accordance with the State Administrative Procedure Act ('SAPA').

As part of this final proposed action, Authority staff is proposing a \$0.05 million, or 4.2%, Fixed Costs decrease as compared to the Fixed Costs component of currently effective production rates. As a result of this Fixed Costs proposal and the estimated Variable Costs, this proposed final action seeks approval to decrease the production rates of the Customers by \$0.28 million, or 0.95%, as compared to 2018 rates. The decrease would be effective with the January 2019 bills.

BACKGROUND

At their meeting on October 2, 2018, the Trustees directed the publication in the New York *State Register* ('*State Register*') of a notice that the Authority proposed to decrease production rates by \$5.90 million, or 17.98%, for rate year 2019. The proposed decrease was solely driven by estimated Variable Costs, which are reconciled to actual Variable Costs incurred by the Authority to serve the Customers. Although the Authority proposed to decrease production rates, the Fixed Costs were projected to increase by \$0.19 million. The *State Register* notice was published on October 17, 2018 in accordance with the SAPA. The sixty-day public comment period was then established and closed on December 17, 2018. There were no public comments received during the comment period. 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. As such, a public forum was held on November 20, 2018. No comments were received during the public forum. The public forum transcript is attached as Exhibit '4b i-A.'

DISCUSSION

To align with the Authority's 2019 Official Budget approved by the Trustees on December 11, 2018, staff is now proposing a Fixed Costs decrease as compared to the proposal at the October 2018 meeting. As part of the decrease set forth in this proposed rate action, the Fixed Costs component is expected to decrease by \$0.05 million from \$1.29 million in 2018 to \$1.23 million in 2019. The proposed decrease is primarily driven by a decrease in Operations & Maintenance ('O&M') costs at the Small Hydroelectric facilities as a result of several projects having been completed in 2018 or are expected to be completed in 2019.

The Variable Costs component of rates is estimated based on the market price snapshot at the time of the Cost-of-Service ('COS') development. Due to the market's variability, the Authority passes through all Variable Costs to the Customers by way of an Energy Charge Adjustment ('ECA') cost-recovery mechanism. This ECA mechanism employs a monthly charge or credit that reflects the difference between the projected Variable Costs of electricity recovered by the tariff rates and the monthly actual Variable Costs incurred by the Authority to serve the Customers. The estimated Variable Costs component is projected to decrease \$0.52 million from \$28.84 million in the Final 2018 COS to \$28.32 million in the Final 2019 COS. The primary cost element, energy purchases, is \$21.40 million and accounts for approximately two-thirds of the total production costs. The projected 2019 energy prices are expected to be lower than those that were projected for 2018 and incorporated into the rates that are

currently in effect. Also contributing to the decrease in Variable Costs are lower capacity costs due to a projected decrease in Lower Hudson Valley capacity prices.

Based on further staff analysis, the Final 2019 Westchester County Governmental Customers' COS is \$29.55 million. Applying current rates to the 2019 Customer sales forecast results in projected revenues of \$29.84 million, representing an over-collection of \$0.28 million from the Customers. Therefore, staff is proposing a final rate action to decrease production rates by 0.95%.

The current 2018 and final 2019 proposed rates with the 0.95% rate decrease are shown in Exhibit '4b i-B.'

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. The adoption of the 2019 production rate decrease would have no effect on NYPA's financial position.

RECOMMENDATION

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

The Trustees are also requested to authorize the Vice President of Economic Development, or his designee, to issue written notice of adoption and the revised tariff leaves, as necessary, to the affected Customers.

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 final action by the Trustees for a 0.95% 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 notice 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 rate decrease; and be it further

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

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

c. Power Allocations:

i. Request for Increased Funding – Municipal and Rural Cooperative Electric Utilities Electric-Drive Vehicle Program

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve \$3 million in additional funding for the Municipal and Rural Cooperative Electric Utilities Electric-Drive Vehicle Program ('Muni-Coop E-D Program' or 'Program'). This amount is in addition to the \$8 million previously approved by the Trustees at their May 2003, February 2009, December 2013, and January 2017 meetings, respectively. This Program enables the Authority's Municipal ('Munis') and Rural Electric Cooperative ('Coops') utilities to purchase electric and hybrid-electric vehicles for use in their fleets, as well as battery charging equipment, where required. These funds will be recovered from the Program participants over a period of up to three years through a surcharge to their electric bills.

BACKGROUND

Since the 1980s, through its Energy Services Programs ('ESP'), the Authority has offered various types of energy services and clean energy technologies programs to participants throughout the state to help lower energy usage and/or achieve a cleaner and more energy efficient use of energy and natural resources.

At their May 29, 2003 meeting, the Trustees authorized \$1.2 million to finance the Muni-Coop E-D Program, a new partnership program between NYPA and the Munis and Coops. This Program facilitated the purchase of electric and hybrid-electric vehicles for the Muni and Coop systems' municipal fleets. At their meeting on February 24, 2009, the Trustees authorized an additional \$1.8 million. At their meeting on December 17, 2013, the Trustees authorized an additional \$2 million. At their meeting on January 31, 2017, the Trustees authorized an additional \$3 million. As of December 1, 2018, seventy-three (73) such vehicles were placed with 24 participants.

DISCUSSION

The current Muni-Coop E-D Program is available to all Muni and Coop utilities. The Muni and Coop utilities apply to the Authority for funding to purchase on-road passenger vehicles; heavy-duty work vehicles; or off-road work vehicles. The vehicles are used by the Muni and Coop utilities' personnel and/or their affiliated municipal agencies to carry out their functions. The funds made available to the Muni and Coop utilities for the purchase of these vehicles are recovered over three years through a monthly bill to the participating utility.

In addition, the Trustees have previously authorized that the full-requirements Muni and Coop utility customers, regulated by the Authority, be permitted to recover from their retail customers all costs associated with the electric-drive vehicle finance program, as well as any other energy-efficiency programs and initiatives that the Authority offers to the Muni and Coop Systems. Recovery of these costs will be through the Purchased Power Adjustment Charge. The partial-requirements systems, regulated by the New York Public Service Commission ('PSC'), may request similar permission from the PSC to recover costs associated with the vehicle purchase and other energy-efficiency programs from their customers.

The additional funding will enable the Authority to continue its successful partnership with the Munis and Coops to expand the integration of electric-drive vehicles into their municipal fleets.

FISCAL INFORMATION

With the addition of the requested funding, the Muni-Coop E-D Program will provide financing up to \$11 million for the purchase of vehicles and the purchase and installation of battery charging equipment, where applicable. These costs will be recovered directly from the Program participants over a period of up to three years through a monthly invoice or an electric bill surcharge. To date, there have been no issues with the repayment of loans in the initial or subsequent phases of the program.

The Program will be funded from Commercial Paper Note proceeds and/or Operating Fund monies. A small portion of the funding will be supplemented by the Petroleum Overcharge Restitution ('POCR') funds allocated to the Authority by the New York State legislature; the POCR funding will be used strictly to offset the internal NYPA interest charges.

RECOMMENDATION

The Vice President – Economic Development recommends that the Trustees authorize an additional \$3 million in funding for the implementation of the Municipal and Rural Cooperative Electric Utilities Electric-Drive Vehicle Program and continue the use of the Purchased Power Adjustment Charge to allow the full-requirements municipal and rural cooperative electric utilities regulated by the Authority to recover their costs for the program.

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 an additional funding in the amount of \$3 million for the Municipal and Rural Cooperative Electric Utilities Electric-Drive Vehicle Program, as described in the foregoing report of the President and Chief Executive Officer, is hereby authorized; and be it further

RESOLVED, That the Electric-Drive Vehicle Program may be funded with the proceeds of Series 1, 2, or 3 Commercial Paper Notes, Operating Fund monies, and/or Petroleum Overcharge Restitution (“POCR”) funds allocated to the Authority by New York State legislation, with such POCR funding being in amounts as deemed advisable by the Vice President of Economic Development; and be it further

RESOLVED, That the Trustees hereby authorize the full-requirements Municipal and Rural Co-operative systems served by the Authority to recover costs for this, and other energy-efficiency programs, through the Purchased Power Adjustment Charge; 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

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**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. 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 '4d i-A,' as well as the continuation and/or funding of the procurement (services) and other contracts listed in Exhibit '4d 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 '4d 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, which range in estimated dollar value from \$200,000 to \$5 million. 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 '4d 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 '4d 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:

Utility Operations – Engineering

Due to the need to meet and maintain the Authority's project schedule, the proposed personal services contracts with **Leidos Engineering of New York PC ('Leidos'), Power Engineers, Inc. ('Power'), SNC Ltd., ('SNC'), Substation Engineering Company ('Substation') and TRC Engineers, Inc. ('TRC') (Q18-6553JGM)** became effective January 7, 2019, for the initial interim award amount of \$550,000, subject to the Trustee's approval as soon as practicable, in accordance with the Authority's Guidelines for Procurement Contracts and EAP's. The contract provides Optical Groundwire ('OPGW') expansion design and engineering 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-four 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 a contract to Leidos, Power, SNC, Substation and TRC 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. These contracts are for an intended term of three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the aggregate amount expected to be expended for the term of these contracts, \$2,762,795.

Utility Operations – SENY

The proposed non-personal services contract with **Quintal Contracting Corporation ('Quintal') (A18-000961DW)** would provide Algae Scraping of Reinjection Ponds for the Richard M. Flynn Power Plant on an 'as needed' basis. Quintal has performed this service for the past five years and is familiar with Flynn Power Plant facilities. Bid documents were developed by staff and were accessible through the NYPA.gov site. The Request for Quotations was advertised on the New York State *Contract Reporter* website and posted on the Procurement page of the Authority's website. One firm / entity was listed as having been invited to, or requested to participate in, the Ariba event. One proposal was received electronically via Ariba and was evaluated, as further set forth in the Award Recommendation documents.

Staff recommends the award of contract to Quintal which is technically and commercially qualified and meets the bid requirements on the basis of 'best value,' which optimizes quality, cost and efficiency among responsive and responsible offerors. The contract is for an intended term of five years, subject to the Trustees' approval, which is hereby requested. This contract will begin on January 31, 2019 and end on January 30, 2024. Approval is also requested for the amount expected to be expended for the term of the contract, \$200,000.

Utility Operations – Technical Compliance

The proposed personal services contracts with **Bureau Veritas North America, Inc. ('Bureau'), NPTS, Inc. ('NPTS'), Procurement Services Consulting, Inc. ('Procurement') and Stantec Consulting Services, Inc. ('Stantec') (Q18-6502JGM)** would provide domestic and global Quality Assurance ('QA') Inspection and QA Engineering services. As the Authority undertakes various major non-recurring and capital projects, such as Lewiston Pump Generating Plant – Life Extension and Modernization ('LPGP LEM') and Transmission Life Extension and Modernization ('TLEM'), ensuring new assets being procured or refurbished meet the Authority's technical specifications and requirements is imperative to facilitate the Authority's mission of delivering reliable power. 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-five 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 a contract to Bureau, NPTS, Procurement and Stantec 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. These contracts are for an intended term of four years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the aggregate amount expected to be expended for the term of these contracts, \$3.2 million. NPTS is a NYS-certified Minority-owned Business Enterprise.

Utility Operations – Technical Compliance

The proposed personal services contracts with **ABB, Inc. ('ABB'), Hydro Tech (USA), Inc. ('Hydro'), and Power Engineering, Inc. ('Power') (Q18-6558JGM)** would provide on-call specialty engineering services for future initiatives and activities within the Authority's Engineering group. On-call specialty engineering services are required to advance planned, emergent and on-going projects and to supplement existing resources. 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. Four 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 ABB, Hydro and Power which are technically and commercially qualified and meet the bid requirements as the lowest-priced bidders among responsive and responsible offerors. These contracts are for an intended term of five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the aggregate amount expected to be expended for the term of these contracts, \$7 million.

Extensions and/or Additional Funding Requests:

Corporate Affairs - Public & Regulatory Affairs

At their meeting on July 29, 2014, the Trustees approved the award of a competitively bid contract to **KPMG, LLP ('KPMG') (PO# 4500249908)** in the amount of \$2.5 million for a five-year term to provide independent accounting and auditing services, as well as other audit and non-audit services, as may be required. At their meeting on March 29, 2016, the Authority's Audit Committee authorized staff to engage KPMG to provide advisory services relating to the transfer of the New York State Canal

Corporation ('the Canal Corporation'). Additional funding in the amount of \$6,910,000 was subsequently authorized in accordance with the EAPs including Trustee authorization of \$6,410,000 at the July 26, 2016 Trustee meeting. Additional funding of \$1,275,000 was approved by the Trustees at their meeting on January 31, 2017 for continued support of the integration work effort. At their meeting on August 7, 2018, the Trustees approved additional funding of \$1,056,000 for post-merger integration due diligence assistance services. Due to the need for additional advisory services, the Trustees are requested to approve an increase of the contract amount in the amount of \$775,320 which includes the interim value of \$200,000 for work to be performed during the period beginning on or before December 31, 2018 through January 30, 2019.

Utility Operations – Security Upgrades (Northern, Central and Western Regions)

At their meeting on January 27, 2015, the Trustees approved the Capital Expenditure Authorization Request ('CEAR') for the Implementation of NERC CIP Version 5 Security Upgrades in the amount of \$43,235,100. On March 26, 2015, **Johnson Controls, Inc. ('JCI')** was issued **Purchase Order #4500254367** in the amount of \$21,497,160 for a multi-year construction project for NERC CIP Version 5 Security Upgrades at NYPA Northern, Central and Western Region facilities. Under this contract, physical security enhancements, including cameras, access controls and methods of preventing and detecting intrusion in the Authority substations; Programmatic enhancements to the Authority's Reliability Standards and Compliance Program; Modifications to the Authority's internal control tools - Maximo, CIMS, AIMS; and IT infrastructure enhancements were scheduled for construction. Additional program scope, associated with the contemplated construction schedule, totaling \$1,958,429 was added to the JCI Purchase Order. The Trustees are requested to approve a contract extension through July 31, 2019 to allow for completion of the additional program work. No additional funding is 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 – Public & Regulatory Affairs; the Vice President – Engineering; the Vice President – Project Management; the Vice President – Technical Compliance; the Regional Manager SENY; the Director – Quality Assurance & Code Compliance; and the Director Civil/Structural Engineering and Dam Safety recommend that the Trustees approve the award of multiyear procurement (services) and other contracts to the companies listed in Exhibit '4d i-A' and the extension and/or funding of the procurement (services) contracts listed in Exhibit '4d i-B,' for the purposes and in the amounts discussed within the report 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 '4d 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 '4d 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.

e. Energy Efficiency

i. Smart City Technology Grant Program – Authorization for Program and Funding

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to authorize funding in the aggregate amount of \$7.5 million to implement the Smart City Technology Grant Program ('Program') through December 31, 2025. The Program will support the planning and installation of sensor hardware and software technology, as well as connectivity studies, as part of light emitting diode ('LED') street lighting projects performed under the Authority's Energy Services Program ('ESP'). Of the \$7.5 million, \$2.5 million will fund projects performed for the Cities of Albany, Buffalo, Rochester, Syracuse, and Yonkers. The remaining \$5 million will fund other ESP eligible program participants as well as other programmatic costs. The funds will not be recoverable from program participants.

BACKGROUND

Public Authorities Law 1005 (17) requires the Trustees' approval to finance, including grants, certain energy related projects, programs, and services for program participants.

On February 26, 2015 and January 31, 2017, the Trustees approved the Five Cities Energy Plan and associated funding in support of energy efficiency projects and measures at the five largest cities outside of New York City (Albany, Buffalo, Rochester, Syracuse, and Yonkers). The authorization of the funding for the energy plan expired on December 31, 2018.

On February 19, 2018, the Governor announced the Smart Street Lighting NY Program which has a goal of converting 500,000 street lights to LED technology by 2025. The conversion would yield savings of 482 gigawatt hours annually and reduce the overall greenhouse gas emissions which align with the State's goal of 40 percent reduction in emissions by 2030. To achieve this goal, the Authority will provide municipalities a turn-key solution to purchase and convert the existing street lights to energy efficient LED.

The Program will facilitate the conversion to LED street lighting and achieve associated energy savings. Streetlights provide a unique opportunity for a municipality to utilize this infrastructure as strategic assets. A typical Smart City project would incorporate a range of devices to improve a municipality's connectivity, public safety, environment, and transportation.

DISCUSSION

The Energy Efficiency Program provides energy efficiency and renewable energy services to customers meeting the eligibility criteria under the Public Authorities Law. The Authority will work with program participants statewide to develop comprehensive street lighting projects by integrating one or more of the following technology categories:

<i>Connectivity:</i>	city-wide Wi-Fi, 4G/5G cell tower, digital kiosk, connected asset management
<i>Public safety:</i>	gunshot detection, video analytics, noise/ motion monitoring
<i>Environmental:</i>	air quality, ice/snow detection, sewer/ storm water monitoring, weather
<i>Transportation:</i>	traffic optimization, traffic monitoring, parking management

As new technology continues to be developed, the Authority can expand the listed offerings mentioned above.

Program funds will be available to program participants on a 'first-come,' 'first-serve' basis. Funding will be applied in conjunction with street lighting projects performed by the Authority. In addition, program participants will provide the Authority access to all data.

The Smart City Technology Grant Program will coincide with the Governor's Smart Street Lighting NY Program with a term of up to 2025. By combining these initiatives, the Authority and the State of New York will be leaders in the development and roll-out of the Smart City technology.

FISCAL INFORMATION

The \$7.5 million Smart City Technology Grant Program will be funded from the Authority's Operating Fund.

RECOMMENDATION

The Vice President – Clean Energy Business and Market Development recommends that the Trustees approve the requested funding for the implementation of the Smart City Technology Grant Program.

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 in accordance with Public Authorities Law 1005 (17), the Trustees hereby authorize the Smart City Technology Grant Program and expenditure of up to \$7.5 million through 2025 to fund the Smart City Technology Grant Program as described in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That Operating Fund monies will be used to fund such grants in the amount and for the purposes listed below:

<u>Operating Funds</u>	<u>Expenditure Authorization (not to exceed)</u>	<u>Authorization Expires</u>
Hardware and software technology for Five Cities (Cities of Yonkers, Albany, Buffalo, Rochester, Syracuse)	\$2.5 million	12/31/2025
Hardware and software technology for municipal government (excluding Cities of Yonkers, Albany, Buffalo, Rochester, Syracuse)	\$5 million	12/31/2025

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 –
Erie Canalway Heritage Fund – Contract Award**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Board of Directors ('Board') is requested to approve the award of a single-source, personal services contract to Erie Canalway Heritage Fund, Inc. ('ECHF') of Waterford, New York to assist with marketing and promotional programs and services, sponsorships of vital community programs and audience development for major canal events. The contract term will be three years, effective January 1, 2019 through December 31, 2021, with a total value of \$425,000.

ECHF is a nonprofit organization located in Waterford, NY, duly organized and existing under the laws of the State of New York, that assists in carrying out the work of the Erie Canalway National Heritage Corridor Commission ('the Commission'), a federally funded program of the National Park Service. ECHF has been identified as a single-source selection because its, and the Commission's, mission is strongly aligned with the Canal Corporation's ('Corporation') goals to promote the canal as a tourism destination and its extensive knowledge of the system uniquely positions it to provide the services proposed in the contract.

In accordance with the Corporation's Procurement Guidelines and Expenditure Authorization Procedures, the Board's approval is required when the award of Single-Source Personal Service Contracts and/or Purchase Order Releases exceeds one year in term or the value of such contracts exceeds \$1,000,000.

BACKGROUND

ECHF works to preserve and share New York's canals' extraordinary heritage, to promote the corridor as a world-class tourism destination, and to foster vibrant communities connected by the waterway. Its mission is to provide a critical link that unites communities and assets along the 524-mile corridor under a strong, recognized brand; leverage financial resources and focus public and private investment to advance the entire region; draw international and national attention to New York's legendary canal corridor; share expertise, innovative ideas and resources to support people who are working to preserve and enhance corridor assets and local economies; and bring diverse partners together to implement projects with a broad, corridor-wide scope, achieving bigger results than any single organization could achieve alone.

Specifically, the services to be provided by ECHF include: promoting and sponsoring local community events that will generate tourism visitation and economic benefits throughout the Canal System; producing and distributing an annual Erie Canalway Map and Guide that includes substantial education and interpretive content and which will enhance Canal tourism by featuring Canal destinations and experiences; administering a Canal-themed photo contest, including refining contest rules, managing submissions, selecting winners, and administering a traveling photo exhibit; producing and distributing an Annual Calendar that will feature photographic images (from the photo contest) that represent and promote the diverse recreational experiences and/or heritage of the Canal; and to develop, grow and promote recreational campaigns and publications to encourage cycling, paddling, boating and hiking/walking.

The non-profit status of ECHF makes it uniquely suited to provide these services. First, no profit margin is added into pricing for the production of the two publications, keeping costs lower than similar projects contracted with private for-profit firms; and second, ECHF matches the Corporation's funds for

the sponsorship of local events dollar-for-dollar with monies raised from other public and private sources, thereby helping to significantly leverage the Corporation's funds.

ECHF has provided many of these services to the Corporation in past years, and the proposed contract would be a renewal, with expanded services, of an expiring three-year contract with a term life of January 1, 2016 through December 31, 2018.

DISCUSSION

The contract with ECHF will seek to assist with marketing and promotional programs and services, sponsorships of vital community programs, and audience development for major canal events. A component of this will be carrying out the work of the Commission. Also, the mission is strongly aligned with the Corporation's goals to promote the canal as a tourism destination.

The Corporation initially contracted with ECHF in 1999 and has had Agreements for the periods 2016-2018. In conformance with the Corporation's Procurement Guidelines, the Corporation has determined that it is beneficial for such services to be contracted for rather than performed by employees of the Corporation and that the conditions for a waiver of competition have been met.

FISCAL INFORMATION

The Corporation has sufficient funds in the proposed 2019 Canal System Development Fund budget that will be allocated to this project.

RECOMMENDATION

The Director of Policy & Program Development, the Director of Community & Economic Development and the Executive Deputy Director recommend that the Board approve the award of a single-source, personal services contract to Erie Canalway Heritage Fund, Inc. ('ECHF') of Waterford, New York to assist with marketing and promotional programs and services, sponsorships of vital community programs, and audience development for major canal events. The contract term will be three years, effective January 1, 2019 through December 31, 2021, with a total value of \$425,000.

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 pursuant to the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures, approval is hereby granted to award a single-source, personal services contract, with a start date on January 1, 2019 through December 31, 2021, with a total award value of \$425,000, to Erie Canalway Heritage Fund, Inc. ("ECHF") of Waterford, New York to assist with marketing and promotional programs and services, sponsorships of vital community programs, and audience development for major canal events as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Contract Award</u>
Erie Canalway Heritage Fund, Inc. Single-Source	Waterford, NY	<u>\$ 425,000</u>

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, and all other officers of the 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**
Waste Services - Contract Award

The President and Chief Executive Officer submitted the following report:

"SUMMARY"

The Board of Directors ('Board') is requested to approve the award of a non-personal services contract related to Inquiry No. K18-10256506JGM to NRC NY Environmental Services, Inc. ('NRC') of Great River, New York to provide waste services in support of the operations and maintenance of NYS Canal Corporation ('NYSCC') facilities on an as needed basis. The contract term will be three years, starting on or about January 30, 2019, with a total value of \$250,000.

In accordance with the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures, the Board's approval is required when the award of services contracts and/or Purchase Order Releases exceed one year in term or the value of such contracts exceeds \$6,000,000.

BACKGROUND

The Canal System includes: The Erie, Champlain, Oswego and Cayuga-Seneca canalized natural waterways, plus five lakes: Champlain, Oneida, Onondaga, Cross Cayuga and Seneca; short canal sections at Ithaca and Watkins Glen; feeder reservoirs, canals and rivers not accessible by boat from the canal; and canal terminals on Lake Champlain. The Canal System passes through 25 counties and close to 200 villages, hamlets and towns. The Canal System is a listed National Historical Landmark. Portions of original canals (e.g., Erie/Champlain) and support infrastructure (e.g., feeder canals) are listed, or eligible for listing, on the Registry of Historic Places.

The Corporation seeks to retain a Contractor to complete the removal, handling, transportation, and disposal or recycling of hazardous and non-hazardous Resource Conservation Recovery Act ('RCRA') regulated waste materials from NYSCC collection locations. The term of the contract shall be three years with an option for two additional years. Facilities that may require services are the Canal System (Erie, Oswego, Cayuga & Seneca, and Champlain canals) locks, maintenance and support facilities.

Waste services would include the collection and disposal of various wastes in containers, primarily in 55-gallon drums, but may also be within over pack drums or within smaller containers. All requirements to properly classify, obtain approvals at destination facilities, prepare and load containers for shipment, manifest and provide communications for the shipment, provide disposal and documentation of the disposal for all wastes will be provided by the Contractor.

DISCUSSION

In response to an advertisement issued on August 27, 2018 for Waste Services, Inquiry No. K18-10256506JGM, three (3) proposals (bids) were received and publicly opened and read on September 24, 2018. The bids were reviewed by an Evaluation Committee consisting of the Director of Environmental Health and Safety at NYPA and Environmental Affairs at NYSCC.

FISCAL INFORMATION

Expenditures for this contract will be paid from the Canal Corporation's Operating Fund, as appropriate.

RECOMMENDATION

The Director of Policy & Program Development and the Deputy Director recommend that the Board approve the award of a non-personal services contract to NRC NY Environmental Services, Inc. ('NRC') of Great River, New York to provide waste services in support of the operations and maintenance of NYS Canal Corporation ('NYSCC') facilities. The contract term will be for three years, effective on or about January 30, 2019, with a total value of \$250,000.

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 pursuant to the Canal Corporation's Procurement Guidelines and Expenditure Authorization Procedures, approval is hereby granted to award a Contract (K18-10256506JGM), with a start date on or about January 30, 2019, with a total award value of \$250,000, to NRC NY Environmental Services, Inc. to provide waste services in support of the operations and maintenance of NYS Canal Corporation ("NYSCC") facilities, as recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u>	<u>Location</u>	<u>Contract Award</u>
NRC NY Environmental Services, Inc. K18-10256506JGM	Great River, NY	<u>\$250,000</u>

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, and all other officers of the 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").

2018 Year-End Report

NYPA's 2020 Strategic Plan

NYPA is at the end of the implementation of its 2020 Strategic Plan – Resource Alignment, Infrastructure modernization and Customer Empowerment – putting the customer at the forefront of all its endeavors. The goal is to finish strong in 2019.

Utility Operations

Infrastructure Modernization

Under the leadership of Joe Kessler, the Authority is investing, building, designing, and modernizing its assets for the benefit of its customers.

Some of the key activities in Utility Operations and its accomplishments include implementing and modernizing the Authority's infrastructure.

Smart Path

Smart Path is the rebuild of the Moses Adirondack transmission lines from Massena to the Adirondacks, approximately 86 miles. In the fall, the Authority's Article 7 citing application before the Public Service Commission was deemed complete; it is expected to be approved later this year. In addition, the Board approved a \$99 million contract to begin this work. To date, the Authority has expended approximately \$12.5 million towards this project.

LPGP-LEM

The Lewiston Pumped-Generating Life Extension and Modernization project is a multi-year project, which is scheduled to be completed in 2022. This \$460 million capital investment project is about 75 percent complete. To date, the Authority has expended \$297 million on the project, which is on budget and on schedule.

T-LEM

The Authority owns one-third of the high voltage transmission in New York State. The Transmission Life Extension and Modernization Project is a multi-year program which is about 50 percent complete and is scheduled to be completed in 2025. Of the \$726 million capital investment, to date, the Authority has expended about \$299 million on the project, which is on budget and on schedule.

Digital Utility

The Authority has started investing in being a digital utility. The Authority is now monitoring about 25,000 sensor points to assess the real-time health of its generation and transmission assets. The plan is to add more sensors and build its own communications backbone center in order to realize its goal of being a digital utility. This project should be completed by 2021.

Commercial Operations

Commercial Operations monetizes the Utility Operations' performance of the Authority's assets in terms of reliability and availability under the leadership of Ms. Sarah Salati.

Electric Supply

Last year, the Authority exceeded the gross margin target of its electric supply business.

New Project Development

NYPA and LS Power's project, in which NYPA is a minority partner, was recommended by the NYISO staff as the preferred project for segment "A" in a NYISO competitive solicitation seeking transmission improvements in two segments - one west of Albany and the other south of Albany. If NYISO's Board formally approves the NYISO Staff recommendation, NYPA's Board approval will be sought. This would be a major investment for the Authority.

Staff will make a presentation to the Board regarding a large-scale renewable project, a first-of-its-kind in the Southern Tier. Ms. Marie Berninger made a presentation in this regard to the Finance Committee at its last meeting. Staff will be requesting the full Board's approval of the project at this meeting.

Economic Development

The Authority continues to allocate low-cost, clean, economical power to help catalyze job creation and capital investments in the state. This has resulted in approximately \$7.2 billion in capital commitments by the Authority's customers that support more than 210,000 jobs.

The Authority also renewed all of its Electric Supply contracts with its customers last year. These multi-year agreements will provide stability to the Authority and its customers.

Customer Energy Solutions

The Authority has seen significant growth in its energy efficiency and customer-sided renewable business. In spite of the challenges of making those businesses break even, the Authority is on the right track for it to take place. The Authority is encouraged by the top line growth and the introduction of new products and services to its customers.

The Authority will continue to invest in new startup energy services businesses such as the New York Energy Manager, which is going according to plan.

In addition, the Authority is shifting to a new, more-robust platform and partnership with a Silicon Valley company called C3 IOT, a software platform provider that provides artificial intelligence capabilities.

Moonshots

The Authority launched three moonshot initiatives last year.

1. Evolve NY - the Authority's foray into the electric vehicle space. The Authority plans to build 200 fast chargers along the highway corridors and help build model Electric Vehicle ("EV") communities and fast charging hubs at airports. This project is underway and is a critical tool to reduce greenhouse gas emissions in the state.
2. Flexibility - the demand and energy storage response. The Authority plans to install a 20-megawatt storage facility in one of its substations in upstate New York. In addition, there are a number of other potential projects with the Authority's customers, at the distribution level, to do large-scale test and learns with a goal to help shape the regulatory rules and market signals and foster storage growth, not only for NYPA and its customers, but also for the state as a whole.

3. Offshore Wind - In his state-of-the-state address, the Governor announced increasing the goal in offshore wind, threefold. To that end, last year, the Authority did a detailed study of the experience of the Europeans who have already installed several offshore wind projects. The Authority is now sharing all the lessons learned with the market operators and utilities in New York with the goal to work with them on the best approaches for offshore wind development in New York State.

New York State Canal Corporation

Last year, the Canal Corporation ("Canals") was fully integrated in NYPA's operations. The Authority has made many improvements in Canals, especially in the area of environmental health and safety for the safe and secure operation of Canals. Work on the "Reimagining the Canals" vision has started and the Authority will report on this plan to the Board in the future.

Financial Performance

In terms of financial performance, last year was a stellar year for NYPA. The Authority has over performed in terms of its Net Income. The fixed cost coverage ratio is still above 1.75%, the median in its class. The rating agencies affirmed the Authority's credit rating as one of the strongest in the public power space.

2019 SOS: NYS Green New Deal

In his 2019 address to the state, the Governor announced a very aggressive goal, the Green New Deal, mandating 100 percent clean power by 2040. This goal is for carbon-free electricity by 2040, ultimately removing carbon from all sectors of the economy. To that end, up to \$200 million in investments will be made to import infrastructure for offshore wind; \$1.5 billion initial investment in large-scale renewable projects, and ensuring a workforce development program that will adjust transition to this complete transformation of the electric and energy sector in the state.

NYPA 2019 – New Strategic Plan

The Authority is in the process of creating a new Strategic Plan, the NYPA 2030 Strategic Plan, and will report to the Board on the progress of this Plan later in the year.

In summary, last year was a great year for NYPA from the operations, commercial and financial perspectives. The Executive Management team and all of the employees at NYPA and Canals are credited for working together to produce a great set of outcomes for 2018 and for having a good starting platform to do even better, going forward.

b. Financial Operations

i. Chief Financial Officer's Report

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

2018 Preliminary Year-End Results

The Authority's financial performance in 2018 was very good; therefore, it will be in good financial health to support the organization in all of its strategic objectives. The Authority's financial performance remains very strong and in line with its AA credit rating, which was recently affirmed by all three rating agencies.

Net Income

Based on preliminary results, the Authority is expecting to have final Net Income of approximately \$103 million, which is higher than the budgeted amount of \$76.9 million. Higher Generation Margins and lower Net Interest expense primarily drove the positive results.

Operating expenses were within one percent of the budgeted amounts. The Authority undertook new strategic initiatives and investments, as well as economic development projects that required additional expenditures that were not included in the 2018 budget.

Preliminary Net Income for 2018 is expected to be in the range of \$97.6 million to \$107.6 million with the expected value of \$102.6 million. This positive result is driven by \$17.5 million in higher Margins and \$17.6 million in lower Net Interest Expense and is offset by approximately \$9 million in higher Operating Expenses.

The positive Margin variance was driven primarily by energy Margins – hydro volumes at six percent higher than originally budgeted and strong resource management by the Commercial Operations team in capturing market opportunities around asset management and modernizations of excess natural gas inventories.

Further bolstering the Authority's positive Net Income was lower Net Interest Expense. Approximately one-third was related to noncash, market-to-market gains in the Authority's reserve portfolio. The remaining two-thirds is associated with lower-budgeted Interest Expense because the Authority delayed some of last year's, and future periods, including 2019, issuances.

Operating Expenses are expected to come in at approximately \$9 million higher than budgeted, which is within one percent of the overall budgeted amount. These higher expenses are associated with the Authority's undertaking new strategic initiatives and investments, which are expected to yield value to NYPA over time, and economic development projects, including the acceleration of projects at the Canal Corporation.

c. Utility Operations

i. Chief Operations Officer's Report

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

Performance Measures – Year-to-Date October 2018

Generation Market Readiness

Generation Market Readiness factor was at 98.81%. This is below the target of 99.40%.

The variance in the Generation Market Readiness is due to a breaker failure at the Blenheim-Gilboa Project last year. This target will be adjusted in 2019, taking the outage into consideration. The Board will be informed of the new measure at the March meeting.

Transmission reliability

- Transmission Reliability factor was 95.39%. This is above the target of 95.22%.

Environmental Incidents

- Year-to-date, there were 14 incidents. The Annual Target is not to exceed 28 incidents.

Safety

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

- The year-to-date DART Rate is 0.97. The target is 0.78.

There a slight variance in this target. The Authority plans to revisit the DART target to make sure that, based on the nature of the work that staff performs, the target is achievable.

2018 Year-End Net Generation

Generation Market Readiness is a measure that represents how the Authority is doing with generation based on the different impacts of energy prices, the system and the ancillary services.

Last year, the Authority exceeded its budgeted target for total generation of energy. In fact, the Northern Region, the Massena Plant, set a record for generation. In addition, the Authority was very successful in generating when called upon by the Commercial Operations team.

Utility Operations plans to revisit how it reports the Generation Market Readiness measure. At present, it is based solely on price and the Authority's ability to generate; however, there are a lot more nuances in the way the system is being operated. The Authority wants to make sure that, from a performance standpoint, it is communicating the right behaviors to the Trustees and to the public regarding where it stands on generation. Utility Operations' staff will be working closely with the Commercial Operations' team on this reporting measure.

d. Commercial Operations

i. Chief Commercial Officer's Report

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

Wholesale

- Generation

The Authority's wholesale and resale businesses operated on target.

- Customer Usage

The Customer usage and the level of generation were on target.

- Electric Prices

Electric prices in the market were above target.

- Fuel Prices

The Authority managed its fuel line within its target.

- Gross Margin

Gross Margin is used to manage the Authority's assets that are bid into the market, contracts for fuel as well as the Authority's ability to achieve its hydro forecast. The Authority is 20 percent above its targeted gross margin. This is primarily driven by a very close coordination between Utility Operations and the Commercial Operations team in managing the Authority's assets and the water flows at the Blenheim-Gilboa ("B-G") and St. Lawrence projects, timing those where the Authority is able to buy out of the market when prices are low, and holding its water in reserve and generating when prices are higher.

Additionally, the Authority renegotiated some of its gas contracts, which reduced its exposure to gas prices.

Economic Development

In terms of economic development, the Authority had another very strong year. The cumulative results of the program were over 80 percent allocations for the Recharge New York program. As a result of the work that was undertaken by the Economic Development team, the Authority negotiated contract renewals for several of its economic development programs, which has the Authority committed to retain more than 210,000 jobs over the next seven to ten years, as well as investments of \$7.2 billion in capital commitments to New York State.

Energy Efficiency

In support of the Governor's agenda related to the "Green New Deal," the Authority's energy efficiency projects accelerated customer investments, improving their energy efficiency footprint as well as enabling them to secure incremental renewables.

The non-utility revenues are in line with that agenda because the Authority is paid as it deploys capital and implements those projects.

Operating Expenses

The Authority's operating expenses are higher than budgeted. Commercial Operations is working to ensure that the Authority's revenues are increasing, while maintaining its costs.

The Business Development team signed a record number of customer investment contracts in 2018 for more than \$360 million of work that the Authority will be doing for its governmental customers over the course of the next couple of years. This supports the Governor's energy efficiency targets.

The Authority evolved its various clean energy solutions offerings to municipalities and co-ops in converting to LED lights, supporting their evolution to smart city technologies, as well as expanding and evolving the services around solar and storage at the customer sites and helping some of the Authority's customers reach target carbon-neutral footprints.

1. **Economic Development Allocations and Awards:**

a. **Preservation Power Allocation**

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve an allocation of 850 kilowatts ('kW') of Preservation Power ('PP') to Upstate Niagara Cooperative, Inc. ('Upstate Niagara') which is proposing to install a new, ultrafiltration filling line to produce new yogurt products at its North Lawrence, St. Lawrence County facility. The project is described in further detail below and in Exhibit '5d i-1a-A.' The term of the allocation would be seven years. The allocation would support a capital investment of at least \$3.4 million and the creation of at least 17 jobs (above the current 80 jobs at this facility).

The Trustees are requested to authorize a public hearing, in accordance with Public Authorities Law ('PAL') §1009, on the proposed direct sale contract for Upstate Niagara, the current form of which is attached as Exhibit '5d i-1a-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 apply 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 Corporation 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 241,150 kW of PP available to allocate to qualified businesses under the criteria set forth in PAL §1005(13)(a).

DISCUSSION

Upstate Niagara

Associated with more than 360 family-owned and operated farms, Upstate Niagara is one of the largest and most stable dairy cooperatives in the country. Along with the facility in North Lawrence, Upstate Niagara operates manufacturing facilities in Rochester, Buffalo, West Seneca, Batavia and Campbell.

Upstate Niagara acquired North Country Dairy in 2011. At the time of acquisition, the dairy plant had been closed for several months, putting 137 individuals out of work.

The North Lawrence location primarily produces cultured dairy products sold mostly to retailers and food institutions in New York and the Northeast. All of the milk used to make the products comes from local dairy farmers.

The facility has grown over the years in employment, (currently operating three shifts) producing 45 million pounds of yogurt annually. Upstate Niagara currently receives an allocation of 1,850 kW of PP tied to 80 jobs. It is in compliance with its existing contractual commitments.

The company submitted an application requesting 1,300 kW of PP to support an expansion that would involve the installation of a new, ultra-filtration filling line to produce a unique Greek-style yogurt.

Upstate Niagara plans to invest at least \$3.4 million estimated as follows: approximately \$1,600,000 for storage tanks and installation; \$200,000 for a fruit mixing system; \$250,000 for clean, in-place sanitation equipment; and \$1,350,000 for ultrafiltration, palletizing, building modifications and miscellaneous project items.

The company expects the first year output of yogurt production to increase from 43 million to 63 million pounds annually. Local dairy farmers would benefit from this project. There is currently an overabundance of milk in New York (the supply of milk from dairy farmers far exceeds the demands of the marketplace). This project would help reduce the amount of milk in the region's milk shed since the production of yogurt requires a significant amount of milk.

Upstate Niagara would create 17 new jobs in connection with this project (above the current 80 jobs it is committed to retain) at an average annual salary/benefits package of \$68,470 per worker.

Additional support for this project would be provided by an Empire State Development Regional Council Capital Grant of \$300,000 and a St. Lawrence County IDA Local Development Corporation Loan Package of \$1,000,000, along with sales and tax exemption benefits.

The job creation ratio for the proposed allocation of 850 kW is 20 new jobs per MW. This ratio is below the historic average of 29.9 new jobs per MW based on allocations made during the past nine years. The total project investment of at least \$3.4 million would result in a capital investment ratio of \$4 million per MW. This ratio is below the nine-year historic average of \$23.1 million per MW.

Staff recommends that an allocation of 850 kW of PP for a term of seven years be awarded to Upstate Niagara in support of its proposed project.

Contract Information

Staff intends to discuss the proposed form of the customer agreement with Upstate Niagara, and anticipates reaching agreement with this applicant on a contract substantially similar to the one attached as Exhibit '5d i-1a-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. ('NYISO') 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 Vice President – Economic Development, recommends that the Trustees approve an allocation of 850 kW of PP to Upstate Niagara for a term of seven years as described herein and in Exhibit '5d i-1a-A,' and authorize a public hearing on the contract attached as Exhibit '5d i-1a-B' for the sale of the allocation of PP to Upstate Niagara.

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

Mr. Keith Hayes, Vice President of Economic Development, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That an allocation of 850 kilowatts ("kW") of Preservation Power ("PP") to Upstate Niagara Cooperative, Inc. for a term of seven (7) years as detailed in the foregoing report and Exhibit "5d i-1a-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 Upstate Niagara (the "Contract"), the current form of which is attached to the foregoing report as Exhibit "5d i-1a-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.

b. Replacement Power Allocation

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve an allocation of 350 kilowatts ('kW') of Replacement Power ('RP') to 3M Company ('3M') which is planning an expansion at its facility in the Town of Tonawanda, Erie County. The project is described in further detail below and in Exhibit '5d i-1b-A.' The term of the allocation would be seven years. The allocation would support capital investment of at least \$14 million and the creation of at least 18 jobs in Western New York ('WNY').

BACKGROUND

Under 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 must be 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 WNY and the State of New York. Each organization has expressed support for today's recommended RP allocation.

DISCUSSION

At this time, 67,510 kW of unallocated EP and 99,091 kW of unallocated RP is available to be awarded to businesses under the criteria set forth in PAL §1005(13)(a).

The applicant, 3M, is an American multinational corporation operating in several fields including health care and consumer goods. A global company with annual sales totaling \$30.9 billion, 3M produces a variety of products, including adhesives, abrasives, laminate, passive fire protection, personal protective equipment, dental products, etc. It has operations in sixty (60) countries with 145 plant locations worldwide.

3M currently purchases four allocations of power totaling 3,400 kW. 3M receives 38% of its power needs from NYPA, consisting of three WNY hydropower allocations totaling 1,650 kW, and a Recharge New York allocation totaling 1,750 kW.

3M's Tonawanda plant is a facility that serves 3M's homecare division and has been in existence for over 60 years. 3M purchased the plant from GM in 1990. The main products produced at the plant are cellulose sponges and cellulose/abrasive laminate sponges.

3M, which submitted an application requesting 450 kW of hydropower, is proposing to construct a 2,737 square-foot expansion at its facility on Sawyer Avenue where it would house a new hot melt assembly line which would allow the production of additional laminated sponge products.

This expansion would result in the transfer of production of the 'Scotch Brite Scrub Dot Scrub Sponge' to the Tonawanda facility from its current outsourced locations in Mexico and Minnesota.

Equipment to be installed as part of the expansion includes a high-speed packaging line and a high-power cellulose sponge cooking transformer. Total investment for the project will be at least \$14,000,000 estimated as follows: \$9,000,000 for conveyors, glue heaters/coaters and hydraulic presses; \$4,200,000 for a wrapper, tray line and case packer; and \$800,000 for a cellulose sponge cooking transformer. 3M would create at least 18 new jobs (average compensation/benefits estimated at \$67,142).

The job creation ratio for the proposed allocation of 350 kW is 51 new jobs per MW. This ratio is above the historic average of 29.9 new jobs per MW based on allocations made during the past nine years. The total project investment of at least \$14 million would result in a capital investment ratio of \$40 million per MW. This ratio is above the nine-year historic average of \$23.1 million per MW.

3M is in compliance with all of its existing contractual commitments.

Staff recommends that an allocation of 350 kW of RP for a term of seven years be awarded to 3M in support of its proposed expansion.

Contract Information

3M has already been issued an existing hydropower contract that has been subject to the public review and approval process of Public Authorities Law §1009. The existing contract provides that additional allocations and associated supplemental commitments may be added to the contract. Accordingly, there is no need for the public hearing and other process in connection with this proposed allocation. The recommended allocation would be sold pursuant to the Authority's Service Tariff No. WNY-2, recently approved by the Trustees. Delivery of the allocation would be provided by the customer's local electric distribution utility.

RECOMMENDATION

The Vice President – Economic Development, recommends that the Trustees approve an allocation of 350 kW of Replacement Power to 3M Company as described herein and in Exhibit '5d i-1b-A' for a term of seven years.

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

Mr. Keith Hayes, Vice President of Economic Development, provided highlights of staff's recommendation to the Board.

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

RESOLVED, That an allocation of 350 kW of Replacement Power ("RP") to 3M Company ("3M") for a term of seven (7) years as detailed in the foregoing report of the President and Chief Executive Officer and Exhibit "5d i-1b-A" be, and hereby is approved, subject to rates previously approved by the Trustees; 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.

c. Award of Fund Benefits from the Northern New York Economic Development Fund Recommended by the Northern New York Power Proceeds Allocation Board

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to accept the recommendations of the Northern New York Power Proceeds Allocation Board (the ‘Allocation Board’) and make awards of Fund Benefits from the Northern New York Economic Development Fund to Criscitello and Criscitello LP dba From the Heart Cabinetry (‘Criscitello’ or ‘Applicant’) and authorize the other actions described herein with respect to the applicant and recommended award. The Applicant’s project and the amount of the award being recommended is summarized in Exhibit ‘5d i-1c-A’ and discussed in further detail below and in Exhibit ‘5d i-1c-A-1.’

BACKGROUND

1. Northern New York Power Proceeds Allocation Act

On December 29, 2014, Governor Cuomo signed into law the Northern New York Power Proceeds Allocation Act (the ‘Act’). The Act adds provisions to two chapters of consolidated law, the Economic Development Law (‘EDL’), and the Public Authorities Law within the Power Authority Act, the enabling statute of the New York Power Authority (‘NYPA’) (collectively, the ‘Statutes’). As discussed in more detail below, the Act creates a program, administered by NYPA and the Board, to support economic development in Northern New York (‘Program’). Under the Program, financial assistance known as ‘fund benefits’ may be awarded to ‘eligible applicants’ for ‘eligible projects’ based on criteria set forth in the Statutes.

Under the Act, an ‘eligible applicant’ is a private business, including a not-for-profit corporation that is a private business. ‘Eligible projects’ is defined to mean ‘economic development projects’ that are or would be physically located within St. Lawrence County that will support the growth of business in St. Lawrence County and thereby lead to the creation or maintenance of jobs and tax revenues for the state and local governments. ‘Eligible projects’ include, for example, capital investments in buildings, equipment, and associated infrastructure owned by an eligible applicant; transportation projects under state or federally approved plans; the acquisition of land needed for infrastructure; research and development where the results of such research and development will directly benefit New York State; support for tourism and marketing and advertising efforts for St. Lawrence County tourism and business; and energy-related projects.

Eligible projects do not include, and fund benefits may not be used for, public interest advertising or advocacy; lobbying; the support or opposition of any candidate for public office; the support or opposition to any public issue; legal fees related to litigation of any kind; expenses related to administrative proceedings before state or local agencies; or retail businesses as defined by the board, including without limitation, sports venues, gaming and gambling or entertainment-related establishments, residential properties, or places of overnight accommodation.

NYPA and the Town of Massena Electric Department are parties to a contract that provides for NYPA’s sale of up to 20 megawatts (‘MW’) of hydropower known as ‘St. Lawrence County Economic Development Power’ (‘SLCEDP’) to the Town. As detailed in the Statutes, NYPA is authorized to sell unallocated SLCEDP into the market to generate revenue for the Program. The Statutes provide that NYPA will deposit proceeds from such sales into the Fund no less than quarterly.

At least 15% percent of the Fund is dedicated to eligible projects which are ‘energy-related projects, programs and services,’ which are defined as ‘energy efficiency projects and services, clean energy technology projects and services, and high performance and sustainable building programs and

services, and the construction, installation and/or operation of facilities or equipment done in connection with any such projects, programs or services.’

Monies from the Fund – known as ‘fund benefits’ – are paid to awardees in the form of grants, and staff expects that, in most cases, fund benefits will be disbursed as reimbursement for expenses incurred by an awardee. Allocations of fund benefits may only be made on the basis of monies that have been deposited in the Fund. No award may encumber funds that have not been deposited in the Fund.

2. Northern New York Power Proceeds Allocation Board

Under the Act, the Allocation Board’s primary responsibilities regarding applications for fund benefits under the Program are to (i) administer the application process, (ii) make determinations relating to eligibility, and (iii) where an applicant and project are eligible, evaluate applications against the statutory criteria and make a recommendation to the NYPA Board of Trustees on whether an applicant should be awarded fund benefits. The Allocation Board uses the criteria applicable to EP, RP and PP allocations, and for revitalization of industry, provided for in Public Authorities Law §1005.

Additionally, the Allocation Board is authorized to consider the extent to which an award of fund benefits is consistent with the strategies and priorities of the North Country Regional Economic Development Council, which covers the region in which an eligible project may be proposed.

At its meeting on January 25, 2017, the Allocation Board, in accordance with the Act, adopted by-laws, operating procedures, guidelines related to the application, and a form of application. A copy of the relevant criteria (collectively, ‘Program Criteria’), adapted from the Allocation Board’s ‘Procedures for the Review of Applications for Fund Benefits,’ is attached as Exhibit ‘5d i-1c-B’ to this report.

Under the Act, a recommendation for Fund Benefits by the Allocation Board is a prerequisite to an award of Fund Benefits by the Authority, and the Act authorizes the Authority to award Fund Benefits to an applicant upon a recommendation of the Allocation Board. Upon a showing of good cause, the Authority has discretion as to whether to adopt the Allocation Board’s recommendation, or to award benefits in a different amount or on different terms and conditions than proposed by the Allocation Board. In addition, the Authority is authorized to include within the contract covering an award (‘Award Contract’) such other terms and conditions the Authority deems appropriate.

3. Application Process

In an effort to provide for the efficient review of applications and disbursement of Fund Benefits, the Allocation Board established a schedule of dates through the end of 2019 on which the Allocation Board would meet to consider applications. At this time, applications are being accepted on a rolling basis. A webpage was created that is hosted on www.nypa.gov/nnyppab with application instructions, a link to the approved application form and other program details including a contact phone number and email address staffed by NYPA.

DISCUSSION

At its November 14, 2018 meeting, the Allocation Board considered an application from Criscitello seeking \$150,000 in Fund Benefits.

Allocation Board staff analyzed the application and made recommendations to the Allocation Board based on eligibility requirements and Program Criteria. The Program Criteria are described in Exhibit ‘5d i-1c-B.’ A copy of the recommendation memoranda provided to the Allocation Board for Criscitello is attached as Exhibit ‘5d i-1c-A-1.’ The application has also been made available to the Trustees for review.

As detailed in Exhibit '5d i-1c-A-1,' the Criscitello application seeks Fund Benefits to support a building acquisition, the purchase of machinery and equipment and reimbursement of other costs related to its proposed project to expand production capacity. The applicant indicates that, as part of the project, it would create five full-time positions over five years and that it would spend approximately \$885,500 on this project.

The Allocation Board has recommended the Applicant receive a Fund Benefit award in the amount indicated on Exhibit '5d i-1c-A.' Given the nascent stage of the proposed project, it was not possible to make recommendations concerning the terms and conditions that would be applicable to the award and memorialized in an Award Contract between the Authority and the applicant.

If this Applicant receives a Fund Benefit award, it is anticipated that Authority staff would negotiate final terms and conditions with the applicant after receipt of more detailed information concerning the project and proposed schedules. Award Contracts may include scheduled payments keyed to commitment milestones, such as employment creation and retention. In addition, staff anticipates that Award Contracts will contain provisions for periodic audits of the successful applicants for the purpose of determining contract and program compliance and, where appropriate, terms providing for the partial or complete recapture of Fund Benefits disbursements if an applicant fails to maintain agreed-upon commitments.

RECOMMENDATION

The Vice President – Economic Development recommends that:

- (1) the Trustees accept the recommendation of the Allocation Board and make an award of Fund Benefits to Criscitello in the amount recommended in Exhibit '5d i-1c-A-1,' conditioned upon an agreement to be negotiated with the applicant on the final terms and conditions that would be applicable to the award to be contained in the Award Contract approved by the President and Chief Executive Officer, or his designee, and approved by the Executive Vice President and General Counsel, or his designee, as to form;
- (2) the Chief Commercial Officer – Energy Solutions, or such official's designee, be authorized to negotiate with the Applicant concerning such final terms and conditions that will be applicable to the award; and
- (3) the Chief Commercial Officer – Energy Solutions, or such official's designee, be authorized to execute on behalf of the Authority an Award Contract for the award listed on Exhibit "5d i-1c-A" subject to the foregoing conditions.

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

Mr. Keith Hayes, Vice President of Economic Development, provided highlights of staff's recommendation to the Board.

On motion made by member Dennis Trainor and seconded by member Michael Balboni, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

WHEREAS, The Northern New York Power Proceeds Allocation Board ("Allocation Board") has recommended that the Authority make an award of Fund Benefits from the Northern New York Economic Development Fund ("Fund") to the eligible applicant listed in Exhibit "5d i-1c-A" in the amount indicated in Exhibit "5d i-1c-A";

NOW THEREFORE BE IT RESOLVED, That the Authority hereby accepts the recommendation of the Allocation Board and authorizes an award of Fund Benefits to the applicant listed in Exhibit “5d i-1c-A” in the amount indicated for the reasons set forth in the foregoing report and the exhibit and other information referred to therein, conditioned upon an agreement between the Authority and the applicant on the final terms and conditions that would be applicable to the award and set forth in a written award contract (“Award Contract”) between the Authority and each applicant, approved by the President and Chief Executive Officer, or his designee, and approved by the Executive Vice President and General Counsel or his designee, as to form; and be it further

RESOLVED, That the Chief Commercial Officer – Energy Solutions, or such official’s designee, is authorized to negotiate with the applicant concerning such final terms and conditions that will be applicable to the award; and be it further

RESOLVED, That the Chief Commercial Officer – Energy Solutions, or such official’s designee, is authorized to execute on behalf of the Authority an Award Contract for the award listed on Exhibit “5d i-1c-A” subject to the foregoing conditions; and be it further

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

6. Board Committee Reports:

a. Finance Committee

The Chair of the Finance Committee, Tracy McKibben, said that the committee held a meeting on January 24th. The minutes of the last meeting were adopted.

Chair McKibben said that the Finance Committee is recommending two motions for the full Board's approval. The first is the Large-scale Renewable Project award that is a part of the voluntary participation of NYPA in the clean energy standards to support the state's Energy Plan; Ms. Marie Berninger will provide a detailed presentation regarding staff's recommendation to the Board. The second is the release of funds in support of the Residential Discount Program that was created in connection with the Recharge New York Power Program; Mr. Lee Garza will provide a presentation to the Board on staff's recommendation.

i. **Large-Scale Renewable Project Award**

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve the award of a Power Purchase Agreement ('PPA') to Canisteo Wind Energy LLC ('Canisteo Wind Project'), for the to-be-constructed 290 MW Canisteo Wind Project located in Steuben County, NY ('the Project'). The Project will be developed by Invenergy Wind Development North America LLC ('Invenergy') of Chicago, Illinois. This award is a result of the Large-Scale Renewables Request for Proposal ('RFP') issued by the New York Power Authority (the 'Authority') in June of 2017. A comprehensive evaluation of the proposals received was performed and Invenergy's Canisteo Wind Project was evaluated to be the best value among robust competition. With the Trustees' approval, the Authority will enter into a 20-year PPA with the Canisteo Wind Project for energy, capacity and renewable energy credits ('RECs') generated from the Project, inclusive of an option to purchase the asset at year 11 of the contract. The Project is expected to be in-service by December 31, 2020.

BACKGROUND

In 2016, the New York Public Service Commission ('PSC') issued the Clean Energy Standard ('CES') which requires load serving entities ('LSEs') to purchase a progressively increasing amount of RECs in support of the State Energy Plan goal to supply 50% of New York's electricity needs with renewable energy resources by 2030. While the Authority is not subject to the jurisdiction of the PSC, it supports the State Energy Plan goals, and as an LSE, will voluntarily comply with the 50% renewable energy by 2030 objective.

Accordingly, to advance the State's CES and help its customers reach their renewable energy goals, the Authority issued a RFP on June 2, 2017 seeking Large-Scale Renewable projects that would provide energy, capacity and RECs.

One hundred thirty two (132) projects proposed from fifty-one (51) developers were received in response to the RFP. Proposals were comprehensively evaluated by the Authority based on a number of qualitative and quantitative criteria. The Canisteo Wind Project was subsequently selected as the best-value project for the Authority and its customers.

DISCUSSION

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

The Authority's 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 \$3 million.

The recommended PPA with the Canisteo Wind Project is part of a customer-driven strategy to advance clean energy generation and deliver cost-savings and price stability to the Authority's customers. The Canisteo Wind Project presents a unique opportunity to contract with a competitively priced, high quality wind project prior to the expiration of the Federal Production Tax Credit in 2020. The Project will further the Authority's role as an industry leader in renewable generation by achieving 19% of its customers' 2030 CES goal by 2021.

The PPA includes an option for the Authority to purchase the asset in year 11 of the contract. Exercising this mid-contract purchase option may drive further customer savings and provide the

Authority the opportunity to expand its renewable energy portfolio and in-house operations capabilities with wind power.

The 290 MW Canisteo Wind Project was selected based on its many competitive strengths including the strengths of the developer, Invenergy. Invenergy is a top-tier wind developer with 12,650 MW of wind development in North America and 670 MW in New York State. It is one of the strongest wind operators in the industry with over 10 years of wind operating experience. Invenergy is also financially strong, having raised more than \$30 billion in project capital.

The Canisteo Wind Project itself has many competitive strengths, including, but not limited to:

- The pricing for the project is very competitive;
- The project is utilizing top-tier, reliable wind turbine technology;
- The wind resource is reliable, supported by an extensive amount of wind measurement data;
- The location of the project supports economic development and project economics;
- The project is on or ahead of schedule for permitting, interconnection and site-control.

FISCAL INFORMATION

This is a request to enter into a Power Purchase Agreement with Canisteo Wind Project at a fixed, confidential price. Costs will be recovered through the Authority's customer supply contracts.

RECOMMENDATION

The Director – Business Development recommends that a 20-year Power Purchase Agreement be executed with Canisteo Wind Energy LLC for the 290 MW Canisteo Wind Project in accordance with this report.

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

Ms. Marie Beringer, Director of Business Development, provided highlights of staff's recommendation to the Board. She said that this large-scale renewable transaction is a major step forward in the Authority's Clean Generation Moonshot strategy and advancing the Clean Energy Standard.

Specifically, staff is proposing a 20-year Power Purchase agreement with Canisteo Wind Project that will be developed by Invenergy and go into service at the end of 2020. This agreement is the result of a competitive procurement search that was launched in the summer of 2017, consistent with the Authority's longstanding policy to procure large-scale renewables from the private sector. It sought a public/private partnership under the structure of a long-term contract with new, large-scale renewable projects. The scale is broad and includes technologies of wind, solar, and hydro biomass at various term options.

Industry response was very strong, including 132 projects proposed by 51 developers. Following a comprehensive evaluation, the Canisteo Wind Project was selected as the best value for NYPA and its customers. This will be the only award resulting from this RFP. This transaction is a strategic opportunity for NYPA because it will provide value to the Authority's customers.

Based on the strength of the project, its developer, the fact that NYPA is a credit-worthy off-taker, and the project seeks to capture federal production tax credits, the pricing is very competitive. This will allow NYPA to pass on savings and achieve price stability in serving renewable energy credits to its customers.

This project is a meaningful step in achieving the Clean Energy Standard. It will achieve Tier 1 Clean Energy Standard progress and achieve 19 percent of the "50 percent by 2030" Clean Energy Standard goal for NYPA's customers. The Governor has challenged the state to achieve 70 percent renewables by 2030, which makes this step timely and important. The contracted project will represent 3 percent of NYPA's generation portfolio, and is the first wind power resource that will produce Tier 1 renewable energy credits for the Authority's customers.

The project is a 290-megawatt wind farm located in Steuben County, New York. Some of the competitive strengths of the project include price and its location, which will contribute to economic development in the Southern Tier. It is a reliable wind resource, and project development is on or ahead of schedule in various aspects.

The strength of the developer is also very good. Invenenergy is a top Wind Developer in the industry with over 12,000 megawatts of wind developed in North America, and over 600 megawatts in New York. The company has been operating wind farms for more than ten years at one of the highest availability factors in the industry.

As a foundation, NYPA's full-supply contracts have a long history of providing cost competitive energy supply solutions that its customers continue to value. This transaction strengthens that value-added service. In particular, it responds to an emergent need to supplement the Authority's supply offering with renewable energy credits through customer supply contracts. The contract between the Canisteo wind project and NYPA is a full-bundled Power Purchase Agreement ("PPA") for energy capacity and renewable energy credits at the PPA price. The energy and capacity will be transacted in the wholesale market and the renewable energy credits will be delivered to customers via Supply Contracts.

In conclusion, this is a timely and strategic opportunity for NYPA to deliver value to customers and advance the state's Clean Energy Standard.

On motion made by member Dennis Trainor and seconded by member Michael Balboni, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That in accordance with the Authority's Procurement Guidelines and Expenditure Authorization Procedures, authorization is given to award and execute the Power Purchase Agreement with Canisteo Wind Energy LLC for the 290 MW Canisteo Wind Project for a fixed, confidential price, for the energy, capacity and renewable energy credits generated from the project for a contract term of 20 years from the initial delivery date expected to be December, 2020; 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. **Release of Funds in Support of the Residential Consumer Discount Program Created in Connection with the Recharge New York Power Program**

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees are requested to approve the release of \$30.0 million in funds during 2019 in support of the monthly Residential Consumer Discount Program created in connection with the Recharge New York ('Recharge NY') Power Program, as authorized by Chapter 60 of the Laws of 2011 ('Chapter 60'). The funds are to be released monthly at a level of \$2.5 million per month. It is estimated that the \$30.0 million authorized for the Residential Discounts in 2019 will be entirely off-set from (1) Recharge NY hydropower allocated and sold to Recharge NY customers, and (2) unallocated Recharge NY hydropower sold into the wholesale market.

BACKGROUND

The Authority is requested, from time to time, to make financial contributions and transfers of funds to the State or to otherwise provide financial support for various State programs including the Residential Consumer Discount Program related to Recharge NY.

Any such contribution or transfer of funds must (1) be authorized by the Legislature; (2) be approved by the Trustees 'as feasible and advisable,' and (3) satisfy the requirements of the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution'). Further, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 shall be used as a reference point in considering any such payments or transfers.

The Bond Resolution's requirements to withdraw monies 'free and clear of the lien and pledge created by the [Bond] Resolution' are such that withdrawals (a) 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 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.

DISCUSSION

In March 2011, Governor Cuomo signed into law legislation creating the Recharge NY Power Program. The Program utilizes 455 megawatts ('MW') of the firm power from the Authority's Niagara and St. Lawrence hydroelectric facilities, combined with market-based power purchases, forming a new, 910-megawatt economic development power program to replace and expand upon the Power For Jobs ('PFJ') and Energy Cost Savings Benefits ('ECSB') economic development programs.

As part of the Recharge NY Power Program, the Authority, on August 1, 2011, withdrew all 455 MW of the firm hydroelectric power previously sold to certain utility companies for the benefit of their residential consumers. To mitigate the price impacts of this withdrawal on the residential consumers, the Authority was authorized by Chapter 60, as deemed feasible and advisable by the Trustees, to fund monthly 'Residential Consumer Discount Program' payments for the benefit of such consumers on a declining schedule. For each of the first three years following the withdrawal, the Authority is authorized to provide \$100 million per year to fund the discounts. In years four and five following the withdrawal, the

Authority is authorized to fund discounts of \$70 million and \$50 million, respectively. Beginning in year six following the withdrawal, and for each year thereafter, the Authority is authorized to fund discounts of \$30 million per year.

The Authority is authorized to use the revenues from the sale of the withdrawn power, together with any other funds of the Authority as the Trustees may deem feasible and advisable, to support the Residential Consumer Discount Program. The net cost to the Authority of the Residential Discounts after taking into account the resale of the power following the withdrawal from its prior use to supply certain utility companies for the benefit of their residential consumers, is projected to be entirely off-set from (1) Recharge NY hydropower allocated and sold to Recharge NY customers, and (2) unallocated Recharge NY hydropower sold into the wholesale market during 2019. Given the volatility in market prices, however, there is no assurance that the sale of this power will produce sufficient revenues to cover this amount of the residential discounts.

The Trustees have previously approved the release of funds in support of the Residential Consumer Discount Program, the most recent action being taken at the March 2018 meeting. Under consideration today are payments for 2019. Staff intends to return to the Trustees with a recommendation as to the release of any future amounts related to the Residential Consumer Discount Program based on how the overall program is progressing as well as the financial circumstances of the Authority at the time such payments are to be considered.

Staff has reviewed the effects of the \$30.0 million in anticipated payments of the Residential Consumer Discount Program on the Authority's projected financial position and reserve requirements. In addition, in accordance with the Board's Policy Statement, staff calculated the impact of this release, together with the last 12 months' releases, including (i) the release of up to \$74.5 million in Canal-related operating expenses for 2018 (\$20.5 million authorized in March 2018, \$27 million in August 2018, and \$27 million in October 2018), (ii) the release of up to \$21.6 million in Canal-related operating expenses for 2019 authorized in December 2018; (iii) the release of up to \$2 million in Northern NY Power Proceeds net earnings authorized in March 2018, and (iii) the release of up to \$1 million in Western NY Power Proceeds net earnings authorized in March 2018, on the Authority's debt service coverage ratio and determined it would not fall below the 2.0 reference level. Based on the Authority's Four Year Budget and Financial Plan, the 2.0 reference point level is forecasted to be met for each year-end of the forecast period 2019-2022. 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 provide \$30.0 million of the Residential Consumer Discount Program at this time.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to provide \$30.0 million in support for the Residential Consumer Discount Program authorized by Chapter 60 at this time, 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 release of \$30.0 million associated with the Residential Consumer Discount Program payments was anticipated and reflected in the Power Authority's 2019 Operating Budget approved by the Trustees at their December 2018 meeting. The net cost to the Authority of the Residential Consumer Discounts, after taking into account the resale of the power following the withdrawal from its prior use to supply certain utility companies for the benefit of their residential consumers, is projected to be entirely off-set from Recharge NY hydropower allocated and sold to Recharge NY customers and unallocated Recharge NY hydropower sold into the wholesale market during 2019. These monthly payments will be recorded as an expense at the time of payment.

RECOMMENDATION

The Senior Vice President – Financial Operations recommends that the Trustees approve that the release of \$30.0 million during 2019 related to the Residential Consumer Discount Program is feasible and advisable and to authorize such payments. The Finance Committee, at its January 24, 2019

meeting, approved a recommendation that the Trustees approve the release of \$30 million in funds in support of the Residential Consumer Discount Program.

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

Mr. Lee Garza, Senior Vice President of Financial Operations & Acting Controller, provided highlights of staff's recommendation to the Board.

On motion made by member Dennis Trainor and seconded by member Michael Balboni, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Trustees hereby authorize the release of \$30.0 million from the Operating Fund during 2019 to support the monthly Residential Consumer Discount Program as authorized by Chapter 60 of the Laws of 2011 and as discussed in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the amount \$30.0 million to be used for the Residential Consumer Discount Program described herein 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 be it further

RESOLVED, That as a condition to making the payments specified in the foregoing resolutions, on the day of such payment 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 resolutions, subject to approval as to the form thereof by the Executive Vice President and General Counsel.

b. Cyber & Physical Security Committee Report

The Chair of the Cyber & Physical Security Committee, Michael Balboni, said that the Committee met earlier this morning. No votes were taken during the session.

Chairman Balboni reported that recent intelligence estimates have continued to affirm that bad actors will continue to target the energy sector and the methods and means by which they do this continue to evolve. Especially troubling, is the application of artificial intelligence to a threat-vectoring platform. In this dynamic threat environment, NYPA has adopted a proactive “lean- forward” and active defense posture which is completely appropriate considering the environment.

Chairman Balboni thanked Mr. Kenneth (KC) Carnes and his entire team for recognizing the opportunities that the digitization program has done for the Authority, to have enterprise-wide visibility on the threats and the ability to monitor them in real time.

c. Governance Committee Report

Vice Chairman Nicandri, chaired the meeting in Committee Chair Kress' absence. He said that the Committee met this morning and received a report from Mr. Joseph Gryzlo, Vice President and Chief Ethics and Compliance Officer for NYPA and the Canal Corporation, on the Ethics and Compliance Program.

The Committee also adopted a motion to recommend to NYPA and Canal Boards the adoption of Chairman Koelmel's recommendation regarding committee appointments for 2019.

i. **Committee Appointments**

The Chairman submitted the following report:

SUMMARY

The Authority's Board of Trustees and the Canal Corporation's Board of Directors are requested to adopt the committee appointments as indicated below. These appointments were reviewed by the Governance Committee at its January 30, 2019 meeting.

BACKGROUND and DISCUSSION

The following changes in committee composition are recommended. (Additions to committees appear in **bold**.)

Audit Committee

Eugene L. Nicandri (Chair), John R. Koelmel, Anthony J. Picente, Jr., Tracy B. McKibben, **Dennis G. Trainor**

Finance Committee

Tracy B. McKibben (Chair), John R. Koelmel, Anne M. Kress, Michael A. L. Balboni, **Dennis G. Trainor**

Governance Committee

Anne M. Kress (Chair), John R. Koelmel, Eugene L. Nicandri, Jr., Dennis G. Trainor, **Michael A. L. Balboni**

Cyber and Physical Security Committee

Michael A.L. Balboni (Chair), John R. Koelmel, Eugene L. Nicandri, Tracy B. McKibben, **Anthony J. Picente, Jr.**

RECOMMENDATION

I recommend the approval of the above-requested action by adoption of the resolution below."

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as submitted by the Chairman, was unanimously adopted.

RESOLVED, That the members of the Audit Committee shall be: Eugene L. Nicandri (Chair), John R. Koelmel, Anthony J. Picente, Jr., Tracy B. McKibben, Dennis G. Trainor; and be it further

RESOLVED, That the members of the Finance Committee shall be: Tracy B. McKibben (Chair), John R. Koelmel, Anne M. Kress, Michael A. L. Balboni, Dennis G. Trainor; and be it further

RESOLVED, That the members of the Governance Committee shall be: Anne M. Kress (Chair), John R. Koelmel, Eugene L. Nicandri, Jr., Dennis G. Trainor, Michael A. L. Balboni; and be it further

RESOLVED, That the members of the Cyber and Physical Security Committee shall be: Michael A.L. Balboni (Chair), John R. Koelmel, Eugene L. Nicandri, Tracy B. McKibben, Anthony J. Picente, Jr.

7. **Next Meeting**

The Annual joint meeting of the New York Power Authority Board of Trustees and Canal Corporation's Board of Directors will be held on March 26, 2019 **at the Clarence D. Rappleyea Building, White Plains, New York**, unless otherwise designated by the Chairman with the concurrence of the Trustees.

Closing

On motion made by Member Michael Balboni and seconded by Member Tracy McKibben, the meeting was adjourned at approximately 12: 52 p.m.

Karen Delince

Karen Delince
Corporate Secretary

January 30, 2019

EXHIBITS

For

January 30, 2019

Regular Joint Meeting

Minutes

Environmental Justice Plan 2019-2023 (Exhibit A)





Environmental Justice at NYPA

At the core of NYPA's Environmental Justice program is our commitment to being a good neighbor in the underserved communities that host our statewide facilities. Our programs are community-driven and informed by The U.S. Environmental Protection Agency (EPA) which defines environmental justice (EJ) as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. NYPA's EJ program is vital to our efforts to ensure that marginalized communities will fully participate in the just transition to a cleaner, greener economy.

■ ABOUT THE 2019-2023 ENVIRONMENTAL JUSTICE PLAN

NYPA's 2019 – 2023 Year Environmental Justice Plan (2019 – 2023 Plan) expands upon the Power Authority's 2016 Environmental Justice Implementation Plan which was authorized by the Board of Trustees in March 2016 (Appendix A). It seeks to expand ongoing efforts that leverage the Authority's expertise by promoting meaningful programs in energy education and technology as part of our commitment to our neighboring communities.

The 2019 – 2023 Plan was developed through a process of engagement with community stakeholders, dialogue between NYPA's executive management and senior leaders, industry benchmarking and a materiality assessment. Subject matter experts from NYPA's internal EJ Task Force also provided key insights and guidance. This collaborative approach was key in developing a fully integrated, enterprise-wide, and forward looking plan that aligns with NYPA's strategic initiatives, New York State energy policy, and the environmental concerns of communities statewide.

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Environmental Justice at NYPA:

Being a Good Neighbor



INTRODUCTION

ENVIRONMENTAL JUSTICE PLAN OVERVIEW

NYPA's environmental justice commitment is based on a longstanding history of benefiting communities surrounding the locations of NYPA facilities, and in understanding and respecting the concerns of these communities for their quality of life. Guided by our mission to provide innovative energy infrastructure and services, the 2019 – 2023 Plan is supported by four pillars: STEM Education, Community Energy Literacy, Energy Services Projects, and Community Outreach and Advocacy.

The Plan seeks to “right size” the Environmental Justice program over the next five years by establishing a model for collaboration with both external community partners and internal NYPA departments, and ensuring that the EJ program is funded and staffed commensurate with program objective.



PROGRAM GOALS

- Establish EJ as a core value and an integral part of NYPA's strategic vision in order to improve outcomes for the communities that host our statewide facilities.
- Ensure NYPA is a vital component of NY State's commitments to providing access to clean renewable energy for low income and minority communities and that NYPA's Environmental Justice strategy leads by example and establishes a best practice model for State entities.
- Foster open, proactive and empathic dialogue with EJ communities. Broaden and deepen relationships with stakeholders and influencers that will offset potential reputational risk for NYPA in EJ communities.
- Catalyze Science, Technology, Engineering and Math (STEM) learning opportunities for environmental justice communities and foster pathways for training and workforce development in the utility industry.
- Deliver Community Energy Literacy programs for adults, community educators and teachers living in NYPA's host communities.
- Develop energy efficiency, clean energy, and electrification demonstration projects for the benefit of NYPAs EJ communities and stakeholders.
- Establish metrics and a tracking and reporting system to measure NYPA's corporate wide engagement in EJ communities.





SCOPE OF NYPA ENVIRONMENTAL JUSTICE ACTIVITIES

In 2016, NYPA's Board of Trustees approved an Environmental Justice Plan¹ that included applicable New York State initiatives and policies, NYPA's enabling legislation, and statutory authority as it pertains to EJ activities. Included in the 2016 Plan were the geographical parameters of the EJ program.

NYPA's footprint in the State is increasing as it undertakes new strategic initiatives including large scale transmission and renewable energy programs. Consequently, its reach into new EJ communities will grow beyond the parameters set forth in the 2016 Plan. The 2019 – 2023 Plan proposes an expansion of the geographical boundaries of our current efforts so that we can serve new EJ communities with the objective of securing ongoing community support for NYPA's projects. The increased reach of the program will include all EJ communities identified by the New York State Department of Environmental Conservation².

Proposed Geographic Scope of Environmental Justice Stakeholder Outreach

Increasing Participation around existing Assets	Building Partnerships around Strategic initiatives
NYPA will expand definition of environmental justice communities as those within four miles of an Authority in an urban area and within ten miles of an Authority facility in a rural area	NYPA will expand engagement with communities impacted by projects Under development Where NYPA is an owner or an investor and engage as needed for Emerging projects that NYPA is either directly or indirectly linked

¹ 2016 Environmental Justice Implementation Plan

² The New York Department of Environmental Conservation (DEC), through DEC Policy CP-29, identified potential EJ Areas in New York State based on demographic information from the 2000 U.S. Census. NYPA has adopted the DEC criteria and commits to adjusting whenever DEC updates the criteria.



STEM EDUCATION

Our STEM education program is driven by NYPA's commitment to help increase student interest and proficiency in STEM to prepare them for success in a tech driven economy.

NYPA currently provides innovative and engaging STEM education enrichment to K-12 students that reflect NYPA's core activities in electricity generation and transmission, energy efficiency, renewable energy and storage and clean transportation initiatives.

For college bound students, NYPA provides mentorship opportunities for students interested in pursuing STEM careers. Students have opportunities to meet and get to know employees in areas as diverse as engineering, cyber security, law, finance and public policy. These employees provide students with a real world understanding of the potential for interesting careers for students with strong STEM proficiency.

NYPA's 2019 – 2023 EJ program seeks to build upon the success of its STEM education and curriculum programs and substantially increase the depth and breadth of these initiatives.

STEM EDUCATION – Strategy and Actions

Goal		Catalyze STEM learning opportunities for environmental justice communities and foster pathways for training and workforce development.				
Strategy		Build partnerships with community educators and schools to enrich STEM curriculum in underserved communities				
		2019	2020	2021	2022	2023
Actions	Formalize existing partnerships and establish engagement goals and metrics					
	Expand community afterschool programs to each NYPA region and to canal corporation communities					
	Annual summer camps in each NYPA region					
	Professional development for community educators and teachers and career guidance counselors at target schools					
	Regional conferences and statewide career days to provide access to NYPAs STEM professionals					
	STEM career awareness seminars for parents of underrepresented communities					

EXPANSION OF GREENHOUSE SCIENCE LAB SUPPORT



The 2019 – 2023 Plan proposes an expansion of NYPA's partnerships to provide professional development and training for educators and innovative curriculum such as the greenhouse science labs. In 2017, NYPA provided funds to support Green Classrooms at six schools close to NYPA's Brooklyn facilities. The labs are developed by converting unused space into greenhouses powered by renewable energy engaging students in a multi-faceted approach to STEM learning focused on the link between environmental science, energy efficiency and sustainable food production. NYPA will expand support of Green Classrooms surrounding all NYPA SENY facilities.

EJ STEM to Work Program

Filling the workforce pipeline and increasing employee diversity is a high priority for NYPA. Beginning in 2019, we will launch the EJ STEM-to-Work program based on the development of a shared value model between NYPA and New York State Department of Education programs that increase college access in underserved communities. Capitalizing on our relationships with educators in EJ communities, the model will incorporate their insights and the needs of students from under-resourced schools.

Digitizing the Workforce Pipeline



NYPA will collaborate with community partners such as Kool Nerds to leverage their STEM to Workforce Digital Platform and engage participants in NYPA EJ STEM programs, NYPA mentors, internships and career pathways in the energy industry.

COMMUNITY ENERGY LITERACY

NYPA will continue to provide community energy workshops for host community residents. The workshops will be developed as community needs are identified. The EJ department will continue to offer weatherization workshops to low-income homeowners and renters to learn about how efficient use of electricity can help lower their bills. During the workshop, NYPA will provide participants with a free weatherization kit that allows participants to install simple energy efficient measures in their homes. NYPA will also provide opportunities for adults to learn about NYPA's strategic initiatives programs including modern technology such as renewable energy, electric vehicles and advances in the utility industry.

STEM EDUCATION AND COMMUNITY ENERGY LITERACY GOALS

The Table below summarizes annual and five-year goals for STEM education and community energy literacy.

	2019	2020	2021	2022	2023
ANNUAL GOALS FOR PROGRAM AREAS					
STEM EDUCATION AND COMMUNITY ENERGY LITERACY					
STEM Education Partnerships	48	56	64	72	80
Energy Literacy Workshops	16	32	48	64	80
Green Classrooms	8	12	16	16	16



PARTNERSHIPS

NYPA partnerships with community stakeholders will be essential to delivering on the STEM and energy literacy goals identified in the Plan. The table below provides a list of past and present community partners. This list is not finite and the Environmental Justice team will actively seek to identify and cultivate new community partners and stakeholders on an ongoing basis.

Community Partners		
Akwesasne Freedom School	My Brother's Keeper	St Regis Mohawk Tribe
Archdiocese of New York	NAACP of Buffalo	Staten Island Community Board 1
BronxWorks	NAACP of Niagara Falls	Sunnyside Community Services
Buffalo River keeper	Niagara Falls Housing Authority	SUNY Cobleskill
The Belle Center	Nos Quedamos	The Floating Hospital
Central Baptist Church Family Life Center	NY Sun Works	Third Avenue BID
Eagle Academy of Harlem	NYC Police Dept. Brooklyn/SI Outreach	Tuscarora Nations
Eagle Academy of Staten Island	Office of the Bronx Borough President	United Federation of Teachers
Good For Girls	Office of the Brooklyn Borough President	United Neighborhood Settlement Houses
Hispanic Council of Western NY	Office of the Queens Borough President	University of Buffalo
IMPACT/RENU	Pierre Toussaint Scholars	UPROSE
Jacob Riis Afterschool Program	PUSH Buffalo	Utica School District
Kool Nerds	Say Yes to Education	Westchester County Executive
Levesque Institute	SCAN New York	Westside Community Center
Liberty Partnerships Program	Solar One	White Plains School District
Massena Central School District	SOMOS	White Plains Youth Bureau
Massena Housing Authority	South Bronx Neighborhood Centers	Woodside Community Center
Mount Vernon School District	Southside Afterschool Program	Woodside Houses



ENERGY SERVICE PROJECTS

NYPA recognizes the need to include all marginalized communities in the benefits that accrue from a clean energy economy. Environmental justice activists are increasingly vocal in their insistence that EJ communities be given special consideration as the State works toward a just transition to the new economy. It is incumbent upon us to respond and work together with these stakeholders. Accordingly, NYPA's EJ department will expand support of energy related projects, programs and services for eligible EJ communities subject to the Authority's statutory power as established in the 2016 Trustee Approved Plan in two ways:

- Increase support of non-recoverable energy Projects
- Prioritize Core NYPA projects in Environmental Justice communities

CASE STUDY: MASSENA HOUSING AUTHORITY



In 2018, the EJ department spearheaded the first non-recoverable energy services project at the Massena Housing Authority. In coordination with NYPA's energy efficiency services, EJ installed 260 energy efficient refrigerators in the homes and apartments of low income and disabled residents. Savings from the installation will help offset rising operational cost for the Housing Authority who are experiencing decreased federal funding and will directly benefit residents, the majority of whom pay their own utility bills. The Plan includes the

expansion of similar types of demonstration projects in the coming years.



Prioritize Core NYPA projects in Environmental Justice Communities:

The EJ department will identify opportunities for the Authority to undertake projects in host communities as part of NYPA's portfolio of customer programs. For example, EJ will engage with a strategic initiative such as EVolve NY to integrate low income and minority community considerations into program development and siting. Internal partnerships will be essential to delivering on the energy services project goals identified in the plan. EJ will connect STEM programming associated with these projects in environmental justice communities

Energy services projects in both categories will include energy efficiency, electric or hybrid transportation technology, or clean energy installations such as solar photovoltaic, geothermal or biomass.



Environmental Justice, Being Good Neighbors

- Help create a cleaner environment for low-income families near our facilities statewide

• Provide



COMMUNITY OUTREACH AND ADVOCACY

NYPA will expand its community outreach efforts by leveraging existing programs and developing new initiatives and services based on community need and NYPA's priorities in the region. Input from stakeholders will be communicated to the appropriate business unit to be incorporated into enterprise-wide or strategic program planning.

COLLABORATION WITH COMMUNITY STAKEHOLDERS

The Environmental Justice team will continue to collaborate with stakeholders through various engagement initiatives including support of community fairs and public events within host communities. We will use these opportunities to educate the public about NYPA programs and initiatives including the value of clean renewable energy. In 2019, NYPA will complete the construction of a mobile energy classroom that will engage the general public in an open explore format involving interactive displays and simulations. The department will actively seek to identify and cultivate new community partners and stakeholders on an ongoing basis.

STATEWIDE POLICY INITIATIVES

In 2017 Governor Cuomo launched the Environmental Justice & Just Transition Working Group to meet New York's social justice and environmental goals. The Working Group includes environmental justice and community leaders from across the State, as well as health and labor advocates. The focus of the group is the development of a statewide environmental justice policy and agency-specific Environmental Justice plans. NYPA is participating in the working group and leading by example through the development of this plan and by sharing experiences, and lessons learned.

NYPA will also continue participation in EPRI's industry study on "The Practice of Environmental Justice: Fundamentals and Peer Insights." EPRI will conduct broad outreach to utility companies to obtain information on industry experiences with environmental justice considerations.

REGIONAL COMMUNITY COUNCILS

The EJ department will assess the merits of establishing regional environmental justice councils to increase dialogue with community organizations on environmental justice issues. Councils would serve as a venue to build relationships among members, discuss NYPA projects and activities in the region, and solicit ideas and input on community projects. The regional community councils would build on and leverage existing community forums and NYPA partnerships. NYPA's Government and Community Relations teams would play a prominent role in the formation of the regional council with support from the environmental justice team.



GOVERNANCE AND COMMUNICATION

Effective execution of the 2019 – 2023 Plan requires increased collaboration with all NYPA business units. The plan includes internal capacity building to raise awareness of NYPA's Environmental Justice stakeholder priorities. NYPA will improve internal governance regarding environmental justice issues and increase stakeholder participation both within NYPA and with EJ communities. The plan also includes the creation of standard procedures for each EJ event type - including media outreach and collateral materials - in order to ensure that exposure is uniform and comprehensive. All collateral material will have a uniform "look" will be translated into Spanish as appropriate.

ENVIRONMENTAL JUSTICE TASK FORCE

NYPA's Environmental Justice Task Force 1) shares information regarding projects under development, 2) helps ensure that an environmental justice lens is applied to project planning throughout the entire lifecycle of the planning and implementation process 3) strengthens positive outcomes and opportunities for environmental justice communities.

Leadership	
Executive Sponsor	Senior Vice President Public and Regulatory Affairs
Chair	Vice President Environmental Justice and Sustainability
Manager	Manager, Environmental Justice.
Commercial Operations	
Clean Energy Business and Market Development	Vice President, Clean Energy Business & Market Development
Economic Development	Vice President, Economic Development
Energy Efficiency	Vice President, Energy Efficiency
Project & Business Development	Vice President, Project & Business Development
Utility Operations	
Power Supply	Regional Manager
Transmission	Regional Manager, Transmission
Project Management	Director
Environmental Health & Safety	Environmental Scientist
Public & Regulatory Affairs	
Community & Government Relations	Vice President, Community and Government Relations
Corporate Communications	Vice President, Corporate Communications
Legislative and Regulatory Affairs	Vice President, Legislative & Regulatory Affairs

PROJECT SCREENING CHECKLIST AND CRITERIA

The NYPA project checklist establishes a step-by-step process to screen significant projects early in the development cycle. The checklist will integrate existing project tracking and risk tools, to identify projects that impact environmental justice communities. The purpose of the checklist is to guide the development, implementation, and evaluation of policies, initiatives, and programs to address the potential impacts of NYPA projects on environmental justice communities.

After identifying potential community impacts, select projects will be brought to the Environmental Justice Task Force for discussion. The Task Force determine appropriate actions and coordinate the development of strategies to mitigate negative impacts through project enhancements, The Task Force will also provide subject matter expertise to the environmental justice team on project impacts and community benefits.

A sample step-wise process that will guide early project development and encourage engagement with NYPA's Environmental Justice team is provided in the table below.

1	Identify project types and define the geographic boundary area	Project Development	List of potential priority project types (CHP and micro grid, energy storage, renewable, fuel switching, electric vehicle charging, others) Project location
2	Determine impacts associated with the project	Project Development	List of project metrics (energy savings (i.e., MMBtu, kWh, gallons of fuel), air pollution and greenhouse gas reductions, energy cost savings, etc.)
3	Identify which neighborhoods and group(s) may be impacted	Environmental Justice	Mapping tool to aid in location of project in proximity to EJ communities
4	Develop a list of potential community issues and concerns with the proposed action	Environmental Justice	List of community issues (i.e., emissions, noise, fossil fuel, etc.)
5	Determine if project outreach to EJ communities is warranted	Environmental Justice and Environmental Justice Task Force	Based on knowledge of community organizations and issues as well as discussions in EJ Task Force
6	Document findings, including project impacts, solutions, and commitments	Environmental Justice Task Force	Project template and worksheet
7	Develop outreach strategy (if necessary)	Environmental Justice and Community Relations	Communication plan, project summaries, public meetings

In 2019 NYPA will identify projects located in environmental justice communities that are in the pipeline and develop environmental justice screening criteria for inclusion in a project risk registry.

METRICS AND DATA TRACKING

NYPA will establish metrics to track and report on the EJ activities to NYPA senior leadership and external stakeholders.

For EJ activities, NYPA has identified the following five-year goals for the Plan:

- 80 STEM Community Partnerships
- 80 Energy Literacy Programs
- 16 Green Class Rooms
- 1 EJ Workforce Pipeline
- 4 Energy Demonstration Projects
- Establish baseline data of NYPA corporate wide engagement with EJ communities

Responsibilities
<ul style="list-style-type: none">• Environmental Justice• Project and Business Development• Clean Energy Business & Market Development• Economic Development

Progress toward these five-year goals will be tracked and reported annually. Course corrections will take place if goals are achieved sooner than anticipated or if unforeseen circumstances prevent EJ from meeting these goals.

While EJ is not setting a specific goal for students engaged in STEM Education programs, EJ will track the number of students impacted by these programs as well as the number of NYPA host community students engaged in the NYPA STEM to Work Program.

Environmental Justice will also assess NYPA project data, to develop a historical account and baseline of NYPA projects in environmental justice communities and their benefits (such as financial investment, energy savings, and emissions reductions). Metrics will be developed based on the baseline data and inform which data is useful for ongoing tracking.

The data tracking initiative will build on internal data capture processes and procedures and seek to capture relevant data and information including but not limited to:



- EJ community investments tied to major generation and transmission projects
- Investments, project types, and benefits associated with the Western and Northern NY Proceeds Funds and percentage invested in EJ communities
- Greenhouse gas emission reductions in EJ communities
- Air pollution emission reductions in EJ communities
- Energy efficiency dollar savings in EJ communities
- Number of projects implemented in EJ communities by project type and total financial investment

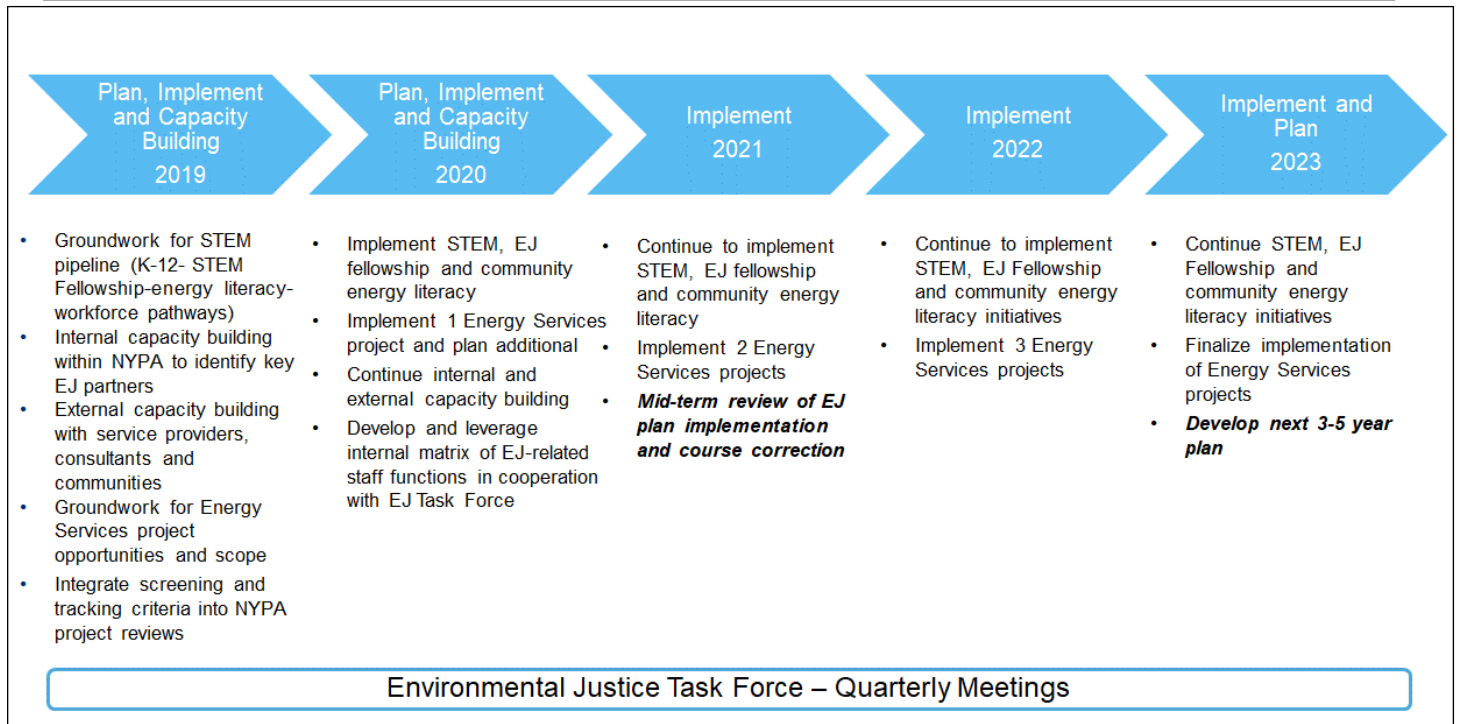
PLAN RESOURCE REQUIREMENTS

To achieve funding parity with electricity generation and transmission companies of similar dimensions of assets and fiscal outcomes, this plan sets out a target funding level for the Environmental Justice program of 1 to 2 percent of net income (approximately \$770k to \$1.4mm). The Environmental Justice program must be adequately staffed and funded to achieve expanded program goals and objectives.

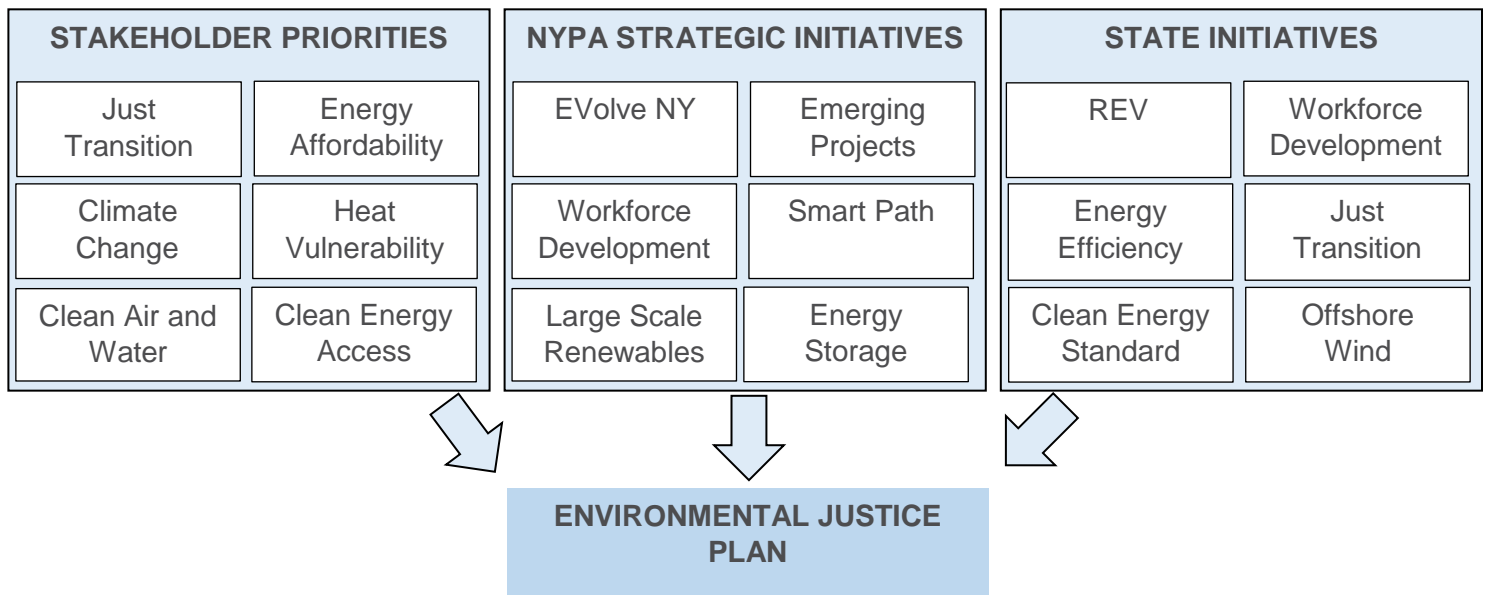
The estimated cost for the 2019-2023 Plan is approximately \$5,400,000, detailed requests and justifications for funding for specific components of the Plan will be presented during future budget proposals. Funding, as may be approached for each of the components STEM Education, Community Energy Literacy; Energy Services Projects and Community Outreach and Advocacy, will be provided from the Operating Fund.



ENVIRONMENTAL JUSTICE PLAN TIMELINE



KEY INPUTS AND DRIVERS FOR THE ENVIRONMENTAL JUSTICE PLAN



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NEW YORK POWER AUTHORITY

Tuesday, November 20, 2018

11:00 a.m. - 3:00 p.m.

NEW YORK POWER AUTHORITY

123 Main Street

White Plains, New York

- - - - -

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2

APPEARANCES :

3

KAREN DELINCE

4

EGLE TRAVIS

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LORNA JOHNSON

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MEETING

MS. DELINCE: Good morning, this Public Forum on the proposed increase in the Fixed Costs component of the production rates for the Authority's Westchester County Governmental Customers is being conducted pursuant to a Power Authority Policy adopted by the Trustees in 1990. My name is Karen Delince and I am the Authority's Corporate Secretary.

This public forum is not required by law and is being held in addition to the State Administrative Procedure Act process, the SAPA process, which provides for a 60-day public comment period, began on October 17, and is scheduled to end on December 17th. The purpose of this Forum is to offer affected customers and the general public an opportunity to present data, views and positions for the Authority's Trustees to consider prior to taking final action on the proposed rate increase.

MEETING

If you plan to make an oral statement at this forum, I ask that you so indicate on the sign-in sheet.

Also, if you have a written statement, please give a copy to Lorna Johnson and one to the reporter.

Written statements may be of any length; however, we are asking that those presenting an oral statement to limit their remarks to 5 minutes.

Both oral and written statements will be included in the official record. The record will remain open for additional comments through close of business, Monday, December 17th.

Additional comments should be mailed, faxed or e-mailed to the Corporate Secretary office at 123 Main Street 11-P, White Plains, New York 10601, or (914) 390-8040; or secretarys.office@nypa.gov.

At this point, I would like to introduce Egle Travis, the Authority's Director of Revenue and Pricing

MEETING

Analysis, who will provide additional details on the proposed rate increase for the Westchester County Governmental Customers.

MS. TRAVIS: Thank you, Ms. Delince. Good afternoon. My name is Egle Travis and I am the Director of Revenue & Pricing Analysis at the New York Power Authority.

I am here today to present an overview of the proposed decrease in the energy production rates that NYPA charges to its Westchester County Governmental Customers. It is important to note that the energy delivery rates and service for these customers are provided by Consolidated Edison of New York and not NYPA.

The Authority provides electricity to Governmental Customers in Westchester County, which includes the county of Westchester, school districts, housing authorities, cities, towns and villages.

MEETING

The basis for providing service is contained in the Supplemental Electricity Agreement with the Westchester Customers. Under the Supplemental Agreements, the Authority is permitted to modify the Customers' rates (for Rate Years subsequent to 2017 at anytime based on the fully supported pro forma cost-of-service subject to Customer review, comment, and compliance with the State Administrative Procedure Act process. These agreements also allow the Authority to apply an Energy Charge Adjustment mechanism to the Customers' bills each month.

For Westchester Customers, the current 2018 base production rates were adopted by the Trustees at their December 12, 2017 meeting, when they approved a 9.44 percent decrease of 2017 production rates. The Authority's policies and procedures call for a public forum if the Fixed Costs

MEETING

component of the proposed rate change exceeds a 2.0 percent increase. The fixed cost component is expected to increase \$0.19 million, or 14.4 percent, from \$1.29 million in 2018 to \$1.47 million in 2019.

This is primarily due to an increase in Shared Services expense, which is mainly driven by an increase in headquarter based non-recurring projects. Although the Fixed Costs component is increasing for 2019, Variable Costs are expected to decrease as compared to the 2018 cost of service. As such, staff is now proposing another decrease in production rates of 17.98 percent, largely due to expected decreases in energy purchases over 2018 rates, which are part of the Variable Costs component of the costs of service. The total Preliminary 2019 cost of service for the Westchester Customers is \$26.91 million as compared to \$30.13

MEETING

million in 2018.

Consistent with the Authority's past rate-making practices and with the rate-setting process set forth in the Supplemental Agreements for Westchester Customers, the proposed rate decrease is based on a pro forma COS for next year.

As Ms. Delince stated earlier, the Authority will accept your comments on the Notice of Proposed Rulemaking until December 17, 2018.

I will now turn the forum back to Ms. Delince.

MS. DELINCE: Thank you. Since no one has signed up to speak at the Forum, we will recess and reconvene as speakers arrive.

[Discussion held off the record.]

MS. DELINCE: It is is now 3 P.M. As previously stated, the record of the Forum will remain open for additional comments through close of

MEETING

business, December 17th, 2018.

The November 20, 2018 public forum on the proposed increase in the Fixed Costs component of the production rates for the Authority's Westchester County Governmental Customers is now officially closed. Thank you and good day.

[Time noted: 3:00 P.M.]

CERTIFICATION

I, ANDREW BAJANA, a Notary Public for
and within the State of New York, do
hereby certify:

That the within transcript is a true
and accurate record of the proceedings.

I further certify that I am not
related to any of the parties to this
action by blood or marriage, and that I am
in no way interested in the outcome of
this matter.

IN WITNESS WHEREOF, I have hereunto
set my hand this 27th day of November,
2018.



ANDREW BAJANA

* * *

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WESTCHESTER GOVERNMENTAL CUSTOMERS

EXHIBIT "B"

Service Tariff No. 200 Rate Comparison (Current vs. Proposed)

Service Classification	Demand (\$/kW)		ENERGY (¢/kWh)											
			SUMMER		SUMMER ON PEAK		SUMMER OFF PEAK		WINTER		WINTER ON PEAK		WINTER OFF PEAK	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
SC 62 Conventional	\$0.00	\$0.00	5.270	5.012					4.925	4.667				
SC 66 Conventional	\$0.00	\$0.00	4.312	4.308					4.312	4.308				
SC 68 Conventional	\$0.88	\$0.91	5.778	5.553					5.434	5.208				
SC 69 Conventional	\$0.84	\$0.81	5.668	5.672					5.323	5.328				
SC 69 TOD	\$1.07	\$0.93			6.262	6.151	4.497	4.386			5.461	5.350	4.513	4.402
SC 82 Conventional	\$0.88	\$0.91	5.778	5.553					5.434	5.208				

Service Tariff No. 200 Demand Standby Rate Comparison (Current vs. Proposed)

Service Class	CONTRACT STANDBY DEMAND (\$/KW)				AS-USED DAILY DEMAND (\$/KW-day)			
	Low Tension		High Tension		Low Tension		High Tension	
	2018	2019	2018	2019	2018	2019	2018	2019
SC 68 Conventional	\$0.026	\$0.027	\$0.025	\$0.025	\$0.028	\$0.029	\$0.026	\$0.027
SC 69 Conventional	\$0.025	\$0.024	\$0.023	\$0.023	\$0.027	\$0.026	\$0.025	\$0.024
SC 69 TOD	\$0.032	\$0.028	\$0.030	\$0.027	\$0.034	\$0.030	\$0.032	\$0.028
SC 82 Conventional	\$0.026	\$0.027	\$0.025	\$0.025	\$0.028	\$0.029	\$0.026	\$0.027

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

EXHIBIT "4d i-A"
January 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
UTILITY OPERATIONS – ENGINEERING	Q18-6553JGM; 5 Awards 1. LEIDOS ENGINEERING OF NEW YORK PC Reston, VA 2. POWER ENGINEERS, INC. Hailey, ID 3. SNC LTD. Rochester, NY 4. SUBSTATION ENGINEERING COMPANY Reading, PA 5. TRC ENGINEERS, INC. WINDSOR, CT	01/07/19	Provide Optical Groundwire (OPGW) expansion design and engineering services	01/06/21	B/P	\$550,000		\$2.763 million* *Note: represents total aggregate value for up to 3-year term including an interim value of \$300,000
UTILITY OPERATIONS – SENY	QUINTAL CONTRACTING CORPORATION Islip, NY (A18-000961DW)	01/31/19	Provide Algae Scraping of Reinjection Ponds for the Richard M. Flynn Power Plant	01/30/24	B/S			\$200,000 *Note: represents total for up to 5-year term
UTILITY OPERATIONS – TECHNICAL COMPLIANCE	Q18-6502JGM; 4 Awards 1. BUREAU VERITAS NORTH AMERICA, INC. Sunrise, FL 2. NPTS, INC. ♦ Buffalo, NY 3. PROCUREMENT SERVICES CONSULTING, INC. Branchburg, NJ	01/30/19 (on or about)	Provide domestic and global Quality Assurance ("QA") Inspection and QA Engineering services	01/29/23	B/P			\$3.2 million* *Note: represents total aggregate value for up to 4-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 "4d i-A "
January 30, 2019

<u>Plant Site</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Expected Expenditures For Life Of Contract</u>
	4. STANTEC CONSULTING SERVICES, INC. New York, NY							
UTILITY OPERATIONS – TECHNICAL COMPLIANCE	Q18-6558JGM; 3 Awards 1. ABB, INC. Cary, NC 2. HYDRO TECH (USA), INC. Sault Ste. Marie, ON 3. POWER ENGINEERING, INC. Irvine, CA	01/30/19 (on or about)	Provide on-call speciality engineering services for advanced planned, emergent and on-going projects and to supplement existing resources	01/29/24	B/P			\$7 million*

*Note: represents total aggregate value for up to 5-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) Contracts – Extensions and/or Additional Funding
(For Description of Contracts See "Discussion")

EXHIBIT "4d i-B"
January 30, 2019

<u>Plant Site/ Bus. Unit</u>	<u>Company Contract #</u>	<u>Start of Contract</u>	<u>Description of Contract</u>	<u>Closing Date</u>	<u>Award Basis¹ Contract Type²</u>	<u>Compensation Limit</u>	<u>Amount Expended To Date</u>	<u>Authorized Expenditures For Life Of Contract</u>
CORPORATE AFFAIRS – PUBLIC & REGULATORY AFFAIRS	KPMG, LLP Montvale, NJ (PO# 4500249908)	07/29/14	Provide for additional advisory services relating to the post- merger integration services for the NYS Canal Corporation	07/28/19	B/P	**200,000	\$11,026,246	\$12,516,320*
						*Note: represents total for 5-year term, and includes \$775,320 additional funding request		
						**Note: request for \$775,320 includes \$200,000 interim award for work beginning on or before December 31, 2018		
UTILITY OPERATIONS – SECURITY UPGRADES – VARIOUS FACILITIES	JOHNSON CONTROLS, INC. Amherst, NY (PO# 4500254367)	01/28/15	Provide time extension for NERC CIP Version 5 security upgrade construction at various NYPA facilities (Northern, Central and Western Regions)	07/31/19	B/C		\$22,986,745	\$23,455,589*
						*Note: represents total for 4.5-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; C= Competitive Search; S= Sole Source; Si = Single Source
2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; L= Legal Service



**NY Power
Authority**

**Canal
Corporation**

CEO Report

Gil Quiniones

President & Chief Executive Officer

January 30, 2019

NYPA 2020 – Putting the customer at the forefront of everything we do...



**Goal:
Finish Strong in
2019**

Utility Operations

Infrastructure Modernization



Smart Path



LPGP LEM



T-LEM

Digital Utility



Communications Backbone



Sensor Deployment

G & T Market Readiness = Record Level Net Generation

Commercial Operations



Electric Supply

Exceeded Gross Margin Target



New Project Development

- Won Segment A of NYISO AC Proceeding RFP
- LSR RFP Award



Economic Development

- 785 MW Low Cost, Reliable Hydropower
 - \$7.2B Capital Investment
 - Over 210,000 Jobs *created/retained*
- Renewed all Customer Electric Supply Contracts

Commercial Operations

Customer Energy Solutions



Significant growth in signed customer investments/projects in energy efficiency and renewables



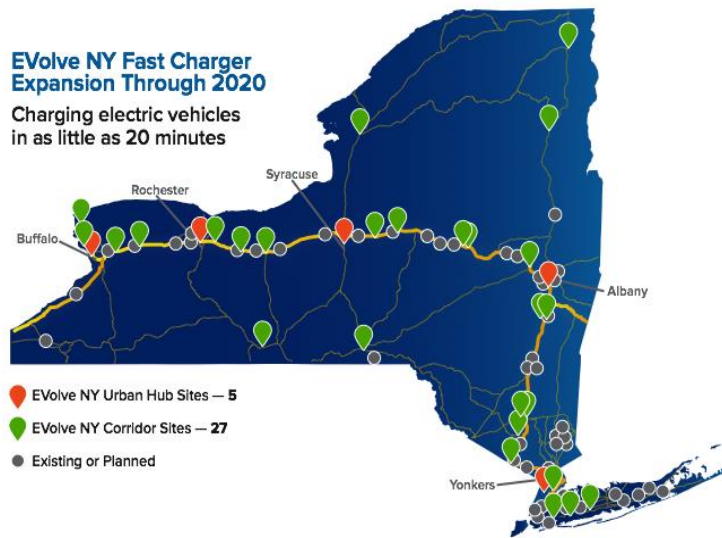
Continue to invest and build new/start-up business line: NYEM



Operating expenses continue to outpace non-utility revenues or project related fees

Moonshots Launched

EVolve NY



A Program of the New York Power Authority

Flexibility

Storage & Demand Response



Off Shore Wind

European Study



New York State Canal Corporation

- Full Integration of Canals into NYPA
- “Reimagining the Canals” Vision



Strong Financial Performance



Net Income



**Fixed Cost
Coverage Ratio**



Credit Rating

2019 SOS: NYS Green New Deal



- Mandates 100 %Clean Power by 2040
- Roadmap to eliminate the state's carbon footprint
 - New Climate Action Council
- Workforce of the future
 - SUNY, ESF with REDCs
- \$1.5 billion initial investment renewable energy projects & expansion of offshore wind
- Up to \$200 million in port Infrastructure for OSW
- Ensures a Just Transition to Clean Power

NYPA 2019



New Strategic Plan
‘NYPA 2030’





**NY Power
Authority**

**Canal
Corporation**

CFO Report

Lee Garza

Senior Vice President, Financial Operations

January 30, 2019

In \$ Millions			
BUDGETED YEAR-END NET INCOME	\$76.9	VARIANCE TO BUDGET	2018 BUDGET
Margins (Generation, Transmission, Non-Utility)	\$17.5	▲	\$1,125.5
Operating Expenses	(9.4)	▼	(915.8)
Net Operating Income	8.1	▲	209.7
Interest Expense, Net	17.6	▲	(132.8)
PRELIMINARY YEAR-END ACTUAL NET INCOME	Low Value \$97.6	Expected Value \$102.6	High Value \$107.6



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Utility Operations




Joseph F. Kessler, P.E.

EVP & Chief Operating Officer

January 30, 2019

Performance Measures – Year-End December 2018

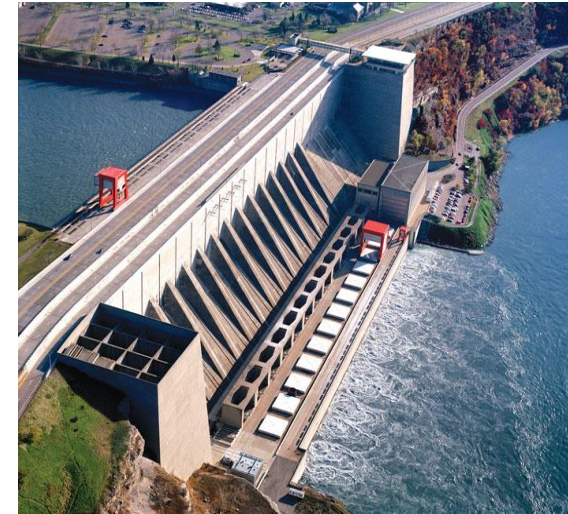
Measure	Year-End 2018			
	Status	Target	Actual	Variance
Generation Market Readiness		99.40%	98.81%	-0.59%
Transmission System Reliability		95.22%	95.39%	0.17%
Environmental Incidents		28	14	-14
Dart Rate		0.78	0.97	0.19

Status	
	Within Target
	Outside of Target
	Significantly Outside of Target Range

Utility Operations – 2018 Net Generation

2018 Year End Net Generation (MWh)

Region	Forecast	Actuals	Variance
Central	(31,075)	(28,920)	2,155
Northern	7,101,987	7,639,554	537,566
SENY	3,712,820	3,217,141	(495,679)
Western	15,680,741	16,479,602	798,861
Total	26,464,474	27,307,377	842,903





**NY Power
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Commercial Operations Report




Sarah Salati

EVP & Chief Commercial Officer

January 30, 2019

Commercial Operations Performance – December 2018

Goal	Measure	Year-End 2018		
		Status	Target	Actual
Wholesale	Customer Usage (twh)		24.4	24.8
	Generation (twh)		29.4	30.0
	Electric Prices (\$/mwh)		\$37.53	\$43.08
	Fuel Price (\$/mmbtu)		\$4.23	\$4.25
	Gross Margin (\$M)		\$323.9	\$386.5




Status	
	Meeting or Exceeding Target
	Below Target
	Significantly Below Target






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Commercial Operations Performance – December 2018

Goal	Measure	Year-End 2018		
		Status	Target	Actual
Economic Development	Recharge NY (MW) Allocated			759/910
	All Programs - Jobs Retained			403,743
	Capital Committed (\$B)			\$34.0
Energy Efficiency	Customer Investments (\$M)		\$194.8	\$244.1
	Non-Utility Revenues (\$M)		\$15.0	\$18.8
	Operating Expenses (\$M)		\$28.3	\$34.9

Status	
	Meeting or Exceeding Target
	Below Target
	Significantly Below Target



**NY Power
Authority**

**Canal
Corporation**

APPLICATION SUMMARY
Preservation Power ("PP")

Company:	Upstate Niagara Cooperative, Inc. ("Upstate Niagara")
Location:	Town of North Lawrence
County:	St. Lawrence County
IOU:	National Grid
Business Activity:	Producer of cultured dairy products, such as yogurt, that is sold to retailers and food institutions in New York and elsewhere in the Northeast.
Project Description:	Upstate Niagara plans to install a new, ultra filtration filling line to produce a unique, low sugar Greek-style yogurt within its existing North Lawrence facility.
Existing Allocation(s):	1,850 kW of PP tied to 80 jobs. Upstate Niagara is currently in compliance with its contractual commitments.
Power Request:	1,300 kW of PP
Power Recommended:	850 kW
Job Commitment:	
Base:	80
New:	At least 17 jobs
New Jobs/Power Ratio:	20 jobs/MW
New Jobs - Avg. Wage and Benefits:	\$68,470
Capital Investment:	At least \$3.4 million
Capital Investment/MW:	\$4 million/MW
Other ED Incentives:	(1) Empire State Development Regional Council Capital Grant of \$300,000; and (2) St. Lawrence County IDA Local Development Corporation Loan Package of \$1,000,000, along with sales and tax exemption benefits.
Summary:	With state support and low cost hydropower in 2011, Upstate Niagara, the parent company of North Country Dairy, purchased and re-opened the shuttered dairy plant in North Lawrence and began producing cultured dairy products. Today, the facility has grown to three-shifts, producing 45 million pounds of yogurt annually. With this expansion, Upstate Niagara will begin producing a new type of Greek yogurt with plans to increase annual yogurt production to 63 million pounds.

POWER AUTHORITY

OF THE

STATE OF NEW YORK

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

AGREEMENT FOR THE SALE OF
PRESERVATION POWER AND ENERGY

SERVICE TARIFF NO. 20

Upstate Niagara Cooperative, Inc.

The POWER AUTHORITY OF THE STATE OF NEW YORK (“Authority”), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law (“PAL”), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for Sale of Preservation Power and Energy (“Agreement”) with Upstate Niagara Cooperative, Inc. (“Customer”) having offices at 22 County Route 52, North Lawrence, NY 12967. The Authority and the Customer are from time to time referred to in this Agreement as “Party” or collectively as “Parties” and agree as follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the St. Lawrence-FDR Power Project known as Preservation Power (or “PP”), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Customer applied for an allocation of PP or an extension of an existing PP allocation for use at its facilities defined in this Agreement as the “Facility”;

WHEREAS, the Customer has offered to make specific commitments relating to, among other things, the creation and retention of jobs, capital investments, power usage and energy efficiency measures at the Facility, in exchange for an allocation of PP;

WHEREAS, the Authority’s Board of Trustees approved an allocation of PP to the Customer;

WHEREAS, the Authority’s provision of Electric Service under this Agreement is an unbundled service separate from (i) the transmission of the allocation, and (ii) the delivery of the Allocation;

WHEREAS, the Parties have reached an agreement on the terms and conditions applicable for the sale of the Allocation for a term as provided in this Agreement;

WHEREAS, electric service hereunder shall be subject to the rates and other terms and conditions contained in the Service Tariff as further provided in this Agreement; and

WHEREAS, the Authority has complied with requirements of PAL § 1009, and has been authorized to execute the Agreement.

NOW, THEREFORE, in consideration of mutual covenants, terms, and conditions herein, and for other good and valuable consideration, the receipt and adequacy of which the Parties hereby acknowledge, the Parties do hereby mutually covenant and agree as follows:

ARTICLE I **DEFINITIONS**

When used with initial capitalization, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below. When used with initial capitalization, whether singular or plural, terms defined in schedules or appendices to this

Agreement shall have the meanings set forth in such schedules or appendices. All other capitalized terms and abbreviations used in this Agreement but not defined in this Section or other provisions of this Agreement or its schedules or appendices shall have the same meaning as set forth in the Service Tariff.

“Adverse Water Condition” means any event or condition, including without limitation a hydrologic or hydraulic condition, that relates to the flow, level, or usage of water at or in the vicinity of the Project and/or its related facilities and structures, and which prevents, threatens to prevent, or causes the Authority to take responsive action that has the effect of preventing, the Project from producing a sufficient amount of energy to supply the full power and energy requirements of firm power and firm energy customers who are served by the Project.

“Agreement” means this Agreement, and unless otherwise indicated herein, includes all schedules, appendices and addenda thereto, as the same may be amended from time to time.

“Allocation” refers to the allocation(s) of PP awarded to the Customer as specified in Schedule A.

“Alternative REC Compliance Program” has the meaning provided in Schedule E.

“Annual Capital Investment Commitment” has the meaning set forth in Schedule B.

“Annual CI Expenditures” has the meaning set forth in Schedule B.

“Base Employment Level” has the meaning set forth in Schedule B.

“Contract Demand” is as defined in applicable Service Tariff.

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

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

“Energy Services” has the meaning set forth in Article V of this Agreement.

“Expansion Project” has the meaning set forth in Section IV.3.a of this Agreement.

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

“Facility” means the Customer’s facilities as described in Schedule A to this Agreement.

“Firm Power” is as defined in the Service Tariff.

“Firm Energy” is as defined in the Service Tariff.

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

“FERC License” means the first new license issued by FERC to the Authority for the continued operation and maintenance of the Project, pursuant to Section 15 of the Federal Power Act, which became effective September 1, 2007 after expiration of the Project’s original license which became effective in 1957.

“Hydropower Curtailment” means a temporary reduction in Firm Energy to which the Customer is entitled to receive under this Agreement made by the Authority in response to an Adverse Water Condition.

“International Joint Commission” or “IJC” refers to the entity with responsibility to prevent and resolve disputes between the United States of America and Canada under the *1909 Boundary Waters Treaty* and pursues the common good of both countries as an independent and objective advisor to the two governments. The IJC rules upon applications for approval of projects affecting boundary or transboundary waters and may regulate the operation of these projects.

“Load Reduction” has the meaning set forth in Section IX.6 of this Agreement.

“Load Serving Entity” (or “LSE”) means an entity designated by a retail electricity customer (including the Customer) to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.

“Metering Arrangement” has the meaning set forth in Section II.8 of this Agreement.

“NYEM” means the New York Energy Manager, an energy management center owned and operated by the Authority.

“NYEM Agreement” means a written agreement between the Authority and the Customer providing for the Facility’s enrollment and Customer’s participation in NYEM.

“NYEM Participation” has the meaning specified in Schedule B of this Agreement.

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

“NYISO Charges” has the meaning set forth in Section VII.3 of this Agreement.

“NYISO Tariffs” means the NYISO’s Open Access Transmission Tariff or the NYISO’s Market Administration and Control Area Services Tariff, as applicable, as such tariffs are modified from time to time, or any successor to such tariffs.

“Physical Energy Audit” or “Audit” means a physical evaluation of the Facility in a manner approved by the Authority that includes at a minimum the following elements: (a) an assessment of the Facility’s energy use, cost and efficiency which produces an energy utilization index for the Facility (such as an Energy Use Intensity or Energy Performance Indicator); (b) a comparison of the Facility’s index to indices for similar buildings/facilities; (c) an analysis of low-cost/no-cost

measures for improving energy efficiency; (d) a listing of potential capital improvements for improving energy consumption; and (e) an initial assessment of potential costs and savings from such measures and improvements.

“Preservation Power” (or “PP”) consists of 490 megawatts (“MW”) of firm hydroelectric power and associated energy produced by the Authority’s St. Lawrence-FDR Power Project.

“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. WNY-20, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.

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

“Schedule B” refers to the Schedule B entitled “Supplemental Preservation Power Commitments” which is attached to and made part of this Agreement, including any appendices attached thereto.

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

“Schedule D” refers to the Schedule D entitled “Zero Emission Credit Charge” which is attached to and made part of this Agreement.

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

“Substitute Energy” means energy that is provided to the Customer by or through the Authority for the purpose of replacing Firm Energy that is not supplied to the Customer due to a Hydropower Curtailment.

“Takedown” means the portion of the Allocation that Customer requests to be scheduled for a specific period as provided for in Schedule C, if applicable.

“Taxes” is as defined in the Service Tariff.

“Unforced Capacity” (or “UCAP”) means the electric capacity required to be provided by LSEs to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

“Utility Tariff” means the retail tariff(s) of the Customer’s local electric utility filed and approved by the PSC that is applicable to the delivery of PP.

ARTICLE II **ELECTRIC SERVICE**

1. The Authority will make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, the Service Tariff and the Rules. The Customer is not be entitled to receive Electric Service under this Agreement for any PP allocation unless such PP allocation is identified in Schedule A.
2. The Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation specified in Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall accept and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
3. The Authority shall provide UCAP in amounts necessary to meet the Customer’s NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with the Service Tariff.
4. The provision of Electric Service associated with the Allocation is an unbundled service separate from the transmission and the delivery of the Allocation. The Customer acknowledges and agrees that Customer’s local electric utility, not the Authority, is responsible for the delivery of the Allocation to the Facility in accordance with applicable Utility Tariff(s).
5. The Contract Demand for the Customer’s Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as PP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all PP customers receiving Electric Service under the Service Tariff, as applicable, based on the terms of such ruling, order, or decision.
6. The Contract Demand may not exceed the Allocation.

7. The Customer's Facility must be metered by the Customer's local electric utility in a manner that is satisfactory to the Authority, or another metering arrangement satisfactory to the Authority must be provided (collectively, "Metering Arrangement"). A Metering Arrangement that is not satisfactory to the Authority shall be grounds, after notice to the Customer, for the Authority to modify, withhold, suspend, or terminate Electric Service to the Customer. If a Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination that it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. After commencement of Electric Service, the Customer shall notify the Authority in writing within thirty (30) days of any alteration to the Facility's Metering Arrangement, and provide any information requested by the Authority (including Facility access) to enable the Authority to determine whether the Metering Arrangement remains satisfactory. If an altered Metering Arrangement is not made to conform to the Authority's requirements within thirty (30) days of a determination it is unsatisfactory, the Authority may modify, withhold, suspend, or terminate Electric Service on at least ten (10) days' prior written notice to the Customer. The Authority may, in its discretion, waive any of the requirements provided for in this Section in whole or in part where in the Authority's judgment, another mechanism satisfactory to the Authority can be implemented to enable the Authority to receive pertinent, timely and accurate information relating to the Customer's energy consumption and demand and render bills to the Customer for all fees, assessments and charges that become due in accordance with this Agreement, the Service Tariff, and the Rules.
8. The Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that such parties determine is necessary to provide for the allocation, sale and delivery of the Allocation to the Customer at the Facility, the proper and efficient implementation of the PP program, billing related to Electric Service, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters. In addition, the Customer agrees to complete such forms and consents that the Authority determines are necessary to effectuate such exchanges of information.
9. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement between the Authority and the Customer's local electric utility providing for the delivery of the Allocation on terms and conditions that are acceptable to the Authority.
10. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, execute consents, and provide information (collectively, "Service Information") that the Authority determines is necessary for the provision of Electric Service, the delivery of the Allocation, billing related to Electric Service, the effective administration of the PP program, and/or the performance of contracts or other arrangements between the Authority and the Customer's local electric utility. The Customer's failure to provide Service Information on a timely basis shall be grounds for the Authority in its discretion to modify, withhold, suspend, or terminate Electric Service to the Customer.

ARTICLE III
RATES, TERMS AND CONDITIONS

1. Electric Service shall be sold to the Customer in accordance with the rates, terms and conditions provided for in this Agreement, the Service Tariff and the Rules.
2. The Service Tariff and the Rules may be amended from time to time by the Authority and, if revised, the revised provisions thereof will apply under this Agreement with the same force and effect as if set forth herein. The Authority shall provide at least thirty (30) days prior written notice to the Customer of any proposed change in the Service Tariff or the Rules. No amendment to the Service Tariff or the Rules shall affect the determination of rates for PP to the Customer during the term of the Agreement except insofar as otherwise authorized by this Agreement. This provision shall not limit the Authority's discretion to determine rates applicable to allocations of power and energy awarded to the Customer beyond or in addition to the Allocation.
3. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates for Electric Service shall be subject to increase by Authority at any time upon 30 days prior written notice to Customer if, after consideration by Authority of its legal obligations, the marketability of the output or use of the Project and Authority's competitive position with respect to other suppliers, Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in Authority's bond and note resolutions and covenants with the holders of its financial obligations. Authority shall use its best efforts to inform Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.
4. In addition to all other fees, assessments and charges provided for in the Agreement, the Service Tariff and the Rules, the Customer shall be responsible for payment of the Zero Emission Credit Charge and Monthly Renewable Energy Credit Charge provided for in Schedule D and Schedule E, respectively, of this Agreement.

ARTICLE IV
SUPPLEMENTAL COMMITMENTS

1. Supplemental Commitments. Schedule B sets forth the Customer's "Supplemental Preservation Power Commitments" ("Supplemental Commitments"). The Authority's obligation to provide Electric Service under this Agreement is expressly conditioned upon the Customer's timely compliance with the Supplemental Commitments described in Schedule B as further provided in this Agreement. The Customer's Supplemental Commitments are in addition to all other commitments and obligations provided in this Agreement.

2. Special Provisions Relating to a New or Expanded Facility.

a. Proposed New or Expanded Facility; Failure to Complete.

If Schedule B provides for the construction of a new facility or an expansion of an existing facility (collectively, “Expansion Project”), and the Customer fails to complete the Expansion Project by the date specified in Schedule B, the Authority may, in its discretion, (a) cancel the Allocation, or (b) if it believes that the Expansion Project will be completed in a reasonable time, agree with the Customer to extend the time for completion of the Expansion Project.

b. Proposed New or Expanded Facility; Partial Performance.

If the Expansion Project results in a completed Facility that is only partially operational, or is materially different than the Expansion Project agreed to in Schedule B (as measured by such factors as size, capital investment expenditures, capital improvements, employment levels, estimated energy demand and/or other criteria determined by the Authority to be relevant), the Authority may, in its discretion, on its own initiative or at the Customer’s request, make a permanent reduction to the Allocation and Contract Demand to an amount that the Authority determines to fairly correspond to the completed Facility.

c. Notice of Completion; Commencement of Electric Service.

- (i) The Customer shall give the Authority not less than ninety (90) days' advance written notice of the anticipated date of completion of an Expansion Project. The Authority will inspect the Expansion Project for the purpose of verifying the status of the Expansion Project and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time subject to the other provisions of this Agreement based on applicable operating procedures of the Authority, Customer’s local electric utility and NYISO.
- (ii) In the event of an Expansion Project being completed in multiple phases, at the Customer’s request the Authority may, in its discretion, allow commencement of part of the Allocation upon completion of any such phase, provided the Authority will similarly inspect the Expansion Project for the purpose of verifying the status of the completed phase of the Expansion Project. Upon such verification by the Authority of any such completed phase, the Authority, in its discretion, will determine an amount of kW that fairly corresponds to the completed phase of the Expansion Project, taking into account relevant criteria such as any capital expenditures, increased employment levels, and/or increased electrical demand associated with the completed phase of the Expansion Project.

d. Other Rights and Remedies Unaffected.

Nothing in this Article is intended to limit the Authority's rights and remedies provided for in the other provisions of this Agreement, including without limitation the provisions in Schedule B of this Agreement.

ARTICLE V
ENERGY-RELATED PROJECTS, PROGRAMS AND SERVICES

The Authority shall periodically communicate with the Customer for the purpose of informing the Customer about energy-related projects, programs and services ("Energy Services") offered by the Authority that in the Authority's view could provide value to the Customer and/or support the State's Clean Energy Standard. The Customer shall review and respond to all such offers in good faith, provided, however, that, except as otherwise provided for in this Agreement, participation in any such Energy Services shall be at the Customer's option, and subject to such terms and conditions agreed to by the Parties in one or more definitive agreements.

ARTICLE VI
SERVICE TARIFF; CONFLICTS

1. A copy of the Service Tariff is attached to this Agreement as Exhibit 1 and shall apply under this Agreement with the same force and effect as if fully set forth herein. The Customer consents to the application of the Service Tariff.
2. In the event of any inconsistencies, conflicts, or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff or the Rules, the provisions of this Agreement shall govern.

ARTICLE VII
TRANSMISSION AND DELIVERY

1. The Customer shall be responsible for:
 - a. complying with all requirements of its local electric utility (including any other interconnecting utilities) that are necessary to enable the Customer to receive delivery service for the Allocation. Delivery of the Allocation shall be subject to the Utility Tariff;
 - b. paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff, and if the Authority incurs any charges associated with such delivery service, reimbursing the Authority for all such charges; and
 - c. obtaining any consents and agreements from any other person that are necessary for the delivery of the Allocation to the Facility, and complying with the requirements of any such person, provided that any such consents, agreements and requirements shall be subject to the Authority's approval.

2. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in the Service Tariff or any successor service tariff, regardless of whether such NYISO Charges are transmission-related.

ARTICLE VIII

BILLING AND BILLING METHODOLOGY

1. The billing methodology for the Allocation shall be determined on a "load factor sharing" basis in a manner consistent with the Utility Tariff and any agreement between the Authority and the Customer's local electric utility. An alternative basis for billing may be used provided the Parties agree in writing and the local electric utility provides its consent if such consent is deemed necessary.
2. Except as otherwise provided in this Agreement, all other provisions with respect to billing are set forth in the Service Tariff and the Rules.
3. The rights and remedies provided to the Authority in this Article are in addition to any and all other rights and remedies available to Authority at law or in equity.

ARTICLE IX

HYDROPOWER CURTAILMENTS AND SUBSTITUTE ENERGY

1. In the event of an Adverse Water Condition, the Authority will have the right in its discretion to implement Hydropower Curtailments. The Authority will implement Hydropower Curtailments on a non-discriminatory basis as to all Authority customers that are served by the Project.
2. In the event of a Hydropower Curtailment, the Authority will provide Substitute Energy to the Customer and the Customer shall pay for such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, Substitute Energy shall be sourced from markets administered by the NYISO.
3. For each kilowatt-hour of Substitute Energy provided by the Authority during a Hydropower Curtailment, the Customer shall pay the Authority directly during the billing month: (1) the difference between the market cost of the Substitute Energy and the charge for firm energy as provided for in this Agreement; and (2) any NYISO charges and taxes the Authority incurs in connection with the provision of such Substitute Energy. Unless otherwise agreed upon by the Parties in writing, billing and payment for Substitute Energy provided for Hydropower Curtailments shall be governed by the provisions of the Service Tariff relating to the rendition and payment of bills for Electric Service.
4. The Authority shall be under no obligation to deliver, and will not deliver, any such curtailed energy to the Customer in later billing periods.

5. The Authority may require the Customer to enter into a separate agreement relating to the provision and sale of Substitute Energy. The provisions of this Agreement will remain in effect notwithstanding the existence of any such separate agreement.

ARTICLE X

EFFECTIVENESS, TERM AND TERMINATION

1. This Agreement shall become effective and legally binding on the Parties on the Effective Date.
2. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (a) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (b) termination by the Authority pursuant to this Agreement, the Service Tariff, or the Rules; or (c) expiration of the Allocation by its own term as specified in Schedule A.
3. The Customer may exercise a partial termination of the Allocation upon at least sixty (60) days' prior written notice to the Authority. The Authority will effectuate the partial termination as soon as practicable after receipt of such notice taking account of the Authority's internal procedures and requirements of the Customer's local electric utility.
4. The Authority may cancel service under this Agreement or modify the quantities of Firm Power and Firm Energy associated with the Allocation: (1) if such cancellation or modification is required to comply with any final ruling, order or decision of any regulatory or judicial body of competent jurisdiction (including any licensing or re-licensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, the Service Tariff, or the Rules.

ARTICLE XI

EXTENSIONS OF ALLOCATION; AWARD OF ADDITIONAL ALLOCATIONS

1. The Customer may apply to the Authority for an extension of the term of the Allocation identified in Schedule A:
 - a. during the thirty-six (36) month period immediately preceding the scheduled expiration of the Allocation;
 - b. pursuant to any other process that the Authority establishes; or
 - c. with the Authority's written consent.
2. Upon proper application by the Customer, the Authority may in accordance with applicable law and Authority procedures award additional allocations of PP at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (a) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (b) produce a modified Appendix to Schedule B, as the Authority determines to be appropriate. The Authority will furnish the Customer with any such modified Schedule A, supplemental schedule, and/or a modified

Appendix to Schedule B, within a reasonable time after commencement of Electric Service for any such additional allocation.

3. In addition to any requirements imposed by law, the Customer hereby agrees to furnish such documentation and other information as the Authority requests to enable the Authority to evaluate any requests for extension of the Allocation or additional allocations and consider the terms and conditions that should be applicable of any extension or additional allocations.

ARTICLE XII

NOTICES

1. Notices, consents, authorizations, approvals, instructions, waivers or other communications provided in this Agreement shall be in writing and transmitted to the Parties as follows:

To: The Authority

New York Power Authority
123 Main Street
White Plains, New York 10601

Email:

Facsimile: _____

Attention: Manager – Business Power Allocations and Compliance

To: The Customer

Upstate Niagara Cooperative, Inc.
22 County Route 52
North Lawrence, NY 12967

Email:

Facsimile:

Attention:

2. The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XII.1.
3. Except where otherwise herein specifically provided, any notice, communication or request required or authorized by this Agreement by either Party to the other shall be deemed properly given: (a) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (b) if sent by a nationally recognized overnight delivery service, two (2) calendar days after being deposited for delivery to the appropriate address set forth above; (c) if delivered by hand, with written confirmation of receipt; (d) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (e) on the date of transmission if sent by electronic communication to the appropriate address as set forth above, with confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

ARTICLE XIII
SUCCESSORS AND ASSIGNS; RESALE OF HYDROPOWER

1. This Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the legal successors and assigns of either Party hereto, provided that no assignment by either Party or any successor or assignee of such Party of its rights and obligations hereunder shall be made or become effective without the prior written consent of the other Party, which consent shall not be unreasonably withheld or conditioned. Notwithstanding the foregoing sentence, the Authority may require such approvals, and such consents and other agreements from the Customer and other parties, that the Authority determines are necessary in order to effectuate any such assignment.
2. The Customer may not transfer any portion of the Allocation to any other person, or a location different than the Facility, unless: (a) the Authority in its discretion authorizes the transfer Authority; (b) all other requirements applicable to a transfer, including board approvals, are satisfied; and (c) the transfer is effectuated in a form and subject to such terms and conditions approved by the Authority. Any purported transfer that does not comply with the foregoing requirements shall be invalid and constitute grounds for the Authority in its discretion to suspend Electric Service or terminate the Allocation and/or this Agreement.
3. The Customer may not sell any portion of the Allocation to any other person, allow any other person to use any portion of the Allocation, or allow any other person to interconnect to the Facility. Any purported sale shall be invalid and any violation of this provision shall constitute grounds for the Authority in its discretion to suspend Electric Service, or terminate the Allocation and/or this Agreement.

ARTICLE XIV
MISCELLANEOUS

1. Choice of Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a) and rulings by the IJC and without regard to conflicts of law provisions.

2. Venue

The Parties: (a) consent to the exclusive jurisdiction and venue of any state court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement; (b) agree to accept service of process; and (c) will not raise any argument of inconvenient forum.

3. Previous Agreements; Modifications; and Interpretation

- a. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of the Allocation and the subject matter of the Agreement, and

supersedes all previous communications and agreements between the Parties, oral or written, with reference to the sale of the Allocation.

- b. No modifications of this Agreement shall be binding upon the Parties hereto or either of them unless such modification is in writing and is signed by a duly authorized officer of each of them.
- c. No provision shall be construed against a Party on the basis that such Party drafted such provision.

4. Waiver

Any waiver at any time by either the Authority or the Customer of their rights with respect to a default or of any other matter arising out of this Agreement shall not be deemed to be a waiver with respect to any other default or matter. No waiver by either Party of any rights with respect to any matter arising in connection with this Agreement shall be effective unless made in writing and signed by the Party making the waiver.

5. Severability and Voidability

If any term or provision of this Agreement shall be invalidated, declared unlawful or ineffective in whole or in part by an order of the FERC or a court of competent jurisdiction, such order shall not be deemed to invalidate the remaining terms or provisions hereof. Notwithstanding the preceding sentence, if any provision of this Agreement is rendered void or unenforceable or otherwise modified by a court or agency of competent jurisdiction, the entire Agreement shall, at the option of either Party and only in such circumstances in which such Party's interests are materially and adversely impacted by any such action, be rendered void and unenforceable by such affected Party.

ARTICLE XV
EXECUTION

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement as a PDF or similar file type transmitted via electronic mail, cloud based server, e-signature technology or similar electronic means shall be legal and binding and shall have the same full force and effect as if an original executed counterpart of this Agreement had been delivered.

[SIGNATURES FOLLOW ON NEXT PAGE]

AGREED:

Upstate Niagara Cooperative, Inc.

By: _____

Title: _____

Date: _____

AGREED:

POWER AUTHORITY OF THE STATE OF NEW YORK

By: _____
John R. Koelmel, Chairman

Date: _____

SCHEDULE A
PRESERVATION POWER ALLOCATIONS

Customer: Upstate Niagara Cooperative, Inc.				
Type of Allocation	Allocation Amount (kW)	Facility and Address	Trustee Approval Date	Allocation Expiration Date
Preservation Power	850	22 County Route 52 North Lawrence, NY 12967	1/30/2019	Seven (7) years from the date of commencement of Electric Service

SCHEDULE B
SUPPLEMENTAL PRESERVATION POWER COMMITMENTS

ARTICLE I
SPECIFIC SUPPLEMENTAL COMMITMENTS

1. Employment Commitments

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

2. Capital Investment Commitments

The Customer shall make the capital investments specified in the Appendix to this Schedule B.

3. Power Utilization

For each month the Authority provides Electric Service to the Customer, the Customer shall utilize the entire Allocation, as represented by the Billing Demand (as such term is described in the Service Tariff), provided, however, that if only part of the Allocation is being utilized in accordance with Schedule C, the Customer shall utilize such partial amount of the Allocation.

4. Energy Efficiency and Conservation Program

- a. The Customer shall implement an energy efficiency and conservation program at the Facility through either (a) enrollment of the Facility and participation in NYEM in accordance with a NYEM Agreement, or (b) one or more Physical Energy Audits of the Facility, or (c) a combination of such measures, in accordance with the provisions of this Article.
- b. The Authority shall transmit to the Customer a NYEM Agreement and an election form. The Customer shall elect to either (a) enroll the Facility and participate in NYEM for a three-year term ("NYEM Participation") in accordance with the NYEM Agreement, or (b) perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit within three (3) years of the Effective Date of this Agreement, at its own expense.
- c. The Authority shall, on or before the expiration of the three-year term of the NYEM Agreement, transmit to the Customer a NYEM Agreement specifying the terms and conditions that would apply to NYEM participation for a second term, and an election form. The Customer shall elect either (a) NYEM Participation for a second term, or (b) to perform a Physical Energy Audit of the Facility. The Customer shall make the election within sixty (60) days of its receipt of the Authority's communication. If the Customer elects NYEM Participation, it shall execute and return the NYEM Agreement to the Authority with the election form, abide by the NYEM Agreement, and participate in NYEM at its own expense at the rate provided in the NYEM Agreement. If the Customer elects to perform a Physical Energy Audit, it shall perform the Physical Energy Audit during the calendar year that begins six years after of the Effective Date of this Agreement, at its own expense.
- d. The Authority may in its discretion waive the requirement for a Physical Energy Audit, or may agree to a limited energy audit of the Facility, where it determines that the Physical Energy Audit is unnecessary based on the age of the Facility, energy efficiency and conservation improvements made at the Facility, the length of the Allocation, or other considerations the Authority determines to be relevant.

ARTICLE II
RECORDKEEPING, REPORTING AND FACILITY ACCESS

1. Employment

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

2. Capital Investments

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

3. Power Usage

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

4. Energy Efficiency and Conservation Program

Upon the Authority's request, the Customer shall provide the Authority with (a) a copy of the results of any Physical Energy Audit performed at the Facility (or, at the Authority's option, a report describing the results), performed pursuant to this Article; and (b) a description of any energy efficiency or conservation measures that the Customer has implemented at the Facility in response to any Physical Energy Audit or as a result of NYEM Participation.

5. Facility Access

Notwithstanding any other provision of the Agreement, the Customer shall provide the Authority with such access to the Facility, and such documentation, as the

Authority deems necessary to determine the Customer's compliance with the Customer's Supplemental Commitments specified in this Schedule B.

ARTICLE III
COMPLIANCE ACTION BY THE AUTHORITY

1. Employment

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

2. Capital Investment Commitment

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

3. Power Utilization Level

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

4. Additional Compliance Action

In addition to the Authority's other rights and remedies provided in this Agreement, the Service Tariff and the Rules, the Authority may suspend Electric Service to the Customer if the Customer does not comply with any of the requirements in Section I.4 or Article II of this Schedule B.

5. Notice of Intent to Reduce Contract Demand

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

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

The Customer shall employ at least 97 full-time employees (“Base Employment Level”) at the Customer’s Facility within three (3) years of commencement of Electric Service. The Base Employment Level shall be maintained thereafter for the term of the Allocation through the Allocation Expiration Date specified in Schedule A in accordance with Article I of Schedule B.

CAPITAL INVESTMENT COMMITMENTS

1. **Annual Capital Investment Commitment** (if applicable, as specified below)
 - a. Each Reporting Year, the rolling average of the annual capital investments made by the Customer at the Facility (“Rolling Average”) shall total not less than \$ N/A (the “Annual Capital Investment Commitment”). For purposes of this provision, “Rolling Average” means the three-year average comprised of (1) the total amount of capital investments (“Annual CI Expenditures”) made by the Customer at the Facility during the current Reporting Year, and (2) the Annual CI Expenditures made by the Customer at the Facility during the two prior Reporting Years.
 - b. Each year, the Customer shall record its Annual CI Expenditures for purposes of enabling the Authority to determine and verify the Rolling Average, which shall be provided to the Authority in a form specified by the Authority on or before the last day of February following the end of the most recent calendar year.
 - c. If the Customer’s Rolling Average as determined by the Authority is less than 90% of its Annual Capital Investment Commitment for the Reporting Year, the Contract Demand may be reduced by the Authority in accordance with the procedures provided in Section III.5 of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the Rolling Average divided by the Annual Capital Investment Commitment. Any such reduction shall be rounded to the nearest ten (10) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.
2. **Expansion Project–Capital Investment Commitment** (if applicable, as specified below)
 - a. The Customer shall make a minimum capital investment of \$3,400,000 to construct, furnish and/or expand the Facility (“Expansion Project Capital Investment Commitment”). The Expansion Project Capital Investment Commitment is expected to consist of the following approximate expenditures on the items indicated:

\$1,600,000 – Storage tanks and installation
\$ 200,000 – Fruit mixing system
\$ 250,000 – Clean in place sanitation equipment
\$1,350,000 – Ultrafiltration, palletizing, building modifications,
and miscellaneous project items

\$3,400,000 Total Expansion Project Capital Investment Commitment

- b. The Expansion Project Capital Investment Commitment shall be made, and the Facility shall be completed and fully operational, no later than January 30, 2022 (*i.e.*, within three (3) years of the date of the Authority's award of the Allocation). Upon request of the Customer, such date may be extended in the discretion of the Authority.

SCHEDULE C
TAKEDOWN SCHEDULE

SCHEDULE D
ZERO EMISSION CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in Service Tariff No. WNY-2, or in the Rules.

“Affected LSEs” has the meaning provided in Section II.2 of this Schedule D.

“CES Order” means the Order issued by the PSC entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“PP Program ZEC Costs” has the meaning provided in Section II.4.b of this Schedule D.

“Government Action” has the meaning provided in Section II.8 of this Schedule D.

“Load Serving Entity” or “LSE” has the meaning provided in the CES Order.

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

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

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

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

“Zero Emission Credit” or “ZEC” has the meaning provided in the CES Order.

“Zero Emission Credit Charge” or “ZEC Charge” means the charge to the Customer established in this Schedule D.

“ZEC Purchase Obligation” has the meaning provided in Section II.2 of this Schedule D.

“ZEC Program Year” has the meaning provided in Section II.2 of this Schedule D.

II. ZEC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff or the Rules, the Customer shall be subject to a ZEC Charge as provided in this Schedule D. The ZEC Charge shall be in addition to all other charges, fees and assessments provided for in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the ZEC Charge.
2. As provided in the CES Order, the Public Service Commission, as part of the CES and Tier 3 of the Renewable Energy Standard, imposed an obligation on Load Serving Entities that are subject to the CES Order (“Affected LSEs”) to purchase Zero Emission Credits from NYSERDA in an amount representing the Affected LSE’s proportional share of ZECs calculated on the basis of the amount of electric load the LSE serves in relation to the total electric load served by all Load Serving Entities in the New York Control area, to support the preservation of existing at risk nuclear zero emissions attributes in the State (the “ZEC Purchase Obligation”). The ZEC Purchase Obligation is implemented on the basis of program years running from April 1 through March 31 of each year (“ZEC Program Year”).
3. The ZEC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of supporting the CES and Tier 3 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan. The Authority will comply with the CES and Tier 3 of the RES by applying a form of ZEC Purchase Obligation to the end-user load for which the Authority serves as a load serving entity, including the load that the Authority serves under the PP power program.
4. The ZEC Charge, which is intended to recover from the Customer costs that the Authority incurs for purchasing ZECs in quantities that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:
 - a. The cost of the total ZEC Purchase Obligation for all LSEs in the New York Control Area, including the Authority as a participating load serving entity, will be assessed pursuant to the methodology provided in the CES Order. The Authority will purchase its proportionate share of ZECs from NYSERDA based on the proportion of the forecasted total kilowatt-hours load served by the Authority (i.e., total Authority LSE load) in relation to the forecasted total kilowatt-hours load served by all LSEs in the New York Control Area as

provided in the CES Order. The ZEC Purchase Obligations may be based on initial load forecasts with reconciliations made at the end of each ZEC Program Year by NYSERDA.

- b. The Authority will allocate costs from its ZEC Purchase Obligation between its power programs/load for which it serves as load serving entity, including the PP load that it serves (the “PP Program ZEC Costs”). Such allocation will be based on the forecasted kilowatt-hours load of the PP program to be served by the Authority in relation to the forecasted total kilowatt-hours load served by the Authority (total Authority LSE load) for each ZEC Program Year. In addition, any balance resulting from the ZEC Program Year-end reconciliation of ZEC Purchase Obligations will be allocated to the PP power program based on the proportion of the actual annual kilowatt-hours load served under such programs to total actual annual kilowatt-hours load served by the Authority (total Authority LSE load).
 - c. The Authority will allocate a portion of the PP Program ZEC Costs to the Customer as the ZEC Charge based on the proportion of the Customer’s actual kilowatt-hours load for the PP purchased by the Customer to total kilowatt-hours load served by the Authority under the PP power program (i.e., PP Program level load). In addition, any balance resulting from the ZEC Program Year-end reconciliation of the ZEC Purchase Obligation referenced above will be passed through to the Customer based on the proportion of the Customer’s annual kilowatt-hours load purchased under this Agreement to total annual kilowatt-hours load served under the PP power program by the Authority (PP Program level load). The ZEC Charge assessed to the Customer shall not include any costs resulting from the Authority’s inability to collect a ZEC Charge from any other Authority customer.
5. The Authority may, in its discretion, include the ZEC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the ZEC Charge pursuant to another Authority-established procedure.
6. The Authority may, in its discretion, modify the methodology used for determining the ZEC Charge and the procedures used to implement such ZEC Charge on a nondiscriminatory basis among affected PP customers, upon consideration of such matters as Public Service Commission orders modifying or implementing the CES Order, guidance issued by the New York Department of Public Service, and other information that the Authority reasonably determines to be appropriate to the determination of such methodology. The Authority shall provide Customer with reasonable notice of any modifications to the methodology or procedures used to determine and implement the ZEC Charge.
7. Nothing in this Schedule shall limit or otherwise affect the Authority’s right to charge or collect from the Customer any rate, charge, fee, assessment, or tax

provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

8. If the ZEC Purchase Obligation is modified or terminated by the Public Service Commission or other controlling governmental authority (collectively, “Government Action”), the Authority shall modify or terminate the ZEC Charge, and assess any additional charges or provide any credits to the Customer, to the extent that the Authority determines such actions to be appropriate based on such Government Action.

SCHEDULE E
MONTHLY RENEWABLE ENERGY CREDIT CHARGE

I. DEFINITIONS

When used with initial capitalization, whether singular or plural, the following terms, as used in this Schedule, shall have the meanings as set forth below. Capitalized terms not defined in this Schedule shall have the meaning ascribed to them elsewhere in the Agreement, in the Service Tariff No, or in the Rules.

“Alternative REC Compliance Program” has the meaning provided in Section III.1 of this Schedule E.

“Annual REC Percentage Target” has the meaning provided in Section II.2 of this Schedule E.

“CES Order” means the Order issued by the Public Service Commission entitled “Order Adopting a Clean Energy Standard, issued on August 1, 2016, in Case Nos. 15-E-0302 and 16-E-0270, and includes all subsequent orders amending, clarifying and/or implementing such Order or the RES.

“Clean Energy Standard” or “CES” means the Clean Energy Standard adopted by the State in the CES Order.

“Load Serving Entity” has the meaning provided in the CES Order.

“Mandatory Minimum Percentage Proportion” has the meaning provided in the CES Order.

“Monthly Renewable Energy Credit Charge” or “Monthly REC Charge” means the monthly charge to the Customer established in this Schedule E.

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

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

“Renewable Energy Credit” or “REC” refers to a qualifying renewable energy credit as described in the CES Order.

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

“RES Compliance Program” means a program or initiative that the Authority has adopted for the purpose of meeting the RES for the load that the Authority serves under the PP power program as authorized in the Power Authority Act.

“Renewable Energy Standard” or “RES” means the Renewable Energy Standard adopted by the State in the CES Order.

“REC Compliance Measures” mean: (1) the Authority’s procurement of RECs from NYSEERDA in accordance with NYSEERDA procedures and/or the CES Order; (2) the Authority’s procurement of RECs from available REC markets; (3) the Authority’s procurement of RECs from sources other than those identified in items (1) and (2) of this definition, including through a procurement process adopted by the Authority; and/or (4) any other measure that the PCS authorizes a Load Serving Entity to implement for the purpose of meeting the applicable Mandatory Minimum Percentage Proportion.

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

“Total Monthly REC Costs” has the meaning provided in Section II.3.b of this Schedule E.

II. MONTHLY REC CHARGE

1. Notwithstanding any other provision of the Agreement, or any provision of the Service Tariff, or the Rules, the Customer shall be subject to a Monthly REC Charge as provided in this Schedule E. The Monthly REC Charge is in addition to all other charges, fees and assessments provided in the Agreement, the Service Tariff and the Rules. By accepting Electric Service under the Agreement, the Customer agrees to pay the Monthly REC Charge.
2. The Monthly REC Charge is part of a RES Compliance Program that the Authority has adopted for the purpose of complying with the CES and Tier 1 of the RES and implementing the PP power program in a manner that is consistent with the New York State Energy Plan, pursuant to which the Authority will invest in new renewable generation resources to serve its PP customers. Such investments will be made through the procurement of RECs through REC Compliance Measures in quantities that are intended to address the annual Mandatory Minimum Percentage Proportions as applied by the Authority to the total PP load that the Authority will serve each calendar year (the “Annual REC Percentage Target”) for the purpose of ultimately meeting the RES.
3. The Monthly REC Charge, which is intended to recover from the Customer costs that the Authority incurs for implementing REC Compliance Measures that are attributable to the Customer’s PP load served under this Agreement, will be determined and assessed to the Customer as follows:

- a. The Authority shall have the right, for each calendar year to implement such REC Compliance Measures as it determines in its discretion to be appropriate for the purpose of meeting the Annual REC Percentage Target for the total PP load that it will serve during such calendar year.
- b. The Authority will, for each month of each calendar year, calculate the total costs ("Total Monthly REC Costs") that the Authority has incurred or estimates that it will incur from implementing RES Compliance Measures for the purpose of meeting the Annual REC Percentage Target for the total PP kilowatt-hour load for the month ("Total Monthly PP Load"). The Total Monthly REC Costs may be calculated based on forecasts of the Total Monthly PP Load that the Authority expects to serve for the month, or on a lagged basis based on the actual Total Monthly PP Load that the Authority served for the month.
- c. Each month, the Authority will assess to the Customer, as a Monthly REC Charge, which will represent the Customer's share of the Total Monthly REC Costs assessed to the Total Monthly PP Load. The Monthly REC Charge will be assessed as the proportion of the Customer's total kilowatt-hours load served by the Authority for such month to the Total Monthly PP Load served by the Authority for such month, provided, however, that:
 - i. the Monthly REC Charge to the Customer shall not include any costs associated with the Authority's inability to collect the Monthly REC Charge from other Authority customers; and
 - ii. the effective per-MWh rate of the Monthly REC Charge to the Customer averaged over the REC Program Year to which the Annual REC Percentage Target applies shall not exceed the per-MWh rate of a Monthly REC Charge based on NYSERDA's published REC price for the REC Program Year.
4. The Authority may, in its discretion, include the Monthly REC Charge as part of the monthly bills for Electric Service as provided for in the Agreement, or bill the Customer for the Monthly REC Charge pursuant to another Authority-established procedure.
5. The Authority will, at the conclusion of each calendar year in which it assesses a Monthly REC Charge, conduct a reconciliation process based on the actual costs that it incurred for REC Compliance Measures and actual load served for the year, compared with cost or load estimates or forecasts, if any, that the Authority used to calculate the Customer's Monthly REC Charges during the year. The Authority will issue a credit, or an adjusted final charge for the year, as appropriate, based on the results of such reconciliation process. Any such final charge shall be payable within the time frame applicable to the Authority's bills for Electric Service under this Agreement or pursuant to any other procedure established by the Authority pursuant to Section II.4 of this Schedule E.

6. Notwithstanding the provisions of Section II.3 of this Schedule E, if Electric Service for the Allocation is commenced after the Authority has implemented REC Compliance Measures for the year in which such Electric Service is commenced, and as a result the Customer's load cannot be accounted for in such REC Compliance Measures, the Authority may in its discretion implement separate REC Compliance Measures in order to meet the Annual REC Percentage Target for Customer's load for the year, and bill the Customer for the costs associated with such separate REC Compliance Measures.
7. Nothing in this Schedule shall limit or otherwise affect the Authority's right to charge or collect from the Customer, any rate, charge, fee, assessment, or tax provided for under any other provision of the Agreement, or any provision of the Service Tariff, or the Rules.

III. ALTERNATIVE REC COMPLIANCE PROGRAM

1. Nothing in this Schedule E shall be construed as preventing the Parties from entering into other agreements for an alternative arrangement for the Authority to meet the Annual REC Percentage Target with respect to the Customer's Allocation, including but not limited to Customer self-supply of RECs, alternative REC compliance programs and cost allocation mechanisms, in lieu of the Monthly REC Charge provided in this Schedule E (collectively, "Alternative REC Compliance Program").
2. The Authority shall communicate at least biennially with the Customer concerning implementation of the RES Compliance Program and potential Alternative REC Compliance Programs, if any, that the Authority is offering or expects to offer.



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

Schedule of Rates for Sale of Firm Power Service to
Preservation Power Customers
(Local Electric Utility Delivery)

Service Tariff No. 20

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Preservation Power made directly to a qualified business Customer for firm power service that is delivered by the Customer's local electric utility.

II. Abbreviations and Terms

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

Agreement: An executed written agreement between the Authority and the Customer for the sale of Preservation Power to the Customer.

Annual Adjustment Factor or **AAF**: This term shall have the meaning set forth in Section V herein.

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

Customer: A business entity that (1) has received an Allocation of Preservation Power, (2) purchases such Preservation Power directly from the Authority, and (3) receives delivery of the Preservation Power from a local electric utility.

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

Firm Power: Hydropower capacity (kW) that is intended to be always available from the Project subject to the curtailment provisions set forth in the Agreement between the Authority and the Customer and this Service Tariff. Firm Power shall not include peaking power.

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

Load Factor Sharing or LFS: A type of billing methodology applicable to a Customer's Allocation which determines how a Customer's total Native System Load is apportioned between the power and energy supplied by the Allocation and the Customer's other source of electricity supply, if any. LFS is used to determine the amount of Firm Energy supplied and billed on the basis of the Customer's actual total Native System Load per the monthly billing cycle as follows:

1. When the Maximum Metered Demand is less than (<) the Contract Demand, then the Customer's entire load will be supplied by Firm Energy.
2. When the Maximum Metered Demand is greater than (>) the Contract Demand, then the Customer's portion of Firm Energy supply will be determined as follows:
 - a. For Hourly Billing: $\sum (\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the in-hour demand of Customer's total Native System Load for all hours})$.
 - b. For Monthly Billing: $(\text{Contract Demand} \div \text{Maximum Metered Demand} \times \text{the total consumed energy by the Customer within the bill cycle})$.

Load Serving Entity or LSE: This term shall have the meaning set forth in the Agreement.

Maximum Metered Demand: The highest 15 or 30-minute integrated demand, as determined by the local electric utility, during each Billing Period recorded on the meter that is used by the Customer in accordance with this Service Tariff and the Agreement.

Native System Load: The total consumption of the Customer's electric system, as determined by the Authority's revenue-grade metering equipment, without the offset of Customer's behind the meter generation. It is represented as the sum of all incoming power, plus internal generation behind the system meter, minus power exports to the bulk electric system.

Preservation Power or PP: Firm Power and Firm Energy made available under this Service Tariff by the Authority from the Project for sale to the Customer for business purposes pursuant to PAL § 1005(5) and (13), and that is delivered by the Customer's local electric utility.

Project: The Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.

Rate Year or RY: The period from July 1 through June 30. For example, RY 2018 refers to July 1, 2018 through June 30, 2019.

Rules: The Authority's rules and regulations set forth in 21 NYCRR § 450 *et seq.*, as they may be amended from time to time.

Service Tariff: This Service Tariff No. 20.

All other capitalized terms and abbreviations used in this Service Tariff but not defined in this Section or other provisions of this Service Tariff shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Preservation Power (PP) Base Rates

The rates to be charged to the Customer by the Authority shall be as follows:

Rate Year	Billing Period	Demand (\$/kW)	Energy (\$/MWh)
2018	July 2018 – June 2019	7.90	13.50

B. PP Rates No Lower than Rural/Domestic Rate

At all times the applicable PP base rates for demand and energy determined in accordance with Sections III.A and V of this Service Tariff shall be no lower than the rates charged by the Authority for the sale of hydroelectricity for the benefit of rural and domestic customers receiving service in accordance with the Niagara Redevelopment Act, 16 U.S.C. § 836(b)(1) (the "Rural/Domestic Rate"). This provision shall be implemented as follows: if the base rates, as determined in accordance with Sections III.A and V of this Service Tariff, are lower than the Rural/Domestic Rate on an average \$/MWh basis, each set of rates measured at 80% load factor which is generally regarded as representative for PP Customers, then the base rates determined under Sections III.A and V of this Service Tariff will be revised to make them equal to the Rural/Domestic Rate on an average \$/MWh basis. However, the base rates as so revised will have no effect until such time as these base rates are lower than the Rural/Domestic Rate.

C. Monthly Base Rates Exclude Delivery Service Charges

The monthly base rates set forth in this Section III exclude any applicable costs for delivery services provided by the local electric utility.

D. Minimum Monthly Charge

The Minimum Monthly Charge shall equal the product of the demand rate specified in Section III.A and the Contract Demand (as defined herein). Such Minimum Monthly Charge shall be in addition to any NYISO Charges or Taxes (each as defined herein) incurred by the Authority with respect to the Customer's Allocation, and any other charges provided in this Service Tariff, the Agreement or the Rules.

E. Estimated Billing

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

For the purpose of calculating a Billing Demand charge for an Estimated Bill, the demand charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated demand amount (kW) will be calculated based on an average of the Customer's Billing Demand (kW) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated demand amount (kW) for the Estimated Bill will equal the Customer's takedown (kW) amount.

For the purpose of calculating a Billing Energy charge for an Estimated Bill, the energy charge will be calculated based on a load factor sharing billing methodology as follows:

- The estimated energy (kWh) will be based on the average of the Customer's Billing Energy (kWh) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated energy amount (kWh) will be equal to the takedown (kW) amount at 70 percent load factor for that Billing Period.

If an alternative billing methodology is applicable to the Customer, the demand charge and energy charge for rendering an Estimated Bill shall be calculated in a manner appropriate to such alternative billing methodology as determined by the Authority.

If data indicating the Customer's actual demand and usage for any Billing Period in which an Estimated Bill was rendered is subsequently provided to the Authority, the Authority will make necessary adjustments to the corresponding Estimated Bill and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The Minimum Monthly Charge provisions of Section III.D shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended and shall not be construed to limit the Authority's rights under the Agreement.

F. Adjustments to Charges

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

G. Billing Period

The Billing Period is any period of approximately thirty (30) days, generally ending with the last day of each calendar month but subject to the billing cycle requirements of the local electric utility in whose service territory the Customer's Facility is located.

H. Billing Demand

Billing Demand shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

I. Billing Energy

Billing Energy shall be determined by applying the applicable billing methodology to total Native System Load meter readings during the Billing Period. See Section IV.E, below.

J. Contract Demand

The Contract Demand will be the amount of Preservation Power, not to exceed the Allocation, provided by the Authority to the Customer in accordance with the Agreement.

IV. General Provisions

A. Character of Service

Alternating current; sixty cycles, three-phase.

B. Availability of Energy

1. Subject to Section IV.B.2, the Authority shall provide to the Customer in any Billing Period Firm Energy associated with Firm Power. The offer of Firm Energy for delivery shall fulfill the Authority's obligations for purposes of this provision whether or not the Firm Energy is taken by the Customer.
2. In the event of an Adverse Water Condition, the rights and obligations of the Customer and Authority, including but not limited to such matters as Substitute Energy and responsibility for payment of costs associated therewith, will be governed by the Agreement.

C. Delivery

For the purpose of this Service Tariff, Firm Power and Firm Energy shall be deemed to be offered when the Authority is able to supply Firm Power and Firm Energy to the Authority's designated NYISO load bus. If, despite such offer, there is a failure of delivery caused by the Customer, NYISO or local electric utility, such failure shall not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules or any successor provision addressing adjustments.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the base rates contained in this Service Tariff may be revised from time to time on not less than thirty (30) days written notice to the Customer.

E. Billing Methodology

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

1. The billing methodology used to determine the amount of Firm Power and Firm Energy to be billed to the Customer related to its Allocation shall be Load Factor Sharing ("LFS") in a manner consistent with the Agreement and any applicable delivery agreement between the Authority and the Customer's local electric utility or both as determined by the Authority. An alternative billing methodology may be used provided the Customer and the Authority agree in writing and the Customer's local electric utility provides its consent if the Authority determines that such consent is necessary.
2. Billing Energy - The LFS methodology will be applied against the Customer's Native System Load during the Billing Period to determine the amount of Firm Energy (kWh) attributable to the Allocation (Billing Energy) to be billed to the Customer and charged at the applicable PP Rate. All energy quantities will be adjusted for losses.
3. Billing Demand – The LFS methodology will be applied against the Customer's Maximum Metered Load during the Billing Period to determine the amount of Firm Power (kW) attributable to the Allocation (Billing Demand) to be billed to the Customer and charged at the applicable PP Rate. Billing Demand may not exceed the amount of the Contract Demand. All demand quantities will be adjusted for losses.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power and Firm Energy during any Billing Period the higher of either (i) the sum of (a), (b) and (c) below, or (ii) the Minimum Monthly Charge (as defined herein):

- a. The demand rate per kilowatt for Firm Power specified in this Service Tariff or any modification thereof applied to the Customer's Billing Demand (as defined in Section IV.E, above) for the Billing Period; and
- b. The energy rate per MWh for Firm Energy specified in this Service Tariff or any modification thereof applied to the Customer's Billing Energy (as defined in Section IV.E, above) for the Billing Period; and
- c. A charge representing reimbursement to the Authority for all applicable Taxes incurred by the Authority as a result of providing Preservation Power allocated to the Customer.

2. Transmission Charge

The Customer shall compensate the Authority for all transmission costs incurred by the Authority with respect to the Allocation, including such costs that are charged pursuant to the OATT.

3. NYISO Transmission and Related Charges

The Customer shall compensate the Authority for the following NYISO transmission and related charges (collectively, "NYISO Charges") assessed on the Authority for services provided by the NYISO pursuant to its OATT or other tariffs (as the provisions of those tariffs may be amended and in effect from time to time) associated with providing Electric Service to the Customer:

- A. Ancillary Services 1 through 6 and any new ancillary services as may be defined and included in the OATT from time to time;
- B. Marginal losses;
- C. The New York Power Authority Transmission Adjustment Charge ("NTAC");
- D. Congestion costs inclusive of any rents collected or owed due to any associated grandfathered transmission congestion contracts as provided in Attachment K of the OATT;
- E. Any and all other charges, assessments, or other amounts associated with deliveries to Customers or otherwise associated with the Authority's responsibilities as a Load Serving Entity for the Customers that are assessed on the Authority by the NYISO under the provisions of its OATT or under other applicable tariffs; and
- F. Any charges assessed on the Authority with respect to the provision of Electric Service to Customers for facilities needed to maintain reliability and incurred in connection with the NYISO's Comprehensive System Planning Process (or similar reliability-related obligations incurred by the Authority with respect to Electric Service to the Customer), applicable tariffs, or required to be paid by the Authority in accordance with law, regardless of whether such charges are assessed by the NYISO or another party.

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

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

4. Taxes Defined

Taxes shall be any adjustment as the Authority deems necessary to recover from the Customer any taxes, assessments or any other charges mandated by federal, state or local agencies or authorities that are levied on the Authority or that the Authority is required to collect from the Customer if and to the extent such taxes, assessments or charges are not recovered by the Authority pursuant to another provision of this Service Tariff.

5. Substitute Energy

The Customer shall pay for Substitute Energy, if applicable, as specified in the Agreement.

6. Other Charges

The Customer shall pay the Authority for all other charges provided for in the Agreement.

7. Payment Information

Bills computed under this Service Tariff are due and payable by electronic wire transfer in accordance with the Rules. Such wire transfer shall be made to J P Morgan Chase NY, NY / ABA021000021 / NYPA A/C # 008-030383, unless otherwise indicated in writing by the Authority. The Authority may in its discretion change the foregoing account and routing information upon notice to the Customer.

8. Billing Disputes

In the event that there is a dispute on any items of a bill rendered by the Authority, the Customer shall pay such bill in full. If necessary, any adjustments will be made thereafter.

G. Rendition and Payment of Bills

1. The Authority will render bills to the Customer for Electric Service on or before the tenth (10th) business day of the month for charges due for the previous Billing Period. Such bills shall include charges for Electric Service, NYISO Charges associated with the Allocation (subject to adjustment consistent with any later NYISO re-billings to the Authority), and all other applicable charges, and are subject to adjustment as provided for in the Agreement, the Service Tariff and the Rules.
2. The Authority will charge and collect from the Customer all Taxes (including local, state and federal taxes) the Authority determines are applicable, unless the Customer furnishes the Authority with proof satisfactory to the Authority that (i) the Customer is exempt from the payment of any such Taxes, and/or (ii) the Authority is not obligated to collect such Taxes from the Customer. If the Authority is not collecting Taxes from the Customer based on the circumstances described in (i) or (ii) above, the Customer shall immediately inform the Authority of any change in circumstances relating to its tax status that would require the Authority to charge and collect such Taxes from the Customer.
3. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority will render bills to the Customer electronically.
4. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
5. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
6. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its discretion to suspend Electric Service to the Customer or terminate the Agreement.

Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of any bill rendered by Authority, the Customer shall pay such bill in full within the time provided for by this Agreement, and adjustments, if appropriate, will be made thereafter.

H. Adjustment of Charges – Distribution Losses

The Authority will make appropriate adjustments to compensate for distribution losses of the local electric utility.

I. Conflicts

In the event of any inconsistencies, conflicts, or differences between the provisions of this Service Tariff and the Rules, the provisions of this Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of the Agreement and this Service Tariff or the Rules, the provisions of the Agreement shall govern.

V. Annual Adjustment Factor

A. Adjustment of Rates

1. The AAF will be based upon a weighted average of three indices described below. For each new Rate Year, the index value for the latest available calendar year ("Index Value for the Measuring Year") will be compared to the index value for the calendar year immediately preceding the latest available calendar year (the Index Value for the Measuring Year -1"). The change for each index will then be multiplied by the indicated weights. As described in detail below, these products are then summed, producing the AAF. The AAF will be multiplied by the base rate for the current Rate Year to produce the base rates for the new Rate Year, subject to a maximum adjustment of $\pm 5.0\%$ (" $\pm 5\%$ Collar"). Amounts outside the $\pm 5\%$ Collar shall be referred to as the "Excess."

Index 1, "BLS Industrial Power Price" (35% weight): The average of the monthly Producer Price Index for Industrial Electric Power, commodity code number 0543, not seasonally adjusted, as reported by the U.S. Department of Labor, Bureau of Labor Statistics ("BLS") electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 1, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

Index 2, "EIA Average Industrial Power Price" (40% weight): The average weighted annual price (as measured in cents/kWh) for electric sales to the industrial sector in the ten states of CT, MA, ME, NH, NJ, NY, OH, PA, RI and VT ("Selected States") as reported by Coal and Electric Data and Renewables Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration ("EIA"); U.S. Department of Energy Form EIA-861 Final Data File. For Index 2, the Index Value for the Measuring Year will be the index for the calendar year two years preceding July 1 of the new Rate Year.

Index 3, "BLS Industrial Commodities Price Less Fuel" (25% weight): The monthly average of the Producer Price Index for Industrial Commodities less fuel, commodity code number 03T15M05, not seasonally adjusted, as reported by the U.S. Department of Labor, BLS electronically on its internet site and consistent with its printed publication, "Producer Price Index Detailed Report". For Index 3, the Index Value for the Measuring Year will be the index for the calendar year immediately preceding July 1 of the new Rate Year.

2. Annual Adjustment Factor Computation Guide

- Step 1: For each of the three Indices, divide the Index Value for Measuring Year by the Index Value for the Measuring Year-1.
- Step 2: Multiply the ratios determined in Step 1 by percentage weights for each Index. Sum the results to determine the weighted average. This is the AAF.
- Step 3: Commencing RY 2014, modifications to the AAF will be subject to $\pm 5\%$ Collar, as described below.
- a) When the AAF falls outside the $\pm 5\%$ Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the $\pm 5\%$ Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the $\pm 5\%$ Collar.

- b) Excesses will continue to accrue without limit and carry over such that they will be added to/subtracted from the AAF in any year where the AAF is within the $\pm 5\%$ Collar.

Step 4: Multiply the current Rate Year base rate by the AAF calculated in Step 2 to determine the new Rate Year base rate.

The foregoing calculation shall be performed by the Authority consistent with the sample presented in Section V.B below.

3. The Authority shall provide the Customer with notice of any adjustment to the current base rate per the above and with all data and calculations necessary to compute such adjustment by June 15th of each year to be effective on July 1 of such year, commencing in 2014. The values of the latest officially published (electronically or otherwise) versions of the indices and data provided by the BLS and EIA as of June 1 shall be used notwithstanding any subsequent revisions to the indices.
4. If during the term of the Agreement any of the three above indices ceases to be available or ceases to be reflective of the relevant factors or of changes which the indices were intended to reflect, the Customer and the Authority may mutually select a substitute Index. The Customer and the Authority agree to mutually select substitute indices within 90 days, once one of them is notified by the other that the indices are no longer available or no longer reflect the relevant factors or changes which the indices were intended to reflect. Should the 90-day period cover a planned July 1 rate change, the current base rates will remain in effect until substitute indices are selected and the adjusted rates based on the substitute indices will be retroactive to the previous July 1. If the Customer and Authority are unable to reach agreement on substitute indices within the 90-day period, the Customer and the Authority agree to substitute the mathematic average of the PPI—Intermediate Materials, Supplies and Components (BLS Series ID WPUSOP2000) and the PPI-- Finished Goods (BLS Series ID WPUSOP3000) indices for one or more indices that have ceased to be available or reflective of their intended purpose and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2017 implementation):

STEP 1

Determine the Index Value for the Measuring Year (MY) and Measuring Year - 1 (MY-1) for Each Index

- Index 1 - Producer Price Index, Industrial Power

	Measuring Year <u>(2016)</u>	Measuring Year - 1 <u>(2015)</u>
January	205.3	167.8
February	204.3	167.6
March	204.5	168.2
April	202.4	168.6
May	206.3	171.6
June	220.4	180.1
July	226.2	182.7
August	227.3	179.2
September	228.1	181.8
October	214.9	170.2
November	211.3	168.8
December	211.7	166.6
Average	213.6	223.7
Ratio of MY/MY-1		0.95

- Index 2 – EIA Industrial Rate

<u>State</u>	<u>Revenues</u> ((\$000s))	<u>Sales</u> (MWh)	<u>Avg. Rate</u> (cents/kWh)
<u>Measuring Year (2015)</u>			
CT	444,588	3,432,002	
MA	1,068,927	7,892,165	
ME	290,360	3,208,045	
NH	252,331	1,981,028	
NJ	778,985	7,320,398	
NY	1,140,573	18,079,200	
OH	3,548,736	50,556,675	
PA	3,411,815	47,404,272	
RI	109,866	798,532	
VT	146,022	1,421,601	
TOTAL	11,192,203	142,093,918	7.88

Measuring Year -1 (2014)

CT	453,958	3,514,798	
MA	1,014,262	7,960,941	
ME	300,412	3,357,486	
NH	234,900	1,969,064	
NJ	855,757	7,516,616	
NY	1,184,255	18,002,976	
OH	3,440,919	50,829,251	
PA	3,580,990	48,317,693	
RI	114,111	887,150	
VT	145,111	1,417,994	
TOTAL	11,324,673	143,773,969	7.88

Ratio of MY/MY-1 **1.00**

- Index 3 – Producer Price Index, Industrial Commodities Less Fuel

	Measuring Year (2016)	Measuring Year -1 (2015)
January	191.9	196.0
February	191.8	195.4
March	192.1	195.0
April	192.8	194.8
May	193.4	194.9
June	193.7	195.2
July	193.7	194.9
August	194.0	193.9
September	193.9	193.1
October	194.3	192.9
November	194.9	192.3
December	195.6	191.9
Average	193.5	194.2
Ratio of MY/MY-1		1.00

STEP 2

Determine AAF by Summing the Weighted Indices

<u>Index</u>	<u>Ratio of MY to MY-1</u>	<u>Weight</u>	<u>Weighted Factors</u>
PPI Industrial Power	0.95	0.35	0.334
EIA Industrial Rate	1.00	0.40	0.400
PPI Industrial Commodities less fuel	1.00	0.25	<u>0.249</u>
AAF			0.983

STEP 3

Apply Collar of $\pm 5.0\%$ to Determine the Maximum/Minimum AAF.

$-5.0\% < 1.6\% < 5.0\%$; collar does not apply, assuming no cumulative excess.

STEP 4

Apply AAF to Calculate the New Rate Year Base Rate

	<u>Demand</u> \$/kW-mo.	<u>Energy</u> \$/MWh
Current Rate Year Base Rate	8.03	13.73
New Rate Year Base Rate	7.90	13.50

APPLICATION SUMMARY
Replacement Power (“RP”)

Company: 3M Company (“3M”)

Project Location: Town of Tonawanda

County: Erie County

IOU: National Grid

Business Activity: Manufacturer of cellulose sponges and cellulose/abrasive laminate sponges.

Project Description: 3M is proposing to expand a facility by approximately 2,800 square feet to add new equipment to allow it to produce additional laminated sponge products.

Existing Allocation(s): 1,750 kW RNY, 150 kW EP, 500 kW EP, and 1,000 kW EP. These allocations are tied to 345 jobs. 3M is currently in compliance with its contractual commitments.

Power Request: 450 kW

Power Recommended: 350 kW RP

Job Commitment:
 Base: 347 jobs
 New: At least 18 jobs

New Jobs/Power Ratio: 51 jobs/MW

New Jobs - Avg. Wage and Benefits: \$67,142

Capital Investment: At least \$14 million

Capital Investment/MW: \$40 million/MW

Other Incentives: 3M is seeking incentives from Empire State Development’s Excelsior Jobs Program.

Summary: 3M is a long-time NYPA customer. The 3M Tonawanda facility is in competition with other 3M facilities outside NYS for this project. A hydropower allocation would support 3M’s decision to move forward with this investment in Tonawanda and the creation of at least 18 full time jobs.

Exhibit "5d i-1c-A"
1/30/2019

Applicants Recommended for an Award of Fund Benefits by the NNY Proceeds Allocation Board

Line	Business	City	County	Economic Development Region	Project Description	Project Type	Recommended Award Amount	Total Project Cost	Jobs Retained	Jobs Created
1	Criscitello & Criscitello LP dba From the Heart Cabinetry	Potsdam	SLC	North Country	Expand manufacturing facility	Business Investment	\$95,000	\$885,512	-	5
Total:							\$95,000	\$885,512	-	5

Total Jobs Created & Retained: 5



Northern NY Power Proceeds Allocation Board

Northern New York Economic Development Fund Recommendation Memo

EXHIBIT 5d i-1c-A-1

Applicant Name:	Criscitello and Criscitello, dba From the Heart Cabinetry ("Criscitello")	REDC Region:	North Country
Project Type:	Business Investment	County:	St. Lawrence
Industry:	Custom Cabinetry Manufacturing	Locality:	Potsdam
Amount Requested:	\$150,000	Start Date:	1/31/19
		Finish Date:	9/30/19
RECOMMENDED OFFER			
Recommended Total Award:		\$95,000	
Total Project Cost:		\$885,512	
% of Project Cost Recommended:		11%	
PROJECT BUDGET (Proposed by Applicant)			
Use of funds	Amount	Source of Funds	Amount
Building Acquisition	\$650,000	NNY EDF	\$150,000
Machinery & Equipment	\$130,693	SLCIDA	\$600,000
Supplies and Materials	\$38,300	NBT Bank Loan	\$25,000
Labor for Buildout	\$23,600	Company Equity	\$110,512
Infrastructure Costs	\$18,819		
Relocation of Existing M&E	\$16,300		
Furniture & Fixtures	\$7,800		
Total:	\$885,512	Total:	\$885,512
REGIONAL IMPACT MEASUREMENTS			
Job Commitments:		Applicant would create 5 full time positions at the project location over five years.	
Average Salary of Jobs:		\$35,736	
Indirect Jobs Created		n/a	
Other Impact			
PROJECT DESCRIPTION (Adapted from Application)			
<p>Criscitello currently operates out of a facility that is inadequate to allow the applicant to meet current product/service demand. For example, existing work stations serve multiple functions which is not efficient, and the facility lacks three phase power, which limits the type of manufacturing machinery that can be used. The applicant is currently leasing a small amount of space at 6 Pioneer Rd. for storage purposes. It proposes to purchase the entire facility, which would allow its manufacturing process to be restructured so that multiple jobs could be staged at one time. As part of the project, it would purchase new energy efficient machinery and equipment, and upgrade power to three phase to enable the company to meet increasing product demand and grow its customer base.</p>			
OTHER ECONOMIC DEVELOPMENT BENEFITS RECEIVED			



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SLCIDA PILOT	\$165,000	SLCIDA Mortgage	\$600,000
PREVIOUS STATE ASSISTANCE OFFERED OR PROVIDED			
TYPE	AMOUNT	STATUS	
N/A	\$		
BASIS FOR RECOMMENDATION			
Supporting the project would allow the applicant to relocate and increase its manufacturing capability. The project would also make available three phase power and provide more space to support a more efficient and productive manufacturing model. In addition, the applicant would commit to creating five full time positions over five years. The project would also involve the purchase of energy efficient machinery and equipment and aligns well with the strategies and priorities of the NCREDC which focus on manufacturing business retention and expansion.			
ANTICIPATED DISBURSEMENT TERMS			
Fund Benefits would be used to reimburse the applicant for a portion of costs associated with purchasing machinery and equipment. Fund Benefits will not be used to support any purchases associated with the applicant’s retail business activity, such as a showroom. Consistent with established practice, it is expected that funds would be disbursed in arrears upon project completion, and payment would be made upon presentation to NYPA of invoices and such other documentation acceptable to NYPA verifying the applicant has incurred eligible expenses of approximately \$885,512.			



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“EXHIBIT 5d i-1c-B”

Criteria adapted from the “Board Procedures, and Board Policies Relating to the Review of Applications for Fund Benefits”, adopted by the Northern New York Power Proceeds Allocation Board

1. The extent to which an award of Fund Benefits would be consistent with the strategies and priorities of the North Country Regional Economic Development Council (“NCREDC”). Such strategies and priorities include the following:
 - Energize our communities by building on growth in the aerospace, transit equipment, defense, biotech, energy, and manufacturing industries
 - Leverage our gateway to Canada, the nation’s largest trading partner, to lead the State in global investment
 - Attract and nurture entrepreneurs through innovation to catalyze the highest per capita rate of small business start-ups and expansions in the state
 - Invest in community development infrastructure that expands opportunities and capacity
 - Innovate effective rural healthcare and education delivery networks
 - Elevate global recognition of the region as one of the special places on the planet to visit, live, work and study
 - Activate tourism as a driver to diversify our economies by creating demand to accelerate private investment
 - Invest in agriculture as we help feed the region and the world
 - Create the greenest energy economy in the state
2. Whether the eligible project would occur in the absence of an award of Fund Benefits.
3. The extent to which an award of Fund Benefits will result in new capital investment in the State by the eligible applicant and the extent of such investment.
4. Other assistance the eligible applicant may receive to support the eligible project.
5. The type and cost of buildings, equipment and facilities to be constructed, enlarged or installed if the eligible applicant were to receive an award of Fund Benefits.
6. The eligible applicant's payroll, salaries, benefits and number of jobs at the eligible project for which an award of Fund Benefits is requested.
7. Where applicable, the number of jobs that will be created or retained within St. Lawrence County and any other parts of the State in relation to the requested award of Fund Benefits, and the extent to which the eligible applicant will agree to commit to creating or retaining such jobs as a condition to receiving an award of Fund Benefits.
8. Whether the eligible applicant is at risk of closing or curtailing facilities or operations in St. Lawrence County and other parts of the State, relocating facilities or operations out of St. Lawrence County and other parts of the State, or losing a significant number of jobs in



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St. Lawrence County and other parts of the State, in the absence of an award of Fund Benefits.¹

9. The significance of the eligible project that would receive an award of Fund Benefits to the economy of the area in which such eligible project is located.
10. For new, expanded and/or rehabilitated facilities, the extent to which the eligible applicant will commit to implement or otherwise make tangible investments in energy efficiency measures as a condition to receiving an award of Fund Benefits.²

¹ Job creation and retention are key indicators of economic activity. However, the Allocation Board recognizes that certain investments may increase productivity and revitalize areas without immediately increasing permanent employment. Therefore, job creation/retention commitments will be emphasized primarily in the Business Investment Track. While job creation and retention may not be a significant factor for other Tracks, demonstration of economic development benefits to the Region will generally be considered favorably when assessing applications under all Tracks.

² As provided for in Economic development Law § 197-c(4), many of the criteria are adapted from criteria used in determining eligibility for Expansion Power, Replacement Power and Preservation Power under Public Authorities Law (“PAL”) § 1005(13). Certain criteria identified in PAL § 1005(13) are relevant to power allocations under these programs and do not have any logical application to the allocation of Fund Benefits. Therefore, the Board does not expect to use these criteria to evaluate applications for Fund Benefits.