MINUTES OF THE REGULAR MEETING OF THE POWER AUTHORITY OF THE STATE OF NEW YORK

July 29, 2014

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Minutes of the Regular Meeting of the Power Authority of the State of New York held via videoconference at the following participating locations at approximately 10:30 a.m.

- 1) New York Power Authority, 123 Main Street, White Plains, NY
- 2) Harris Beach, PLLC, 726 Exchange Street, Buffalo, New York

Members of the Board present were:

John R. Koelmel, Chairman Joanne M. Mahoney, Vice Chair Eugene L. Nicandri, Trustee Jonathan F. Foster, Trustee Anne M. Kress, Trustee

Terrance P. Flynn, Trustee – via videoconference

Gil Quiniones President and Chief Executive Officer

Edward Welz Chief Operating Officer

Robert Lurie Executive Vice President and Chief Financial Officer Justin Driscoll Executive Vice President and General Counsel

Arthur Cambouris Deputy General Counsel

William Nadeau Senior Vice President and Chief Risk Officer

James Pasquale Senior Vice President – Economic Development & Energy Efficiency

Paul Tartaglia Senior Vice President – Energy Resource Management
Rocco Iannarelli Acting Senior Vice President – Enterprise Shared Services
Jill Anderson Vice President – Public & Regulatory Affairs and Chief of Staff

Kristen Barbato Vice President – Customer Energy Solutions

Thomas Concadoro Vice President and Controller
Thomas Davis Vice President – Financial Planning

Joseph Leary Vice President – Community & Government Relations

Anne Reasoner Vice President – Budgets & Business Controls

Philip Toia Vice President – Transmission
Gerard Vincitore Vice President – Finance
Karen Delince Corporate Secretary

Vincent Esposito Special Counsel – Power, Transmission & Regulatory

Brian McElroy Treasurer

Janis Archer Director – Strategy Management

Michael Saltzman Director – Communications & Media Relations
Peter Prunty Director – Infrastructure – Infrastructure
Maria He Manager – Application Portfolio

Gregory Jablonsky Manager – Network Services – Infrastructure

Timothy Muldoon Manager – Power Contracts
Lisa Cole Strategy Integration Manager
John Giumarra Senior Account Executive

Silvia Louie Senior Project Manager – Executive Office, Public and Regulatory Affairs/Chief

of Staff

Glenn Martinez Senior Network Analyst – Infrastructure

Gerald McGill Lead Analyst Programmer – Application Development & Support

Lorna Johnson Associate Corporate Secretary
Sheila Baughman Assistant Corporate Secretary

Anna Devine Ernst & Young Lynne Coviello Ernst & Young

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

Introduction

Chairman Koelmel welcomed the Trustees and staff members who were present at the meeting. He also welcomed new Trustee, Dr. Anne Kress, President of Monroe Community College in Rochester, New York, to the Board. He said the Trustees are pleased with her willingness to serve on the Board and look forward to her expertise and participation as well as her representation of the community of Rochester.

Chairman Koelmel continued that the meeting had been duly noticed as required by the Open Meetings

Law and called the meeting to order pursuant to the Authority's Bylaws, Article III, Section 3.

1. Adoption of the July 29, 2014 Proposed Meeting Agenda

Chairman Koelmel said that with the agreement of the Trustees, Item # 2a iii – (Upstate New York Strategic Fuel Reserve Program) will be moved from the Consent Agenda to the Discussion Agenda.

Upon motion made and seconded, the meeting Agenda was adopted as amended.

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Conflicts of Interest

The following Trustees declared conflicts of interest as indicated below and said they will not participate in the discussions or votes as it relate to those matters:

Vice Chair Mahoney:

ARCADIS of New York Inc.; OP-TECH Environmental Services, Inc.; Watts Architecture & Engineering (Item #2c i); G.A. Braun, Inc.; Tessy Plastics (Item #4c)

Trustee Flynn:

Bernier Carr & Associates, P.C. (Item # 2c i) and Corning Inc. (Item #4a)

Trustee Kress:

Corning Inc. (Item #4a)

Chairman Koelmel and Trustee Nicandri declared no conflicts.

2. <u>CONSENT AGENDA</u>:

Upon motion made and seconded, the Consent Agenda was approved as amended.

a. GOVERNANCE MATTERS AND COMMITTEE RECOMMENDATIONS:

i. Approval of the Minutes

The Minutes of the Regular Meeting held on May 22, 2014 were unanimously adopted.

ii. Committee Appointment

The Chairman submitted the following report:

"SUMMARY

In accordance with Article V the By-Laws of the Power Authority of the State of New York, as amended March 27, 2012 ('By-Laws'), the Trustees are requested to approve the following committee appointment effective immediately.

BACKGROUND

The following change in committee composition is recommended in order to achieve an even distribution of assignments for each Trustee. (Change indicated in bold.)

Governance Committee

Eugene L. Nicandri (Chair), Joanne M. Mahoney, John R. Koelmel, Anne M. Kress

RECOMMENDATION

The following resolution is recommended for adoption."

The following resolution, as submitted by the Chairman, was unanimously adopted.

RESOLVED, That the members of the Governance Committee shall be: Eugene L. Nicandri, (Chair), Joanne M. Mahoney, John R. Koelmel, and Anne M. Kress effective immediately.

iii. Selection of Firms to Serve as Authority Underwriters

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve the appointment of a prequalified underwriting pool of Senior Managers, Co-Managers and Selling Group members to originate, underwrite and sell the Authority's Debt Obligations for a period of three years.

BACKGROUND

The Authority's 2014 – 2017 Approved Budget and Financial Plan includes approximately \$1 billion in expenditures for various infrastructure initiatives, such as the Transmission and Lewiston Pump Generating Plant life extension and modernization programs. Additionally, the four-year plan includes approximately \$1 billion in investments in Energy Efficiency measures, bringing average annual total demand for capital funding resources to about \$500 million per year. These initiatives, in part, are expected to be financed via the sale of Debt Obligations ('debt') in the capital markets. Opportunities also exist to refund certain series of the Authority's Revenue Bonds beginning on their first call date of November 15, 2015. To be able to enter the capital markets as conditions and needs arise, the Authority issued a Request for Qualifications ('RFQ') (Q-14-5577MR) to pre-qualify firms to assist in originating, underwriting and selling the Authority's debt.

DISCUSSION

Earlier this year, the Authority issued a RFQ for firms interested in providing underwriting services for Authority debt issuances. The RFQ was advertised in the *New York State Contract Reporter*. Banks, brokers and dealers that have expressed an interest in providing such services to the Authority were invited to respond to the RFQ. In consideration of the recommendations of a State Task Force established to increase the use of Minority and Women-Owned Business Enterprise ('MWBE') underwriters, firms certified with the New York State Department of Economic Development were also invited to respond to the RFQ. In total, thirty-one firms responded to the RFQ either individually or as joint partnerships, of which thirteen were MWBEs and two were Disabled Veteran Enterprises ('DVE').

The Authority's evaluation of responses took into consideration several qualitative characteristics essential for a successful underwriting team. Specifically, responses were evaluated for firm experience in structuring, underwriting and selling both tax-exempt and taxable bond and note issues; knowledge of the Authority, its business markets and the public power industry; the ability and demonstrated willingness to underwrite bonds; financial strength and capital position, including excess net capital allocated to public finance; distribution capability in the retail and institutional sectors; diversity and commitment to equal employment opportunities, including the willingness to partner with an MWBE and/or DVE; and value-added services and financing proposals aimed at cost savings or debt structuring.

Based on staff's evaluation, the following firms exhibited the qualifications that would make them suited to serve in a Senior or Co-Senior underwriting capacity. Based on their combined experience and distribution capabilities, staff believes the team will be able to market the Authority's debt at the lowest possible interest cost with wide investor participation.

Senior Managers

- Bank of America Merrill Lynch
- Barclays Capital Inc. with Rice Financial Products Company* and Duncan-Williams, Inc.* (joint proposal)
- Citigroup Global Markets Inc.
- Goldman, Sachs & Co.

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^{*}MWBE or DVE

- J.P. Morgan Securities LLC with Academy Securities* and Estrada Hinojosa & Company, Inc.* (joint proposal)
- Loop Capital Markets LLC *
- Mesirow Financial, Inc. with Blaylock Beal Van LLC* (joint proposal)
- Morgan Stanley & Co. LLC
- Ramirez & Co., Inc. *
- Wells Fargo Bank, N.A.

In addition to the selection of Senior Managers, the following firms are being recommended to serve as Co-Managers and Selling Group Members based on their qualifications to distribute and/or underwrite bonds:

Co -Managers

- BMO Capital Markets
- BNY Mellon Capital Markets, LLC
- CastleOak Securities, L.P. *
- Drexel Hamilton, LLC*
- M&T Securities, Inc.
- RBC Capital Markets, LLC
- Roosevelt & Cross Incorporated
- Siebert Brandford Shank & Co., L.L.C. *
- TD Securities LLC
- The Williams Capital Group, L.P.*

Selling Group Members

- Robert W. Baird & Co., Incorporated
- Backstrom McCarley Berry & Co., LLC*
- Cadwyn Point Partners LLC*
- Great Pacific Securities*
- NW Capital Markets Inc.
- Stern Brothers & Co.*

Firm assignments for Senior Manager(s), Co-Manager(s) and Selling Group members from the prequalified underwriting pool will be established at the time of each financing transaction subject to selection by the Chairman, President and Chief Executive Officer or Executive Vice President and Chief Financial Officer. Firms serving as Co-Managers or Selling Group members may be considered for an elevated position within the pool based on exemplary service to the Authority or value added structuring proposals.

FISCAL INFORMATION

There is no fiscal impact associated with this action.

RECOMMENDATION

The Treasurer recommends the Trustees' approval of the appointment to the firms referenced in Exhibit '2a iii-A' (attached) for the purpose of providing underwriting services for a three-year period. The Finance Committee considered this item at their meeting earlier today and is also recommending its approval.

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 appointment of prequalified firms to serve as Senior Managers, Co-Managers and Selling Group members as set forth Exhibit "2a iii-A," attached hereto, is hereby approved for the period of three years as recommended in the foregoing report of the President and Chief Executive Officer; and be it further

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

iv. Procurement (Services) Contract – Independent Accounting Services – Contract Award

The Chairman of the Audit Committee submitted the following report:

"SUMMARY

The Trustees are requested to approve the award of a contract in an amount not to exceed \$2.5 million to KPMG LLP ('KPMG') to provide independent accounting services, including the annual audits of the Authority's financial records for the years 2014 through 2018 and other services, as may be required, through July 31, 2019.

BACKGROUND

Section 2879 of the Public Authorities Law and the Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year. The Public Authority Accountability Act of 2005 provides that the Audit Committee shall recommend to the Board of Trustees the hiring of a certified independent accounting firm. At their meeting of July 28, 2009, the Trustees approved the award of a contract to KPMG, for auditing and other services, for five years (2009 through 2013). That contract will expire on July 31, 2014.

DISCUSSION

In accordance with the Authority's Procurement Guidelines, a request for competitive bids was posted on the Authority's website and published in the New York State *Contract Reporter* on June 10, 2014 for independent accounting services. The audit services are to include preparation of the following for the years 2014 through 2018: (1) an opinion on the Authority's financial statements; (2) an opinion on the Authority's compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York; (3) a review of the Authority's internal control over financial reporting, compliance and other matters based on an audit of financial statements performed in accordance with government auditing standards and (4) a review of the Authority's compliance with the requirements of a federal program and internal control over that compliance in accordance with OMB Circular A -133. In addition, the independent accountant may be requested to perform other audit services (for example, reviews of debt offering statements) and non-audit services (for example, reviews of internal process and procedural matters). In response to this request, the Authority received a bid from KPMG, its current independent accountant.

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

KPMG's proposed total maximum price of \$1,572,500 to perform the Authority's audits for the years 2014 through 2018 is 16% over its current fee or 3.2% per year. This is essentially an inflationary increase and is reasonable. In addition, KPMG's proposed hourly rates to perform other audit services and non-audit services are also reasonable. Based on KPMG's proposed hourly rates, historical experience and projected services, staff estimates total expenditures over the five-year contract will approximate \$2.5 million as follows: \$1.6 million for annual audit services, \$175,000 for other audit services and \$725,000 for non-audit services.

FISCAL INFORMATION

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

RECOMMENDATION

Based on KPMG's qualifications to perform the services, reasonable price and hourly rates, and satisfaction of the bid requirements, the Audit Committee recommends that the Trustees approve the award of a five-year contract to KPMG LLP to perform the annual audits of the Authority's financial records for the years 2014 through 2018 and perform other services, as may be required, through July 31, 2019 in an amount not to exceed \$2.5 million.

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

The following resolution, as submitted by the Chairman of the Audit Committee, was unanimously adopted.

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

| <u>O&M</u> | Projected <u>Closing Date</u> | Contract <u>Approval</u> |
|------------------------------------|----------------------------------|------------------------------|
| Independent Accounting Services | | |
| KPMG LLP | 7/31/19 | Not to exceed \$ 2.5 million |

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.

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b. TARIFF ACTIONS:

 i. Amendment to Standby Rate Provisions of NYPA's Governmental Customers Service Tariffs – Notice of Proposed Rulemaking

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize the Corporate Secretary to publish a Notice of Proposed Rulemaking ('NOPR') in the *New York State Register*, in accordance with the requirements of the State Administrative Procedure Act ('SAPA'), for the purpose of amending the currently effective standby rate provisions of the Authority's Service Tariff No. 100 applicable to New York City ('NYC') Governmental Customers and Service Tariff No. 200 applicable to Westchester Governmental Customers (collectively, 'Service Tariffs'). The proposed revised tariff sheets are attached as Exhibit '2b i-A.'

This update to the standby provision of the Service Tariffs would represent an improvement over the existing standby services currently offered, provide clarity to a billing structure for customers with on-site generation supplying multiple accounts, and further encourage the adoption of on-site generation by Customers.

Authority staff will address any comments received during the 45-day public comment period and return to the Trustees at a later date with recommendation for final adoption on the proposed changes to the Service Tariffs.

BACKGROUND

The Authority has served the NYC and Westchester Governmental Customers (collectively, 'Customers') since their transfer from Consolidated Edison Company of New York, Inc. ('Con Edison') beginning in 1976 as part of the NYPA's purchase of the Indian Point 3 Nuclear Power Plant and the Charles Poletti Power (then the Astoria 6) Plant. A total of 115 governmental Customers located in New York City* and Westchester County† purchase NYPA's electricity in order to serve a myriad of government facilities, including office buildings, public schools, public housing, hospitals, water and wastewater treatment plants, parks and police and fire stations.

With respect to the Authority's Service Tariffs, the standby service provisions were originally adopted by the Trustees on June 28, 2011 in conjunction with NYPA's Governmental Customer Production Rate and Delivery Rate Structure Redesign. Along with its 'Rider C - Net Metering,' the Authority's adoption of 'Rider A - Standby Rate' sets forth provisions to integrate Customers' use of on-site generation into NYPA's rate structures. On-site generation, also referred to as Distributed Generation ('DG'), allows Customers to provide some or all of their electricity needs with their own resources. DG can benefit both the Customer and the energy grid by reducing costs incurred by the Customer, reducing the demand on the electric grid during peak periods, and providing clean and efficient power to meet Customer needs. Customers can also serve multiple accounts on their premises with a single DG system.

The standby rate provisions were designed to provide Customers who self-generate with electricity in the event of an outage, planned or otherwise, to their DG facility. Providing needed access to the reliability of the electric power grid makes the benefits of Customer self-generation possible. NYPA's standby service consists of certain charges, including a standby contract demand charge, to ensure that production service is always available to

* The NYC Governmental Customers consist of the City of New York ('NYC' or 'City'), the Metropolitan Transportation Authority ('MTA'), the New York City Housing Authority, the Port Authority of New York and New Jersey, the State of New York Office of General Services and six smaller governmental entities located in the New York City area.

[†] The Westchester Governmental Customers consist of the County of Westchester plus 103 cities, towns, villages, school districts, fire districts and other local government agencies located in the County of Westchester.

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these Customers in the event of a DG failure. (Con Edison, the local utility serving New York City and Westchester County, provides standby delivery service for the Customers in accordance with its state-regulated tariffs.)

Currently, there are no NYPA accounts served under Rider A, but DG facilities are being built by the Customers and are planned to start as early as the end of 2014.[‡]

In 2012, one year after Rider A's adoption and in anticipation of specific DG facilities scheduled to commence service in 2014, the City reached out to Authority staff to review the current standby rate methodology. The City expressed specific concerns that the Authority's standby rate design should be altered to allow Customers to more fully realize the financial benefits of DG, and, as a result, reduce perceived barriers to Customers adopting DG facilities. Additionally, the City needed the tariff's billing provisions to recognize multiple accounts tied to a single on-site generator.

To allow for participation by all Customers, NYPA staff deferred consideration of revisions to the standby rate provision until the biannual review process of governmental customer rates in 2013 for the 2014 rate year. During the review of the 2014 Customer production rate setting process, NYPA staff conducted multiple teleconferences with the NYC Governmental Customers discussing the City's original request to change the standby rate methodology. Various scenarios and analyses were created that resulted in a conceptual agreement for certain standby provision changes. On an informal basis, staff shared draft changes to Rider A with the Customers to solicit feedback. That process formed the basis for today's proposed tariff revisions.

DISCUSSION

The main issues addressed in the proposed revisions to NYPA's standby rate provisions include: (1) reducing overall program costs due to a three-part demand charge contained in the original rate design accompanied by other related changes; and (2) billing provisions to accommodate Customers with multiple accounts connected to one DG facility.

Standby Demand Charges and Rate Design: The current standby billing structure contains three separate demand charges: 1) Contract Standby Demand Charge; 2) As-Used Daily Standby Demand Charge and 3) Supplemental Demand. The Supplemental Demand Service was envisioned to provide service beyond the capabilities of the Customer's on-site generation, and thus Customers would be subject to a regular demand charge for NYPA production service and charged at the applicable production service class rates. The City, however, expressed the view that this billing structure would discourage DG adoption by making it prohibitively expensive and requested that NYPA treat the demand supplied above the DG's maximum capabilities as regular standby demand, valued at the discounted As-Used Daily Standby demand rate. NYPA staff proposes to incorporate this change.

With the proposed elimination of the Supplemental Demand charge and the need to follow cost causation principals, NYPA staff revised the Contract Standby Demand definition to reflect the Customer's maximum demand per account, as opposed to the Customer's maximum on-site generation capability.

Further, staff's research demonstrated that it was appropriate to lower the forced outage rate used in developing the Contract Standby Demand and As-Used Daily Standby Demand rates. The forced outage rate is the probability that a DG system will break down unexpectedly. Based on staff's review that DG systems eligible for standby service have forced outage rates below 3% on average, staff has good cause to include a downward adjustment to the Contract Standby Demand rate as part of this proposal.

[‡] The 15 MW Department of Corrections' (NYC) Rikers Island DG system is expected to be fully operational in October 2014. In addition, NYC's Department of Environmental Protection has announced a proposed DG facility for its North River Treatment Plant, but no completion date has been set.

[§] See Tables ES.2 and ES.3 in Energy and Environmental Analysis, Inc.'s report, 'Distributed Generation Operational Reliability and Availability Database' (January 2004), https://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/dg_operational_final_report.pdf (accessed July 1, 2014).

Accommodating Multiple Customer Accounts: Based on Customers' intentions (particularly the City) to connect multiple accounts to a single on-site generator, it was appropriate to make changes to accommodate this arrangement in NYPA's billing process under the Tariffs. Accordingly, the tariff amendments include provisions to apportion the on-site generator's output to each Customer account being served by the on-site generation facility. This should facilitate broader adoption of DG systems by the Customers, particularly for 'campus' configurations where a single DG system is envisioned to serve multiple accounts of the same Customer.

In total, staff believes that the proposed amendments to Rider A - Standby Rate address Customer concerns to encourage the development of on-site generation and make appropriate adjustments to the rate structure based on cost causation principles.

Consistent with SAPA, a 45-day public comment period will apply to the proposed tariff amendments. Authority staff will address any comments received during the public comment period and return to the Trustees at a later date with recommendation for final action on the proposed tariffs.

FISCAL INFORMATION

The adoption of the proposed standby tariff rider amendments is revenue neutral to the Authority. Any reduction in standby service revenues occasioned by these revisions will be recovered through standard production rates and established rate adjustment mechanisms applicable to all of NYPA's Governmental Customers in New York City and Westchester County.

RECOMMENDATION

The Vice President – Marketing Analysis and Administration and the Manager – Pricing recommends that the Trustees authorize the Corporate Secretary to file a Notice of Proposed Rulemaking for publication in the *New York State Register* for the purpose of amending the Authority's Service Tariffs No. 100 and No. 200, as provided for herein and in Exhibit '2b i-A.'

It is also recommended that the Senior Vice President – Economic Development and Energy Efficiency, or his designee, be authorized to issue written notice of the Authority's proposed action to affected customers.

For the reasons stated above, 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 Corporate Secretary of the Authority be, and hereby is, directed to file a Notice of Proposed Rulemaking for publication in the *New York State Register* in accordance with the State Administrative Procedure Act to amend the Authority's Standby Rate Provisions of its Governmental Customers Service Tariffs, 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 herby is, directed to file such other notice(s) as may be required by statute or regulation concerning the proposed tariff amendments; and be it further

RESOLVED, That the Senior Vice President – Economic Development and Energy Efficiency or his designee be, and hereby is, authorized to take such other and further

actions as may be necessary to effectuate the foregoing; and be it further

RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements 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. Firm Market Power Service Tariff Amendment – Notice of Proposed Rulemaking

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize the Corporate Secretary to publish a Notice of Proposed Rulemaking ('NOPR') in the *New York State Register*, in accordance with the requirements of the State Administrative Procedure Act ('SAPA'), for the purpose of amending the Authority's Schedule of Rates for Sale of Firm Market Power, Service Tariff No. 1C ('ST 1C'), applicable to three market power customers. A draft of the proposed ST 1C is attached as Exhibit '2b ii-A.' Authority staff will address any comments received during the 45-day public comment period and return to the Trustees at a later date with a recommendation for final action on the proposed tariff changes.

BACKGROUND

The Authority currently has three contracts for the sale of firm electricity at market rates. These sales are made in accordance with the aforementioned Authority service tariff, ST 1C. The customers include Brookhaven Science Associates, Air Products & Chemicals, Inc., and Linde LLC, whose contracts with the Authority extend through December 31, 2020.

Under these contracts, the Authority serves as the Load Serving Entity ('LSE') for these customers, which means that the Authority is financially responsible for the New York Independent System Operator ('NYISO') charges imposed on LSEs in connection with providing electric service to these customers. In accordance with these contracts, the NYISO costs incurred by the Authority are recovered from the customers.

As part of supplying these customers with firm market power, the Authority makes market-based hourly energy purchases from either the NYISO Day-Ahead and/or Real-Time markets. Under the currently effective ST 1C, the Authority derives a market energy rate based on the monthly average of the NYISO Day-Ahead Market energy price based on the location of the customer's facility. The resulting rate is then applied to the customer's billing energy to determine the customer's market energy charges.

DISCUSSION

Prompted by concerns raised by certain customers regarding this pricing methodology, Authority staff undertook a comprehensive review of ST 1C. The results of this review demonstrated that the existing methodology had a significant shortcoming, namely, that the Authority would, depending upon energy market conditions, either under recover or over recover market energy charges as a result of the monthly averaging technique. The averaging of hourly energy rates to create one monthly rate applicable to the energy used, does not truly represent the rates assessed by the NYISO for the purchase of energy in specific hours throughout that month. Margins for hourly prices throughout a month could vary significantly as energy prices are driven by market conditions. Energy volumes needed to supply the customers' energy needs vary by the hour as well, depending upon the customer's load shape. Therefore, a monthly energy charge calculated using the averaging technique will result in an under or over collection of energy costs.

It would be more appropriate to render bills that reflect actual energy charges incurred to serve the customer. To do otherwise would put the Authority in the awkward position of earning benefits from customers in some months and incurring losses from customers in other months, neither of which is justified.

For these reasons, the proposed amendments would modify the market energy charge methodology to reflect a pass through of actual charges incurred by the Authority in its NYISO hourly market energy purchases on the customer's behalf and ensure there is neither an Authority over or under collection.

A proposed draft of ST 1C with the proposed changes is attached to this item.

Consistent with SAPA, a 45-day public comment period will apply to the proposed tariff amendments. Authority staff will address any comments received during the public comment period and return to the Trustees at a later date with recommendation for final action on the proposed tariffs.

FISCAL INFORMATION

Adoption of the proposed amendment to ST 1C will avoid any under or over collection of charges from the customer. Thus, the tariff amendment is net neutral in its fiscal impact.

RECOMMENDATION

The Manager – Pricing and the Vice President – Marketing Analysis and Administration recommend that the Trustees authorize the Corporate Secretary to file a Notice of Proposed Rulemaking for publication in the *New York State Register* for the purpose of amending the Authority's Service Tariff No. 1C, as provided for herein and in Exhibit '2b ii-A.'

It is also recommended that the Senior Vice President – Economic Development and Energy Efficiency, or his designee, be authorized to issue written notice of the Authority's proposed action to 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 Corporate Secretary of the Authority be, and hereby is, directed to file a Notice of Proposed Rulemaking for publication in the *New York State Register* in accordance with the State Administrative Procedure Act to amend the Authority's Firm Market Power tariff applicable to its Market 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 herby is, directed to file such other notice(s) as may be required by statute or regulation concerning the proposed tariff amendments; and be it further

RESOLVED, That the Senior Vice President – Economic Development and Energy Efficiency or his designee be, and hereby is, authorized to take such other and further actions as may be necessary to effectuate the foregoing; and be it further

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

c. PROCUREMENT (SERVICES) AND PROPERTY (LEASE) 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 '2c i-A,' as well as the continuation and/or funding of the procurement (services) contracts listed in Exhibit '2c 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 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 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, as well as personal services contracts in excess of \$1 million if low bidder, or \$500,000 if sole-source, single-source or non-low bidder.

The Authority's 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 \$1 million or 25% of the originally approved contract amount not to exceed \$3 million.

DISCUSSION

Awards

The terms of these contracts will be more than one year; therefore, the Trustees' approval is required. 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 value from \$48,000 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 '2c 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 <u>not</u> obligate the Authority to a specific level of personnel resources or expenditures.

Extension of the contracts identified in Exhibit '2c 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 a 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:

Economic Development & Energy Efficiency

Energy Efficiency - Engineering & Design

The contracts with DACK Consulting Solutions, Inc. ('DACK'), Haider Engineering, P.C. ('Haider'), Hill International, Inc. ('Hill') and Nasco Construction Services, Inc. ('Nasco') (Q14-5582) would provide for cost estimating and scheduling services in connection with certain Energy Efficiency projects at selected Authority Customer facilities, on an 'as needed' basis. Services include, but are not limited to, developing cost estimates and schedules for such Energy Efficiency projects, making change-order and other economic evaluations or performing value engineering and life cycle cost analyses in connection with such projects. Demand for these services is expected to increase significantly due to the Authority's central role in reducing energy usage in state facilities. Since the existing contracts are expiring and the need for such services is ongoing, bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 90 firms, including those that may have responded to a notice in the New York State Contract Reporter. Fourteen proposals were received and evaluated; staff identified a 'short-list' of bidders based on lowest evaluated project cost (as calculated by staff for a typical project), for further evaluation. Six bidders were invited for presentations/interviews; their proposals and presentations were then ranked on technical capability based on weighted criteria, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to DACK, Haider, Hill and Nasco, the lowest-priced evaluated bidders with the highest technical ranking and average score. It should be noted that two of the recommended firms have provided satisfactory service to the Authority under existing contracts for such work. The new contracts would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the aggregate total amount expected to be expended for the term of the contracts, \$1 million. Such contracts will be monitored for utilization levels, available approved funding and combined total expenditures. All costs will be recovered by the Authority. It should be noted that DACK is a NYS-certified Minority and Woman-Owned Business Enterprise ('M/WBE'), Haider is a NYS-certified MBE and Nasco is a NYS-certified WBE.

Enterprise Shared Services

Information Technology

The contracts with **AvePoint Public Sector, Inc.** ('AvePoint'), EMC Corp. ('EMC'), Jornata, LLC ('Jornata'), KMQ Enterprises, Inc. dba Tailwind Associates ('KMQ – Tailwind'), Stellar Services, Inc., ('Stellar') and Summit 7 Systems, Inc. (Summit') (Q14-5579) would provide for consulting services in connection with the implementation of the SharePoint 2013 platform, with the goal of migrating the Authority's corporate Intranet and portal from the current SharePoint 2007 environment and rebuilding them on the new platform with improved functionality. Services include support for one or more of the following five areas: content management, development, governance, taxonomy and training. It should be noted that this effort would also

support two major planned SharePoint initiatives of the Operations Business Unit; these include supporting compliance with new NERC standards and addressing process improvement for non-recurring projects through document management and collaboration in an integrated environment, thereby supporting the Authority's process improvement strategic initiative. In an effort to prequalify firms to provide expert knowledge, experience, and technical skills and resources to assist the Authority with these initiatives, bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 122 firms, including those that may have responded to a notice in the New York State Contract Reporter. Eighteen proposals were received and evaluated by a multidisciplinary team, as further set forth in the Award Recommendation documents. After a rigorous initial evaluation of all 18 proposals, nine bidders were invited for interviews. As a result of the prequalification selection process, the following six firms were identified as the most technically qualified bidders that meet the bid requirements and the Authority's needs: AvePoint, EMC, Jornata, KMQ - Tailwind, Stellar and Summit. Contracts will only be awarded to those firms that successfully bid on specific tasks, as each required task is bid among the entire prequalified group and the best candidate is selected. Contracts would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. All contracts will expire on July 31, 2019, regardless of their duration. Approval is also requested for the aggregate total amount expected to be expended for the term of the contracts, \$1.2 million. Such contracts will be monitored for utilization levels, available approved funding and combined total expenditures, including travel and living expenses, where applicable. It should be noted that Stellar is a NYS-certified MBE.

The contract with ShareKnowledge Inc. / Competentum ('ShareKnowledge') (Q14-5565) would provide for an enterprise training management software solution (often referred to in the industry as Learning Management System or LMS solution), including implementation services, consulting, training and five years of maintenance. Services would include configuring, integrating, installing, maintaining and supporting the software solution. The LMS solution would provide the Authority with the capability to manage all aspects of its corporate training, including tracking and compliance monitoring and reporting of NERC Continuing Education Hours courses. The solution would also allow the Authority to develop and implement company-specific job training profiles for individuals, and manage and maintain records of training courses taken by all personnel to perform their duties. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 76 firms, including those that may have responded to a notice in the New York State Contract Reporter; four proposals were received and evaluated, as further set forth in the Award Recommendation documents. After an initial evaluation of all four proposals, the bidders were invited for functional and technical demonstrations. Based on the foregoing, staff recommends the award of a contract to ShareKnowledge, the lowestpriced qualified bidder, which meets all the bid requirements. In addition to successfully addressing all questions and functional scenarios during the demonstration, the ShareKnowledge solution was the only one that would be deployed on the Authority's premises, using the Authority's servers and existing security protocols, thereby minimizing the risk to the Authority's sensitive data stored in the Access Information Management System ('AIMS'); the other three proposals offered cloud-hosted solutions, with a higher risk of potential vulnerability to the Authority. The contract would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$430,000.

Law

Due to the need to commence services, the contract with **Ernst & Young LLP** (**'EY')** (**4500245948**) became effective on April 28, 2014, for an initial three-month term through July 31, 2014 and an interim award amount of \$900,000, subject to the Trustees' ratification and approval as soon as practicable, in accordance with the Authority's Guidelines for Procurement Contracts and EAPs. In April 2014, EY presented the Authority's Board of Trustees with its assessment of the Internal Audit Department and provided several options for deploying EY resources at the Authority. The Audit Committee recommended to the Trustees an option that would expand EY's scope of work by increasing the number of audits to be conducted and providing for additional EY support activities. The subject contract was awarded as the result of a competitive search, which determined that EY's proposal was the most responsive to the Authority's requirements. This contract provides for the services of a third party auditor to assist with the management of the Authority's Internal Audit Department during the transition period, until a new Department head is hired. Services include managing the completion of outstanding 2013 audits, assessing the proposed 2014 Internal Audit Plan, determining the resources to complete the Plan, while assisting with the

management of the Internal Audit staff and executing the Department's 2014 Plan as well as additional audits that address the Authority's areas of focus and business risk. This increased scope results in a contract valued at \$1.528 million plus actual and reasonable out-of-pocket expenses, bringing the projected full contract value to \$1.653 million. The intended term of this contract is currently anticipated to be approximately 8 months (through December 31, 2014), subject to the Trustees' ratification and approval, which is hereby requested. (It should be noted that the contract term may be extended to April 27, 2015, if needed, without additional Trustee approval, pursuant to the Authority's Guidelines for Procurement Contracts.) Approval is also requested for the total amount currently expected to be expended for the term of the contract, \$1.653 million.

Operations

Power Generation / Support Services

The contract with **All State Cleaning (Q14-5585; PO# TBA)** would provide for janitorial services for the Richard M. Flynn Power Plant and the Small Clean Power Plant at Brentwood on Long Island, New York. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 34 firms, including those that may have responded to a notice in the New York State *Contract Reporter*; one additional firm obtained the bid documents from an alternate source. Four proposals were received and evaluated, as further set forth in the Award Recommendation documents. Bid review meetings were also held with the two lowest-priced bidders. Staff recommends the award of a contract to All State Cleaning, the lowest-priced evaluated bidder, which is qualified to perform such services and meets the bid requirements. The contract would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$200,000.

At the Trustees' meeting of May 22, 2014, staff recommended the award of competitively bid contracts to six firms (Q13-5541) to provide for on-call general environmental services to the Authority, as needed. The Trustees approved the award of contracts to five of these firms (AECOM Technical Services, Inc. ('AECOM'), Kleinfelder East, Inc. ('Kleinfelder'), Kleinschmidt Associates, PA, PC ('Kleinschmidt'), Louis Berger & Associates, PC ('Berger') and TRC Environmental Corp. ('TRC')) and an aggregate total amount of \$4 million. The proposed award to ARCADIS of New York, Inc. ('ARCADIS'), originally included in the aforementioned May Consent Agenda (Item 21), was not adopted by the Trustees because they were unable to attain the required number of votes based on conflicts of interest filed by some of the Board members. Therefore, the proposed award to this firm is resubmitted for the Board's consideration with the intent of achieving the required quorum for adoption. Approval of this request to award a contract to the sixth firm, ARCADIS, would enable the Authority to utilize the firm's specialty skills, experience and expertise, as needed. The contract would become effective on or about August 1, 2014 for an intended term of approximately five years (through May 31, 2019, coterminous with the other five previously-approved contract awards), subject to the Trustees' approval, which is hereby requested. ARCADIS would share in the previously-approved aggregate total.

The contract with CB&I Environmental & Infrastructure, Inc. ('CB&I', formerly Shaw Environmental) (RFQ 6000149093; PO# TBA) would provide for routine weekly zebra mussel sampling and testing/analysis services to determine veliger densities in the vicinity of the Niagara Power Project. Services comprise all labor, supervision, equipment and material to complete a weekly sampling program for zebra mussel veligers during the zebra mussel growth season, also including weekly oral updates and an annual written report that describes the methods, sampling results, seasonal trends and comparison of results between sampling locations, as well as conducting mortality studies to determine chlorine treatment efficiency and other general environmental engineering consulting services, as may be required. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 36 firms, including those that may have responded to a notice in the New York State Contract Reporter. Two proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of a contract to CB&I, the lower-priced evaluated bidder, which is technically acceptable, qualified to perform such work, meets the bid requirements and has provided satisfactory service under an existing contract for such work. The new contract would become effective on or about August 1, 2014 for an intended term of up to four years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$48,000.

The contracts with Colden Corporation ('Colden') and Louis Berger & Associates, P.C. ('Berger') (O14-5573; PO#s TBA) would provide for industrial hygiene, occupational health and safety field and consulting services for all Authority operating facilities and offices statewide, on an 'as needed' basis. Services include technical field work for investigative/ evaluative services regarding employee exposure/risk assessments, indoor air quality and ergonomic concerns, laboratory sample analyses and consulting/audit services, as well as training. Analyses of air and bulk samples for various fixed or airborne contaminants include, but are not limited to: organic and inorganic solvents, pesticides and herbicides, PCBs, asbestos, silica, metals, dust, fumes and microbials. The Authority utilizes such external resources to periodically supplement its health and safety staff in order to sustain the efficiency and effectiveness of the health and safety program and to ensure compliance with all applicable federal and state occupational safety and health regulations. Technical services are required for assessment of potential exposure(s) to recognized occupational hazards (e.g., noise, chemical and particulate exposure(s), asbestos and indoor air quality concerns). Industrial hygiene risk assessments, development of regulatory-driven training programs and review of the Authority's occupational safety management program are additional functions. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 34 firms, including those that may have responded to a notice in the New York State Contract Reporter. Five proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to two firms, Colden and Berger, the lowest-priced bidders, which are qualified to perform the work, meet the bid requirements, and possess the credentials, experience, staffing and resources that best meet the needs of the Authority. Additionally, one of these firms has provided satisfactory services under an existing contract for such work. The award of contracts to two firms would afford the Authority additional flexibility in cases where a firm may be unavailable due to other commitments or in a specific geographic area, ensuring the prompt availability of resources to all Authority facilities, when needed, and would also allow for quality assurance/quality control services to validate certain test results (e.g., for field sampling and analysis), as necessary. This arrangement would benefit the Authority by better accommodating the Authority's needs and scheduling requirements (i.e., on short notice) and by taking advantage of the best pricing. The contracts would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Such contracts will be monitored for utilization levels, available approved funding and combined total expenditures. Approval is also requested for the total aggregate amount expected to be expended for the term of the contracts, \$3 million.

The contract with E-J Electric Installation Co. ('E-J Electric') (Q14-5588; PO# TBA) would provide for electrical support services for the power plants and related facilities in the Southeastern New York ('SENY') Region. The work will generally consist of supplementing and assisting the Authority's Plant employees during scheduled outages, emergency shutdowns and technical inspections, as directed by the Authority, and may include general plant electrical maintenance, electrical plant modifications and corrections, and electrical retrofit work. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 79 firms, including those that may have responded to a notice in the New York State *Contract Reporter*. Five proposals were received and evaluated; the two lowest-priced proposals were identified and evaluated in greater detail, as further set forth in the Award Recommendation documents. Staff recommends the award of a contract to E-J Electric, the more commercially and technically acceptable bidder, which is qualified to perform such services and meets the bid requirements. The contract would become effective on or about August 1, 2014, for an intended term of up to five years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$5 million.

Due to the need to commence services, the contract with **G.C. Zarnas & Co., Inc. NY ('Zarnas') (PO 4500246837)** became effective on June 24, 2014, for the initial interim award amount of \$500,000, subject to the Trustees' approval as soon as practicable, in accordance with the Authority's Guidelines for Procurement Contracts and EAPs. Such contract would provide for painting services of two Long Sault Dam gantry cranes at the St. Lawrence/ FDR Power Project. Services include surface preparation and painting, including structural evaluation of corrosion-damaged components. This interim award allows Zarnas to mobilize its resources and maximize the amount of work that can be completed during the warmer weather months. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 33 firms, including those that may have responded to a notice in the New York State *Contract Reporter*. Three proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of a contract to Zarnas, the lowest-priced bidder, which is technically and commercially acceptable, qualified to perform such work and meets the bid requirements. In order to maintain the availability of at least one crane at all times, the

cranes will be painted in two phases (one per year). The intended term of this contract is up to two years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total aggregate amount expected to be expended for the term of the contract, \$1,804,905 (comprising a firm lump sum award for \$1,554,905, as well as an additional allowance of \$250,000 for any emergent structural repairs that may be required, to be performed on a time-and-material basis).

The contracts with LiRo Engineers, Inc. ('LiRo'), Stohl Environmental, LLC ('Stohl') and Watts Architecture & Engineering, D.P.C. dba Watts Architecture & Engineering ('Watts') (RFO 6000149152; PO#s TBA) would provide for environmental sampling and laboratory analysis, as well as environmental consulting services for the Niagara Project in connection with general plant maintenance, planned renovations and emergency response situations. Services include, but are not limited to: inspections for asbestos, lead, PCBs and other hazardous materials; field sampling and laboratory analysis; abatement design; air sampling and project monitoring, as may be required, with the capability of 2-hour response time and 24-hour availability to the site with appropriate personnel and sampling equipment. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 172 firms, including those that may have responded to a notice in the New York State Contract Reporter. Seven proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of contracts to LiRo, Stohl and Watts, the lowest-priced evaluated bidders, which also submitted the strongest technical proposals, are qualified to perform such services and meet the bid requirements. Two of these firms have provided satisfactory service under the previous contracts for such work. The new contracts would become effective on or about August 1, 2014, for an intended term of up to four years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total aggregate amount expected to be expended for the term of the contracts, \$750,000. Such contracts will be monitored for utilization levels, available approved funding and combined total expenditures. It should be noted that Watts is a NYS-certified MBE.

At the Trustees' meeting of May 22, 2014, staff recommended the award of competitively bid contracts to six firms (O14-5581) to provide for on-call emergency spill response, clean-up and disposal services for Authority facilities throughout the state, as needed. The Trustees approved the award of contracts to five of these firms (Allstate Power Vac, Inc. ('Allstate'), Environmental Products & Services of Vermont, Inc. ('EP&S'), Miller Environmental Group, Inc. ('Miller'), National Vacuum Corp. ('NVC') and WRS Environmental Services, Inc. ('WRS')) and an aggregate total amount of \$15 million. The proposed award to OP-TECH Environmental Services, Inc. ('OP-TECH'), originally included in the aforementioned May Consent Agenda (Item 21), was not adopted by the Trustees because they were unable to attain the required number of votes based on conflicts of interest filed by some of the Board members. Therefore, the proposed award to this firm is resubmitted for the Board's consideration with the intent of achieving the required quorum for adoption. Approval of this request to award a contract to the sixth firm, **OP-TECH**, would ensure that each Authority facility will be able to obtain sufficient resources to respond to a spill within two hours of contractor notification and that each site also has one back-up contractor for emergency situations, as needed. The contract would become effective on or about August 1, 2014 for an intended term of approximately five years (through May 31, 2019, coterminous with the other five previously-approved contract awards), subject to the Trustees' approval, which is hereby requested. OP-TECH would share in the previously-approved aggregate total.

Transmission

The contract with Aviation Services Unlimited, LLC ('Aviation Services') (RFQ 6000146607; PO# TBA)) would provide for helicopter patrol services to support high-voltage transmission line inspections, in compliance with regulatory requirements. Services include providing a pilot and appropriate aircraft to transport one or more Authority personnel performing such inspections on a typical yearly schedule, consisting of two complete patrols of approximately 1,400 miles of the Authority's transmission lines located throughout New York State. In addition, occasional emergency patrols may be required, for which a maximum two-hour response is required. Services may also include transporting personnel for watershed and reservoir inspections, as needed. All operations and maintenance must conform to Federal Air Regulations Part 135, as well as to additional qualifications, specifications and requirements specified by the Authority. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 16 firms, including those that may have responded to a notice in the New York State *Contract Reporter*. Two proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of a contract

to Aviation Services, the lower-priced evaluated and technically acceptable bidder, which is qualified to perform such work, meets the bid requirements and has provided satisfactory service under the previous contract for such work. The new contract would become effective on or about August 1, 2014 for an intended term of up to three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total amount expected to be expended for the term of the contract, \$900,000.

Public & Regulatory Affairs

Project Development & Licensing

Due to the need to commence services, the contract with Bernier Carr & Associates, P.C. ('Bernier Carr') (4600002809) became effective on July 1, 2014, for the initial interim award amount of \$30,000, subject to the Trustees' approval as soon as practicable, in accordance with the Authority's Guidelines for Procurement Contracts and EAPs. Such contract would provide for construction management and design services for environmental and recreational improvements, as well as shoreline stabilization measures, at the St. Lawrence/FDR Power Project, in compliance with the Project's New License and the related Comprehensive Relicensing Settlement Accord commitments. The Authority is currently constructing the last of the major Habitat Improvement Projects ('HIPs') approved by the Federal Energy Regulatory Commission under License Article 409, on Little Sucker Brook in the Town of Waddington. Construction management and design services will be required to oversee the construction of the new Accessible Hiking Trail on Nichols Hill Island and for continuing shoreline stabilization measures. The New License also provides for future HIPs under Article 410, which may result in the need for additional construction management services, when approved for implementation by the Technical Advisory Council. This interim award allows Bernier Carr to maximize the amount of work that can be completed during the warmer weather months. Bid documents were developed by staff and were downloaded electronically from the Authority's Procurement website by 91 firms, including those that may have responded to a notice in the New York State Contract Reporter. Three proposals were received and evaluated, as further set forth in the Award Recommendation documents. Staff recommends the award of a contract to Bernier Carr, the lowest-priced evaluated bidder, which is qualified to perform such work, meets the bid requirements and has provided satisfactory service under the previous contract for such work. The intended term of this contract is up to three years, subject to the Trustees' approval, which is hereby requested. Approval is also requested for the total aggregate amount expected to be expended for the term of the contract, \$690,000. It should be noted that Bernier Carr is a NYScertified WBE.

Contract Extensions and/or Additional Funding:

Economic Development & Energy Efficiency

Marketing Analysis & Administration

At their meeting of March 31, 2009, the Trustees approved the award of a competitively bid five-year contract to EnergyICT, Inc. (4600002103), which provides for equipment and services in connection with the End-Use Metering and Monitoring Project ('Project'). The Project provides for continuous near-real-time monitoring and end-use metering of certain participating Authority governmental customers in the Southeastern New York ('SENY') region, by securing hourly information on key end uses and/or processes that are significant contributors to the overall energy profile of selected customer facilities. Studies indicate that customers have demonstrated savings of 5-8% by simply closely monitoring the energy usage at their facilities. One of the goals of the Project is to provide more substantive information to help quantify the potential energy savings that can be attributed to providing continuous review of facility end-use performance in order to improve efficiencies of the selected customer facilities. The original award became effective on April 15, 2009, with an approved 'Target Value' of \$5 million. Under a pilot program established in 2009, the City of New York (specifically, certain New York City schools) and the Westchester Medical Center receive these services, allowing these customers to better understand their energy use on a granular level in real-time. The Authority's Rappleyea Building is also served under this contract; furthermore, these services have supported the pilot phase of New York EnergyManager implementation under Governor Cuomo's BuildSmart New York initiative, as well. Interim extension of the subject contract through July 29, 2014 was authorized in accordance with the Authority's Guidelines for Procurement Contracts and

EAPs. A two-year extension (inclusive of the aforementioned interim extension) is now requested in order to ensure that the selected customer facilities continue to receive uninterrupted service. The current 'Released' amount is \$740,766; staff anticipates that no additional funding (above the previously authorized \$5 million) will be required for the extended term. The Trustees are requested to ratify the aforementioned interim extension and to approve extension of the subject contract through April 14, 2016, with no additional funding requested.

Operations Support Services

Project Management

The contract with **Northline Utilities, LLC** (**4500232210**) provides for construction services in connection with Phase 3 of the Alcoa Transmission Line Relocation Project, which entails the relocation of the existing 115 kV Transmission Lines MRG1, MRG2 and MR3 in support of Alcoa's Massena Modernization Project. At their meeting of May 21, 2013, the Trustees approved capital expenditures in the amount of \$3,715,000 for the project, which included funding for Phase 3 construction / installation. The original award, which was competitively bid, became effective on May 21, 2013, for an initial term of less than one year and an award amount of \$2,135,916; an additional \$362,812 was subsequently authorized in accordance with the Authority's EAPs. At their meeting of May 22, 2014, the Trustees approved a three-month extension through August 31, 2014 to complete the work. At that time, staff indicated that no additional funding would be required for the extended term. However, due to equipment differences between the design and actual equipment delivered, field modifications were required. This resulted in additional Change Orders totaling \$273,489 (of which \$129,521 has been issued) for retrofit work and installation of hardware, as well as bonding of anchor rods to the ground system. The Trustees are requested to approve the additional funding requested, increasing the total contract amount to \$2,772,217. It should be noted that Alcoa will reimburse the Authority for 100 percent of the cost of the project.

The contract with **Northline Utilities, LLC** (**4500233515**) provides for clearance remediation work on medium and high priority transmission lines in the St. Lawrence region. The original award, which was competitively bid, became effective on June 28, 2013, for an initial term of less than one year and an award amount of \$1,885,236. The contract term was subsequently extended to one year and cumulative additional funding of \$999,534 was subsequently authorized in accordance with the Authority's Guidelines for Procurement Contracts and EAPs. An additional two-month extension through August 31, 2014 was also authorized, subject to the Trustees' ratification, in accordance with the Authority's Guidelines for Procurement Contracts, in order to perform additional required remediation work. The current contract amount is \$2,884,770; staff anticipates that no additional funding will be required for the extended term. The Trustees are requested to ratify and approve the aforementioned extension of the subject contract through August 31, 2014, with no additional funding requested.

Public & Regulatory Affairs

Project Development and Licensing

The New York State Public Service Commission has directed that the Marcy South Series Compensation ('MSSC') Project proceed and expects it to be in service by June 2016. The Project is logistically complex, involving the facilities of three utilities: New York State Electric & Gas ('NYSEG'), National Grid and the Authority. It includes connecting three series capacitor banks ('SC Banks') to existing NYSEG and Authority transmission lines, increasing transmission transfer capability by reducing impedance on these transmission lines. Based on preliminary engineering, one SC Bank would be located on the Authority's Marcy Substation property and two additional SC Banks would be situated on NYSEG's Fraser Substation property. However, subsequent studies and evaluations determined that it would be advantageous to relocate the Marcy SC Bank to NYSEG's Fraser Substation property. The proposed relocation is expected to simplify line relay protection requirements, increase cost efficiency and enhance constructability. This change requires that the SSR and TRV studies be revised and expanded, which could be achieved most efficiently under the existing contract with ABB Inc. (4500229444) for such work. The original contract, which was awarded on a competitive basis, became effective on March 14, 2013, for an initial term of less than one year and an initial award amount of \$155,000 (of the authorized total of \$200,000). Interim approval to extend the subject contract through July 31, 2014 and additional funding in the amount of \$22,500 were subsequently authorized in accordance with the Authority's Guidelines for Procurement Contracts and EAPs. An extension through December 31, 2014 is now requested in order to complete these

additional studies. The current contract amount is \$222,500; staff anticipates that an additional \$50,000 may be required for the extended term, in the event that another design change is required. The Trustees are requested to ratify and approve extension of the subject contract through December 31, 2014, as well as the additional funding requested.

FISCAL INFORMATION

Funds required to support contract services for various Business Units/Departments and Facilities have been included in the 2014 Approved O&M Budget. Funds for subsequent years, where applicable, will be included in the budget submittals for those years. Payment will be made from the Operating Fund.

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. Payment for certain contracts in support of Energy Efficiency programs will be made from the Energy Conservation Effectuation and Construction Fund.

RECOMMENDATION

The Senior Vice President – Operations Support Services and Chief Engineer, the Senior Vice President – Power Generation, the Vice President and Chief Ethics and Compliance Officer, the Vice President – Environment, Health & Safety, the Acting Vice President – Project Management, the Acting Vice President – Procurement, the Vice President – Project Development and Licensing, the Vice President – Marketing Analysis and Administration, the Vice President – Energy Efficiency, the Vice President – Information Technology and Chief Information Officer, the Vice President – Transmission, the Regional Manager – Western New York, the Regional Manager – Northern New York, the Regional Manager – Central New York and the Regional Manager – Southeastern New York recommend that the Trustees approve the award of multiyear procurement (services) contracts to the companies listed in Exhibit '2c i-A' and the extension and/or funding of the procurement (services) contracts listed in Exhibit '2c i-B,' for the purposes and in the amounts discussed within the item and/or listed in the respective exhibits.

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

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

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, the award and funding of the multiyear procurement services and other contracts set forth in Exhibit "2c 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 "2c 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 Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any

and all things, take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel. ii. Procurement (Services) Contract – Niagara Power Project – Lewiston Pump Generating Plant Life Extension and Modernization Program – Upgrade of Stub Shaft, DC Field Bus, Collector Ring and Neutral Bus – Contract Award

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve the award of a two-year contract to General Electric Industrial Solutions ('GE') of Pittsfield, ME in the amount of \$1,379,269 for the upgrade of the Stub Shaft, DC Field Bus, Collector Ring and Neutral Bus of three out of the 12 existing motor generating units (3rd Unit; 4th Unit; and 5th Unit) at the Niagara Power Project, Lewiston Pump Generating Plant ('LPGP'). This work is part of the Life Extension and Modernization ('LEM') Program at the LPGP.

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.

At their June 29, 2010 meeting, the Trustees approved the LPGP LEM Program at the estimated cost of \$460 million. As of their November 9, 2012 meeting, the Trustees have authorized a capital expenditure amount of approximately \$252 million for the LPGP LEM Program; the value of this contract falls within that capital expenditure authorization.

The principal reason for the life extension work at LPGP is the aging condition of the generating equipment. Failure to maintain the LPGP would result in significant loss of peaking and firm capacity from the Niagara Power Project, impacting the ability of the Niagara Power Project to meet the requirements under power contracts with the Authority's customers.

In July 2012, a multi-year contract was awarded to Andritz Hydro ('Andritz') for the motor generator upgrade of all 12 of the existing motor generating units at LPGP (the 'MG Upgrade Contract'). The work under the MG Upgrade Contract included the subject work, as well as replacement of the stator coils and rotor poles for each of the 12 existing motor generating units. The MG Upgrade Contract was structured such that the work was to be released in four phases consisting of three units each – the first phase consisting of 1st Unit, 2nd Unit and 3rd Unit.

During the refurbishment of the 1st Unit, the stator coils fabricated by Andritz failed industry tests causing the Authority to investigate further. Ultimately, the Authority issued a 'stop work order' affecting all further work under the MG Upgrade Contract as a result of Andritz's failure to properly fabricate the stator coils in accordance with the technical specifications, the Authority's requirements and acceptable industry standards. An emergency contract was issued to GE to install a spare set of stator coils that the Authority had previously purchased from GE in lieu of the faulty Andritz coils, along with the replacement of the Stub Shaft, Collector Ring, DC and Neutral Bus and Current Transformers replacement on the 2nd Unit.

The current procurement for the upgrade of the Stub Shaft, DC Field Bus, Collector Ring and Neutral Bus for the 3rd Unit, 4th Unit and 5th Unit is required as a component of the LEM project, specifically to connect the new static exciter to the existing rotor and for the new relay protection to operate as designed, and to maintain the overall LEM project schedule.

DISCUSSION

An advertisement to solicit bids (Q14-5619FS) for the upgrade of the Stub Shaft, DC Field Bus, Collector Ring and Neutral Bus for motor generating units 3, 4 and 5 was issued and appeared in the New York State *Contract Reporter* on April 2, 2014. Two proposals were received on May 30, 2014. The NYPA Fair Cost Estimate for this project is \$1,659,000.

The final proposal prices are as follows:

| <u>Bidder</u> | Bid Price |
|---------------------------------------|------------------|
| General Electric Industrial Solutions | \$1,379,269 |
| Alstom Hydro Power Inc. | \$1,669,193 |

The proposals were reviewed by an Evaluation Committee ('Committee') with representatives from Procurement, Engineering, Niagara Project and Project Management. Queries were sent to GE, the lowest price bidder, seeking clarifications to their proposal and to provide an opportunity for GE to demonstrate their work plan, guaranteed characteristics of their proposal and pricing. GE's responses were acceptable to the Committee.

In the recent past, GE successfully completed several projects at the Niagara Power Project, including the Stub Shaft, Collector Ring, DC and Neutral Bus and Current Transformers replacement of the 2nd Unit and the stator coil replacement of the 1st Unit. GE has broad experience in projects of this magnitude, has demonstrated knowledge of the scope-of-work and is capable of completing this project in a timely manner. The Committee recommends that a contract for the work described above be awarded to GE whose bid is technically and commercially acceptable.

FISCAL INFORMATION

Payment associated with this project will be made from the Authority's Capital Fund and is included in the 2014 approved Capital budget.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Acting Vice President – Project Management, the Vice President – Engineering, the Acting Vice President – Procurement, the Project Manager and the Regional Manager – Western New York recommend that the Trustees approve the award of a two-year contract to General Electric Industrial Solutions of Pittsfield, ME in the amount of \$ 1,379,269, for the upgrade of the Stub Shaft, DC field Bus, Collector Ring and Neutral Bus of three motor generating units as part of the Life Extension and Modernization Program to renovate and modernize the Lewiston Pump Generating Plant.

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, approval is hereby granted to award a two-year contract to General Electric Industrial Solutions of Pittsfield, ME, in the amount of \$1,379,269, for the upgrade of the Stub Shaft, DC field Bus, Collector Ring and Neutral Bus of three motor generating units as part of the Life Extension and Modernization program to renovate and modernize the Lewiston Pump Generating Plant, as recommended in the foregoing report of the President and Chief Executive Officer;

Contractor

Contract Approval

General Electric Industrial Solutions (Q14-5619FS)

\$1,379,269

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

 iii. Procurement (Services) Contract – Niagara Power Project – Lewiston Pump Generating Plant Life Extension and Modernization Program – Independent Analyses for Upgrade of Pump-Turbine Motor Generator Unit – Contract Award

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve the award of a two-year contract to Power Engineering Inc. ('PEI') of Irvine, CA in the amount of \$269,775 to perform the independent Analysis of Motor Generator Amortisseur and Supporting Engineering Analysis for upgrade of the Pump-turbine Motor Generator Unit as part of the Life Extension and Modernization ('LEM') Program at the Niagara Power Project, Lewiston Pump Generating Plant ('LPGP').

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.

At their June 29, 2010 meeting, the Trustees approved the LPGP LEM Program at the estimated cost of \$460 million. As of their November 9, 2012 meeting, the Trustees have authorized capital expenditure amount of approximately \$252 million for the LPGP LEM Program; the value of this contract falls within that capital expenditure authorization.

The principal reason for the life extension work at LPGP is the aging condition of the generating equipment. Failure to maintain the LPGP would result in significant loss of peaking and firm capacity from the Niagara Power Project, impacting the ability of the Niagara Power Project to meet the requirements under power contracts with the Authority's customers. The rotor poles and windings on the LPGP units are being replaced due to their age, having entered service in 1961, and due to periodic failure of the shorting bar and inter-pole connectors, which were believed to have cracked due to migration of the amortisseurs from pole to pole, causing flexure of the connectors and possible high current.

In July 2012, a multi-year contract was awarded to Andritz Hydro ('Andritz') for the motor generator upgrade of all 12 of the existing motor generating units at LPGP (the 'MG Upgrade Contract'). Replacement of the stator coils and rotor poles, as well as new amortisseurs designed by Andritz, for all 12 motor generating units was included in the scope-of-work under the MG Upgrade Contract.

During the refurbishment of the 1st Unit, the stator coils fabricated by Andritz failed industry tests, causing the Authority to investigate further. Ultimately, the Authority issued a 'stop work order' as a result of Andritz's failure to properly fabricate the stator coils in accordance with the technical specifications, the Authority's requirements and acceptable industry standards. This affected all further work under the MG Upgrade Contract. An emergency contract was issued to GE to install a spare set of stator coils that the Authority had previously purchased from GE, in lieu of the faulty Andritz coils, along with the replacement of the Stub Shaft, Collector Ring, DC and Neutral Bus and Current Transformers replacement on the 2nd Unit.

Commissioning of the 1st Unit revealed that the turbine required twice the amount of time to ramp-up to full speed in pump mode as compared to the original units and was experiencing overheating of the rotor pole jumpers and extreme high current upon across-the-line motor starting. A scheduled inspection in February 2014 revealed a complete failure of the amortisseurs designed by Andritz. Under warranty, Andritz revised its design of the amortissuers, but the 1st Unit continued to experience high current events with no conclusive explanation from Andritz. The Authority is pursuing an independent analysis of the performance of the amortisseurs (both the original and redesigned configurations) and the rotor pole jumper overheating issue to determine the cause of the high current events before proceeding with the remaining rotor pole and stator coil replacement on all further units.

DISCUSSION

An advertisement to solicit bids (Q14-5642FS) was issued and appeared in the New York State *Contract Reporter* on May 7, 2014. A single proposal was received from PEI on June 17, 2014.

The initial proposal price is as follows:

Bidder Base Bid Price

Power Engineering Inc. \$149,775

Multiple options, including analysis and redesign of the Motor Generator Bearing and Pump-Turbine Bearing will be performed on a time and material basis, with an estimated cost of an additional \$120,000. As a result, the total sum for this contract award, inclusive of all options, is \$269,775.

The proposals were reviewed by an Evaluation Committee ('Committee') with representatives from Procurement, Engineering, Niagara Project and Project Management. Queries were sent to PEI to clarify their proposal and to provide an opportunity to explain how they arrived at their work plan, guaranteed characteristics and pricing. PEI's responses were acceptable to the Committee.

In the recent past, PEI successfully completed several projects at the Niagara Power Project which include Post Upgrade Vibration and Mechanical Testing of the 1st LEM Unit. PEI has broad experience in projects of this magnitude, has demonstrated knowledge of the scope-of-work and is capable of completing this project in a timely manner. The Committee recommends that a contract for the work described above be awarded to PEI whose bid is technically and commercially acceptable.

FISCAL INFORMATION

Payment associated with this project will be made from the Authority's Capital Fund and is included in the 2014 approved Capital budget.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Acting Vice President – Project Management, the Vice President – Engineering, the Acting Vice President – Procurement, the Project Manager and the Regional Manager – Western New York recommend that the Trustees approve the award of a two-year contract to Power Engineering Inc. of Irvine CA in the amount of \$269,775, to perform the independent Analyses of Motor Generator Amortisseur and Supporting Engineering Analyses for upgrade of the Pump-turbine Motor Generator Unit as part of the Life Extension and Modernization Program to renovate and modernize the Lewiston Pump Generating Plant.

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, approval is hereby granted to award a two-year contract to Power Engineering Inc. of Irvine, CA, in the amount of \$269,775, to perform the independent Analysis of Motor Generator Amortisseur and Supporting Engineering and Analysis for upgrade of Pump-turbine Motor Generator Unit as part of the Life Extension and Modernization program to renovate and modernize the Lewiston Pump Generating Plant, as

recommended in the foregoing report of the President and Chief Executive Officer;

<u>Contractor</u> <u>Contract Approval</u>

Power Engineering Inc. (Q14-5642FS)

\$<u>269,775</u>

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

iv. Procurement (Design and Construction) Contract –
 St. Lawrence/FDR Power Project Relicensing –
 Design/Build Hiking Trails on Nichols Hill Island –
 Contract Award

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to ratify and approve the award of a procurement contract (4600002818) to Tahawus Trails LLC of Accord, NY in the amount of \$934,500 to design and build approximately 2.5 miles of handicap accessible and rustic hiking trails on Nichols Hill Island in Louisville, NY. Trails will include an accessible fishing pier, observation platform and hunting blind. The contract term would be two years.

Due to the need to commence services, interim approval to award the subject contract, effective July 1, 2014, was authorized in accordance with the Authority's Guidelines for Procurement Contracts and Expenditure Authorization Procedures.

BACKGROUND

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

FERC issued the New License for the St. Lawrence/FDR Project on October 23, 2003. The Trustees accepted the New License at their November 25, 2003 meeting. As part of the new license, NYPA is committed to rehabilitate existing and build new recreational facilities. In December 2003, the Trustees authorized a total of \$169.0 million for expenditures relating to compliance with the new license and the Comprehensive Relicensing Settlement Accord, including the costs of constructing a hiking trail in Louisville, NY.

DISCUSSION

On April 25, 2014, the Authority issued a request for proposal in the New York State *Contract Reporter* for a firm demonstrating experience and success in designing and building hiking trails including components meeting Federal handicap accessible requirements. Bids were due in the White Plains office by close of business on June 12, 2014. Five bid addenda were issued responding to bidder questions; a sign-in sheet of potential bidders who attended the pre-bid site tour was also provided.

Sixty four (64) requests were downloaded from the NYPA procurement website. On May 7, 2014, six companies participated in a walk-down of the proposed trail at Nichols Hill Island in Louisville, NY.

Three proposals were received as follows: Tahawus Trails, LLC (Accord, NY); Perras Excavating Inc. (Massena, NY) and J.E. Sheehan Contractors (Potsdam, NY).

Staff from the Authority's Relicensing and Implementation and Procurement Divisions evaluated the proposals for technical qualifications and pricing. Tahawus Trails and Perras Excavating's subcontractor demonstrated technical competence while J.E. Sheehan and its subcontractor offered no proposed work plan or evidence of trail design or building experience.

The Perras Excavating subcontractor's proposed work plan demonstrated technical competence but lacked design creativity as the experience of the firm in designing recreational projects is primarily limited to parks and campgrounds as opposed to working in a forested environment. The method of construction proposed, using heavy equipment during the winter season, will, potentially, negatively impact the natural environment.

Tahawus Trails, a member of the National Professional Trail Builders Association, has a proven record of trail design and construction spanning over 25 years. NYPA has previous satisfactory experience with Tahawus Trails. In 2012, the company was hired by NYPA to construct stairs at the Grand Gorge in Niagara which earned

the Authority the 'Outstanding Stewardship of American Waters' award in 2013 and Tahawus Trails the 'Trail Project of the Year' by the National Professional Trail Builders Association.

The proposed design and construction methods used by Tahawus Trails will have minimal impact on the natural environment as it proposes to use small equipment and hand tools for much of the work. The schedule proposes to perform the work during the spring and fall seasons following acquisition of all permits by NYPA.

The proposals were evaluated for trail design and building experience, cost, proposed methods and schedules for construction. The evaluated costs for each firm based on the provided scope-of-work were as follows:

Tahawus Trails, LLC \$ 820,618 Perras Excavating \$ 1,165,901

J.E. Sheehan Contractors \$ 885,000 (proposal did not provide work plan or experience in trail design and building)

Included in the Tahawus Trails' proposal were suggestions for alternatives to the proposed scope-of-work that, in total, would cost \$113,803. These suggestions include widening the accessible portions of the trail to provide for an enhanced experience by reducing the need to focus on staying on the trail. Also proposed is the use of steel anchors for the fishing piers and observation platforms rather than pressure-treated wood. These anchors will reduce disturbance to the wetlands during construction and have a much longer life expectancy, reducing maintenance and future replacement costs. On the rustic portion of the trail, the bidder proposes adding natural soil fill to create a 'crowned surface' that will avoid standing water, thus reducing trail maintenance costs. These changes to the scope-of-work will reduce lifetime maintenance costs and environmental impacts and result in a proposed cost of \$934,421 which is below the cost of the Perras Excavating proposal.

FISCAL INFORMATION

Since these expenditures are related to implementing commitments in the New License for the St. Lawrence Project and the underlying settlement agreements, payments will be made from the Capital Fund.

RECOMMENDATION

The Vice President – Project Development and Licensing and the Acting Vice President – Procurement recommend that the Trustees ratify and approve award of the contract to Tahawus Trails, LLC of Accord, NY in the amount of \$934,500 to construct accessible and rustic hiking trails to include an accessible fishing pier, observation platform and hunting blind at Nichols Hill Island in Louisville, NY.

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 and the Authority's Expenditure Authorization Procedures, approval is hereby granted to ratify and approve award the contract to Tahawus Trails LLC for a period commencing on July 1, 2014, and ending on June 30, 2016, in the amount of \$934,500, for design and construction services to design and construct accessible and rustic hiking trails to include an accessible fishing pier, observation platform and hunting blind on Nichols Island at the St. Lawrence/FDR Power Project, in compliance with that Project's New License, as recommended in the foregoing report of the President and Chief Executive Officer;

Contractor

Contract Approval

Tahawus Trails, LLC (4600002818)

\$<u>934,500</u>

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

v. Procurement (Services) Contract – Richard M. Flynn Power Plant – Water Tanks Refurbishment – Contract Extension

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve a one-year contract extension, at no additional cost to the Authority, for Purchase Order #4500232052 with Structural Preservation Systems, LLC ('SPS') of Long Island City, New York for the Richard M. Flynn CCPP ('Flynn') Water Tanks Refurbishment Project.

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.

This project scope-of-work includes the refurbishment of three steel tanks and their concrete bases, replacement of one fiberglass tank and refurbishment of the concrete containment pit. The steel tank's original protective coating and insulation, and the fiberglass tank are at the end of their useful life and require replacement. The concrete containment pit and all four concrete tank bases also require refurbishment and coating replacement to extend their useful life. A contract was awarded to SPS through competitive bidding, effective May 27, 2013, for a term of up to one year and for the initially authorized amount of \$2,283,000. Subsequently, the contract was increased by an additional \$30,117.35 for a current total contract amount of \$2,313,117.35.

DISCUSSION

The project schedule included construction kick off in July 2013, a 'winter shutdown,' and remobilization by April 2014 for installation of the fiberglass tank, the concrete refurbishments and the containment pit coating application. By November 20, 2013, demobilization for the 'winter shutdown' was required and SPS successfully completed all three steel tank refurbishments and released the fiberglass tank for fabrication. For remobilization and application of the coating systems, a temperature of 55 degrees and rising is required at all times with not more than 60% humidity to assure curing. Due to cold weather and excessive moisture conditions through mid-May 2014, SPS could not begin installation of the dike coating system until May 21, 2014. SPS's original contract expiry is May 26, 2014 and, due to weather delay, the coating work is expected to be completed by August 1, 2014. No additional funding is requested to perform this work; however, a contract date extension is required.

FISCAL INFORMATION

Payments associated with this Project will be made from the Authority's Operating Fund.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Vice President – Engineering, the Acting Vice President – Project Management, the Acting Vice President – Procurement and the Regional Manager – SENY recommend that the Trustees approve a one-year contract extension, at no change in contract value, to Structural Preservation Systems, LLC of Long Island City, NY for the Richard M. Flynn Power Plant Water Tanks Refurbishment Project.

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, approval is hereby granted to award a one-year contract extension, at no change in contract value, to Structural Preservation Systems, LLC of Long Island City, New York for the Richard M. Flynn Power Plant Water Tanks Refurbishment Project as recommended in the foregoing report of the President and Chief Executive Officer:

Contractor

Contract Approval

Structural Preservation Systems, LLC Long Island City, NY PO# 4500232052 One-Year Contract Extension May 26, 2015

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

vi. Lease of Office Space – Clarence D. Rappleyea Building – Berman, Frucco, Gouz, Mitchel & Schub, PC

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize the execution of a lease extension for approximately 7,814 square-feet of office space on the seventeenth floor of the Clarence D. Rappleyea Building ('Rappleyea Building'), White Plains, New York by the Authority, as landlord, to Berman, Frucco, Gouz, Mitchel & Schub, PC ('Berman') as tenant. The proposed lease extension is for a term of five years, to September 30, 2019, at an average annual base rent of approximately \$24.40 per square foot, exclusive of the electrical factor of \$3.00 per square foot, as more specifically described in Exhibit '2c vi-A' attached hereto.

BACKGROUND

The Authority acquired the Clarence D. Rappleyea Building by deed dated July 10, 1991. This is a commercial office building with the majority of the existing space occupied by Authority personnel. However, approximately 30% of the building is occupied by private tenants. The Authority initially entered into a lease with Berman's predecessor on October 21, 1998. This lease was extended on August 4, 2003 and again on February 24, 2009. The current lease, including all extensions and options, expires September 30, 2014, and the tenant wishes to remain in the space for an additional five-year term.

DISCUSSION

Berman is a law firm, primarily engaged in the practice of matrimonial law. Its current lease expires September 30, 2014, and the firm has expressed an interest in renewing and extending its lease at this time. The Authority entered into negotiations with Berman after publicly advertising the space for lease. Preliminary negotiations have resulted in the basic lease terms set forth in Exhibit '2c vi-A.' Generally, this lease is for a term of five years at an average annual base rental of approximately \$190,662. In addition, Berman will pay an electrical factor of \$3.00 per square foot. A review of the local market conditions indicate that this transaction compares favorably with other space being offered in downtown White Plains. The Real Estate Department's Expenditure Authorization Procedures require the Trustees' approval for leases where the annual rent exceeds \$100,000.

FISCAL INFORMATION

Payment for standard brokerage commissions as set forth in Exhibit '2c vi-A' will be made from the Operating Fund.

RECOMMENDATION

The Acting Vice President – Procurement, the Director – Corporate Support Services and the Director – Site Purchasing, Materials Management and Real Estate, recommend that the Trustees approve the execution a five-year lease extension with Berman, Frucco, Gouz, Mitchel & Schub, PC for office space in the Clarence D. Rappleyea Building on terms substantially in accordance with the foregoing and with Exhibit '2c vi-A' attached hereto.

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

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

RESOLVED, that the President and Chief Executive Officer, the Acting Vice President – Procurement and the Director of Site Purchasing, Materials Management and Real Estate be, and hereby are, authorized to enter into a Lease Agreement between the Authority and Berman, Frucco, Gouz, Mitchel & Schub, PC, on substantially the terms set forth in the foregoing report of the President and Chief Executive Officer and subject to the approval of the documents by the Executive Vice President and General Counsel or his designee; and be it further

RESOLVED, That the Acting Vice President – Procurement or the Director of Site Purchasing, Materials Management and Real Estate is hereby authorized to execute any and all other agreements, papers or instruments on behalf of the Authority that may be deemed necessary or desirable to carry out the foregoing, subject to the approval by the Executive Vice President and General Counsel; and be it further

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

d. <u>CAPITAL EXPENDITURE AUTHORIZATIONS</u>:

i. Small Clean Power Plants – Black-Start Project – Harlem River and Hell Gate – Capital Expenditure Authorization Request and Contract Award

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize capital expenditures in the amount of \$11,000,700 and approve a contract in the amount of \$7,536,100 to Dynamic Mechanical Contractors, Inc. ('Dynamic') of Hackensack, NJ for engineering, procurement, installation, start-up, testing and commissioning services associated with the Black-Start Project ('Project') at the Harlem River and Hell Gate Small Clean Power Plants ('SCPPs'). This Project entails the installation of a 1,000 kW diesel generator and related appurtenances at Hell Gate and Harlem River SCPPs, respectively.

On March 12, 2012 the President and Chief Executive Officer approved \$668,883 for preliminary engineering related to the project.

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 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.

Each of the Harlem River and Hell Gate SCPP consists of two LM6000 Gas Turbine-Generator units and are each connected to the Hell Gate Annex Substation via 138 kV Circuit Breaker #4 and #1, respectively. Neither the Hell Gate nor Harlem River generating facilities possess black-start capability.

Major New York City blackouts have occurred, resulting in a complete loss (de-energization) of the 138 kV transmission system. Future such events would result in a full-load rejection trip of the SCPPs, assuming that the SCPPs were operating at the time of the event. Current configurations do not allow the SCPPs to provide power to the transmission system in the event of a total blackout.

At the request of Consolidated Edison ('Con Edison') the Authority agreed to construct such black-start capabilities at the two sites, as long as NYPA can recover the reasonable costs incurred in constructing such facilities over a reasonable time period.

Under the existing New York Independent System Operator's ('NYISO') Transmission Tariff, new generating facilities that provide black-start services to Con Edison are permitted to recover their reasonable and prudent costs for providing black-start service. The Tariff states that the NYISO determines what costs are reasonable for providing this service.

Con Edison agreed to select the Authority's Hell Gate and Harlem River facilities as black-start resources under Con Edison's System Restoration Plan, over the period designated in the Tariff for the recovery of black-start costs.

Based on a review of the NYISO Tariff, a payback period of twenty-two years is anticipated (through 2029) for construction costs.

In response to the Authority's request for proposal advertised in the New York State *Contract Reporter* on March 6, 2014 (RFQ No. Q14-5603JF), ten companies attended the pre-bid walk-down and three proposals were received on April 30, 2014 from the bidders listed below:

| Company | Evaluated Price |
|---|-----------------|
| Dynamic Mechanical Contractors, Inc. (Hackensack, NJ) | \$7,536,100 |
| Welsbach Electric Corp. (College Point, NY) | \$8,186,000 |
| E-J Electric Installation Co. (Long Island City, NY) | \$11,673,120 |

The Authority's Comparative Cost Estimate is \$10,200,000.

The proposals were reviewed by an Evaluation Committee consisting of Authority staff. Dynamic provided the lowest cost and technically acceptable proposal. It included a detailed project execution and resource plan describing Dynamic's approach for management of the project scope, cost, schedule, safety, quality and a specific identification of the major work tasks to be performed. The company's proposal meets the criteria as specified in the Authority's construction specification. It has also successfully completed several projects for the Authority. Dynamic took no exceptions to the Authority's technical specifications and commercial terms and conditions.

FISCAL INFORMATION

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

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Acting Vice President – Project Management, the Vice President – Engineering, the Acting Vice President – Procurement, the Project Manager, and the Regional Manager – Southeastern New York recommend that the Trustees approve capital expenditures in the amount of \$11,000,700 and award of a contract in the amount of \$7,536,100 to Dynamic Mechanical Contractors of Hackensack, NJ for the Black-Start Project at the Harlem River and Hell Gate Small Clean Power Plants.

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 Authority's Expenditure Authorization Procedures, capital expenditures in the amount of \$11,000,700 are hereby authorized for the Hell Gate and Harlem River Black-Start Small Clean Power Plant Project ("Project"), 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, approval is hereby granted to approve the award of a contract to Dynamic Mechanical Contractors, Inc. in the amount of \$7,536,100 to provide material, installation and testing services for the Project, as recommended in the foregoing report of the President and Chief Executive Officer and as set forth below:

Contractor

Contract Approval

Dynamic Mechanical Contractors Hackensack, NJ (Q14-5603JF) \$7,536,100

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

ii. Small Clean Power Plants –
 Combustion Turbine Control Systems Upgrade –
 Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize a capital expenditure in the amount of \$11 million for the purchase and installation of new control systems to upgrade the existing eleven LM6000 Combustion Turbine Power Generators ('Combustion Turbines') at each of the Authority's Small Clean Power Plants ('SCPPs') located in New York City and Brentwood, Long Island.

The Authority intends to procure the control systems through its current contract with GE Packaged Power (Contract No. 4600002573) (the 'GE Packaged Power Value Contract' or the 'Contract'), which was approved by the Trustees on September 24, 2012. The Contract is currently capped with a compensation limit of \$40 million and is valid through December 31, 2017. Trustee approval is sought to issue a change order to the Contract, extending its term for two years, through December 21, 2019, and increasing the current contract compensation limit by \$11 million for a total aggregate contract value of \$51 million.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for extending a 'Services' contract that was previously approved by the Trustees, for a cumulative term of more than one year. In addition, the Authority's Expenditure Authorization Procedures requires the Trustees' approval for capital expenditures in excess of \$3 million as well as any cumulative change order in excess of \$3 million.

In 1999, the Authority was tasked to meet an 'urgent need' for new electric power generation in the metro-New York area. The Authority's eleven Combustion Turbines were purchased and installed at each of the Authority's SCPPs in 2000. In the interest of time, the Combustion Turbines were purchased from General Electric's stock 'as equipped.' Four Combustion Turbines were shipped with a Woodward Netcon control system made by Woodward Controls Inc. and seven turbines were shipped with the GE Mark VI control system made by General Electric Company. The past thirteen years of operating the Combustion Turbines have enabled the Authority to compare and contrast the performance and reliability of both control systems. The Woodward Netcon control system has proven to be far more reliable than the GE Mark VI control system. Woodward Controls Inc. is now a wholly-owned subsidiary of General Electric Company and its products are sold through General Electric Company.

Both the existing Woodward Netcon control system and the existing GE Mark VI control system are at the end of their product support cycle. In 2012, the manufacturers for both products provided the Authority with a notice of intent to render the aging systems obsolete, and the Authority began planning and engineering for the required upgrades. Presently, the existing Woodward Netcon control system installed on the four Combustion Turbines located in the Bronx is obsolete. A time-line to total obsolescence provided for the GE Mark VI system sets forth a phased approach to obsolescence that begins in 2015.

In 2013, the Authority's four Combustion Turbines located in the Bronx were selected by The Consolidated Edison Company as 'Black-Start' units intended to have the ability to restart the electrical system for New York City without reliance on the electrical grid following a hypothetical regional blackout. The technical requirements of the Black-Start Project mandate engineering and software upgrades to the control systems of the 'Black-Start' units that are presently using the obsolete Woodward Netcon control system.

The Authority's engineers and operators have determined that a systematic migration of all eleven Combustion Turbines over to a standardized control system platform will enable the Authority to avoid unplanned outages, reduce outage durations, and improve operational reliability of the Combustion Turbines while routine

maintenance and repairs are made. Aligning of the Combustion Turbine Control System Upgrade Project with the requirements of the Back-Start Project exhibits both prudent engineering principles and cost-effectiveness.

DISCUSSION

After a comprehensive review of the past performance of both aging control systems, consultation with other utility owner/operators, and an examination of migration proposals, the Authority's engineers and operators selected the Woodward Micro-Net Plus control system as the new standardized platform. This control system is fully supported by the General Electric Aero Division (the original equipment manufacturer of the LM6000 Combustion Turbines), based out of Houston, TX, the location of the Authority's repair center for the LM6000 Combustion Turbines, which are maintained and serviced under the current GE Packaged Power Value Contract.

The Authority's engineers evaluated alternative solutions, and concluded that upgrading the Combustion Turbines with the Woodward Micro-Net Plus is the only viable solution that also preserves the warranty provided under the GE Packaged Power Value Contract for the support of the LM6000 Combustion Turbines. Since GE Packaged Power is the proprietary owner of the source codes and other pertinent information necessary to safely operate the LM6000 Combustion Turbines, the replacement of the control systems will be planned, designed, purchased and installed under the current GE Packaged Power Value Contract as a single-source procurement. An increase of \$11 million to the compensation limit of \$40 million currently applicable to the GE Packaged Power Value Contract is required to purchase and install the Woodward Micro-Net Plus, bringing the total compensation limit of the GE Packaged Power Value Contract to \$51 million.

The project will progress based on the following phased approach:

- 2012 Began the evaluation and selection process for a new Combustion Turbine control system platform
- 2013 Specified, designed, planned, and scheduled the installation of the new Combustion Turbine control system platform
- 2014 Preliminary funding approval for the Combustion Turbine Control System Upgrade Project; and replacement of the obsolete control systems for the four Combustion Turbines located in the Bronx to support the Black-Start Project

2015 to 2019 – Replacement of the aging control systems for the remaining seven Combustion Turbines located in New York City and Brentwood, Long Island

FISCAL INFORMATION

Funding for the Combustion Turbine Control System Upgrade Project is included as a component of the Southeast New York ('SENY') ten-year capital budget plan and the Authority's overarching capital budget. The new Woodward Micro-Net Plus control system will be designed, purchased and installed through a change order to the existing GE Packaged Power Value Contract. Payments associated with this project will be made from the Authority's Capital Fund.

RECOMMENDATION

The Senior Vice President – Power Generation, the Acting Vice President – Procurement, the Regional Manager – Southeast New York and the Director – Operations of the Small Clean Power Plants recommend that the Trustees authorize (i) the capital expenditure in the amount of \$11 million; and (ii) a change order to the existing GE Packaged Power Value Contract (#4600002573) extending its term for two years, through December 31, 2019, and increasing the current contract compensation limit by \$11 million for a total aggregate contract value of \$51 million for the Small Clean Power Plant Combustion Turbine Control System Upgrade Project.

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 Authority's Expenditure Authorization Procedures, approval is hereby granted to authorize capital expenditures in the amount of \$11 million for the Small Clean Power Plants ("SCPPs") Mark VI – CT Controls Upgrade project as recommended in the forgoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That pursuant to the Guidelines for the Procurement Contracts Expenditure Authorization Procedures adopted by the Authority, a change order to the GE Packaged Power Value Contract (Contract No. 4600002573) is hereby approved extending its term for the period of time indicated, and increasing its amount for the purpose listed therein as recommended in the forgoing report of the President and Chief Executive Officer;

<u>Contractor</u> <u>Approval</u>

GE Packaged Power

Houston, TX

Contract No. 4600002573

\$\frac{\$11\text{ Million} - \text{Requested Increase}}{\$51\text{ Million} - \text{Adjusted Amount}}{\$\text{December 31, 2019} - \text{Revised Project}}{\$\text{Completion Date}}

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

iii. 500 MW Combined Cycle Power Plant –
 Heat Recovery Steam Generator and
 Fuel Gas Isolation Block and Bleed Valves –
 Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve a Capital Expenditure Authorization Request ("CEAR") in the amount of \$3,240,000 for the 500 MW Combined Cycle Power Plant's Heat Recovery Steam Generator ('HRSG') and Fuel Gas Isolation Block and Bleed Valves Project ('Project') at the Astoria Site.

BACKGROUND

The Authority's 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 current design of the HRSG hot reheat, cold reheat and the fuel gas supply system ('FGS') utilizes one block and bleed valve. To ensure proper Lock-Out/Tag-Out and safe operation of each of the aforementioned systems, a second or redundant block and bleed valve should be installed, in addition to the installation of two actuators on the existing block valves. The project scope entails installation of the following equipment: four HRSG block and bleed valves; six HRSG actuators; two FGS valves; and new platforms, or modifications to existing platforms, to provide safe access, service and maintenance of the equipment. Also, as part of the scope-of-work, new pipe hanger supports or repositioning of the existing supports are required due to the weight of the additional valves.

Preliminary funding in the amount of \$420,000 for engineering services was authorized by the President and Chief Executive Officer in February 2013; the Part I CEAR for \$2,000,000 was approved in January 2014 to procure long-lead time materials (valves and actuators) and to begin installation of the two FGS valves and platforms for the 2014 Fall Outage. This request is for the installation of the HRSG valves, actuators, platforms and pipe hangers which is scheduled to be completed in 2015.

The preliminary funding, CEAR Part 1 and this requested CEAR Part 2 approval is for a total estimated project cost of \$5,660,000 over a three-year period as follows:

| | Funding | |
|---------------------------|---------|-----------|
| Engineering | \$ | 326,600 |
| Procurement | \$ | 1,109,200 |
| Construction/Installation | \$ | 3,641,500 |
| Authority Direct/Indirect | \$ | 582,700 |
| TOTAL: | \$ | 5,660,000 |

FISCAL INFORMATION

Payments associated with this project will be made from the Authority's Capital Fund and have been included in the 2014 and 2015 Capital Budgets.

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Vice President – Project Management, the Vice President – Engineering, the Vice President – Procurement, and the Regional Manager – Southeast New York recommend that the Trustees approve capital expenditures in the amount of \$3,240,000 for

installation of the 500 MW Combined Cycle Power Plant's Heat Recovery Steam Generator and Fuel Gas Isolation Block and Bleed Valves at the Astoria Site.

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 Authority's Expenditure Authorization Procedures, capital expenditures in the amount of the amount of \$3,240,000 for installation of the 500 MW Combined Cycle Power Plant's Heat Recovery Steam Generator and Fuel Gas Isolation Block and Bleed Valves at the Astoria Site, is hereby approved as recommended in the forgoing report of the President and Chief Executive Officer;

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

 iv. Niagara Power Project – Lewiston Pump Generating Plant Life Extension and Modernization Program – Release of Remaining Pump Turbine Units – Increase in Expenditure Authorization

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to increase the expenditure authorization limit for the Niagara Power Project's Lewiston Pump Generating Plant ('LPGP') Life Extension and Modernization Program ('LEM Program') from the previous authorized capital expenditure amount of \$252.44 million to \$300 million. The Trustees are also requested to approve the release of the remaining six pump turbines to Mitsubishi-Hitachi Power Systems of America, Ltd. ('MHPSA') of Basking Ridge, NJ.

This additional \$47.456 million, which is included as part of the original Capital Expenditure Authorization Request, will be utilized to release long-lead time equipment for the remaining units to be overhauled. The major equipment releases required include new: turbines, head covers, wicket gates, generator rotor poles and stator coils, unit control systems, static excitation systems and associated unit auxiliary equipment in order to maintain the schedule.

The total estimated cost of the LPGP LEM Program will remain unchanged at \$460 million.

BACKGROUND

In accordance with the Authority's Expenditure Authorization Procedures, capital expenditure authorizations in excess of \$3 million require the Trustees' approval.

At their June 29, 2010 meeting, the Trustees approved the Capital Expenditure Authorization Request ('CEAR') for the LPGP LEM Program, estimated at \$460 million, to renew the generation assets of LPGP, and were advised that the LEM Program would commence and require about ten years to complete. The Trustees also authorized capital expenditures in the amount of \$131 million and the award of a ten-year contract to Hitachi Power Systems America, Ltd ('Hitachi'), in the amount of \$174 million, to replace 12 pump turbine runners including equipment overhauls. At that time, Hitachi was only released to proceed with the first six pump turbines at a value of \$76 million.

At their November 9, 2012 meeting, the Trustees approved an increase in capital expenditures from \$131 million to \$252.544 million for the release of long-lead time equipment and to fund the rehabilitation work up to the sixth unit.

On February 3, 2014, Mitsubishi Heavy Industries, Ltd. and Hitachi, Ltd. announced a new joint venture between the two organizations, Mitsubishi-Hitachi Power Systems of America, Ltd. ('MHPSA'), which will be responsible for completing this ten-year contract.

The remaining six turbines will be released to MHPSA over the next three to five years in an effort to expedite its fabrication and delivery to support the LPGP LEM schedule. Additionally, there have been recent issues regarding 'insolvency proceedings' for MHPSA's subcontractor, Litostroj, located in Slovenia, which successfully fabricated the first five turbine runner components. MHPSA is presently utilizing two new foundries for the sixth runner components due to financial issues at Litostroj. Therefore, the intent is to mitigate this global sourcing risk by expediting the remaining six runner components at capable foundries to ensure quality, maintain schedule and to reduce material escalation costs.

DISCUSSION

The objective of the LPGP LEM Program is to replace and/or rehabilitate aging generation equipment, most of which dates to 1961. A secondary objective is to increase pump and turbine efficiency, increase pump

flows, increase turbine output and increase the smooth operating range of the pump turbines. These improvements to the pump turbine design would allow for improved operating efficiency, increases in the amount of production retimed to peak demand periods, and an increase in the peaking capacity of the overall Niagara Power Project. The modest increase in the plant's pumping capacity as a result of the new pump turbines required the Authority to file an application with the Federal Energy Regulatory Commission ('FERC') for a non-capacity license amendment which was granted in April 2012.

The current status of the work related to the LEM Program is as follows;

- Five new GSU's, including one spare unit, associated high voltage terminations, and relay protection equipment have been installed.
- The first unit overhaul, Unit 11, was completed in September 2013. The unit vibration adjustments, rotor pole jumper replacement, shaft re-alignment and performance testing to be completed by August 9, 2014.
- The second unit overhaul, Unit 5, was completed in May 2014.
- The third unit overhaul, Unit 7, will commence in August 2014.
- The pump turbine runners and associated long-lead equipment for the next four units to be overhauled are in various stages of manufacturing.
- Units 3 through 12 will be completed in approximately seven to eight months each, with the last unit to be completed in the winter of 2020.

The total value of the contracts awarded to date, amount to approximately \$300 million and the total amount released is approximately \$130 million. Costs associated with the LPGP LEM Program also include Engineering, Project Management, Plant support, site modifications, performance testing and unit auxiliary equipment. Therefore, in order to allow for the orderly execution of the LEM Program as planned and to start the fabrication of the remaining six runners, it is necessary, at this time, to commit the additional requested funding to execute the activities through the 6th unit which is scheduled to be completed in February 2017. The remaining fund balance will be requested accordingly, in order to complete the LEM Program as currently scheduled.

Engineering, Procurement, Construction, Direct and Indirect Costs

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

| | Current Total Estimate (\$000) | Current Request (\$000) | Balance to be Authorized (\$000) |
|---------------------------|--------------------------------|-------------------------|----------------------------------|
| Preliminary | 1,195 | 0 | 0 |
| Engineering/Licensing | | | |
| Engineering and Design | 12,783 | 2,196 | 900 |
| Procurement/Materials | 153,813 | 23,210 | 47,960 |
| Construction | 253,799 | 18,586 | 101,527 |
| Authority Direct/Indirect | 38,410 | 3,464 | 9,613 |
| | 460,000 | 47,456 | 160,000 |

Future year funding will be included in the Capital Budget requests for those years.

FISCAL INFORMATION

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

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Acting Vice President – Project Management, the Vice President – Engineering, the Acting Vice President – Procurement, the Project

Manager and the Regional Manager of Western NY recommend that that the Trustees authorize additional capital expenditures in the amount of \$47.456 million and approve the release of the remaining six pump turbines to Mitsubishi-Hitachi Power Systems of America, Ltd. ('MHPSA') for the Niagara Power Project's Lewiston Pump Generating Plant ('LPGP') Life Extension and Modernization Program ('LEM 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 pursuant to the Authority's Expenditure Authorization Procedures, capital expenditures in the amount of \$47.456 million and the release of the remaining six pump turbines to Mitsubishi-Hitachi Power Systems of America, Ltd. ("MHPSA") of Basking Ridge, NJ, are hereby approved for the Niagara Power Project's Lewiston Pump Generating Plant ("LPGP") Life Extension and Modernization Program ("LEM Program"), as recommended in the foregoing report of the President and Chief Executive Officer;

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

v. Moses-Willis Circuit Separation Project – Change Order Authorization Request

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to authorize additional funding in the amount of \$239,163 to resolve the claims submitted by Michels Power, a Division of Michels Corporation, of Neenah, Wisconsin ('Michels Power'), following the February 2014 completion of the Moses–Willis Circuit Separation Project (the 'Project').

BACKGROUND

The Project involved the removal of the double-circuit contingency identified by the New York Independent System Operator on the Moses–Willis–Plattsburgh Facility. This double-circuit contingency resulted from the Moses–Willis 1 & 2, 230 kV transmission lines being located on common structures for the first two miles from the St. Lawrence Moses Switchyard. A tower failure could have resulted in both Moses–Willis transmission lines being out of service.

The Trustees, at their May 21, 2013 meeting, authorized capital expenditures for the Project in the amount of \$6.1 million. Subsequently, a contract award was issued to Michels Power (PO# 4500232257). The status of the contract is as follows:

| - | Original Award | \$2,499,167.53 |
|---|------------------------------|----------------|
| - | Change Order No.1 | 939,934.85 |
| - | Current Change Order Request | 239,162.63 |
| | Total | \$3,678,265.01 |

In accordance with the Authority's Expenditure Authorization Procedures, Cumulative Change Orders exceeding the greater of \$1 million or 25% of the original amount approved requires the Trustees' approval.

DISCUSSION

Following completion of the Project, Michels Power submitted contract claims resulting from unforeseen site conditions and inclement weather. During the winter of 2013-14, northern New York experienced long durations of excessive rain, snow and extended periods of below '0' degree temperatures. The original Project plan was to complete the project in the summer months. However, due to an increase in material lead times associated with an increase in demand for materials following hurricane Sandy, Project implementation occurred during the fall and winter months. The specific claims are:

1. Plate/Anchors

Original design specified helix anchors. Due to soil conditions, these anchors could not be driven, therefore, the design was altered to plate/dead man anchors, which involved additional excavation and backfilling.

2. Stone Access Roads and Matting

Due to inclement weather, additional matting and road work was required in Dodges Field.

3. Dampers

Crews were re-mobilized for the installation of dampers following the Moses–Alcoa 4 installation and energization.

4. Drilling

Surveying delays caused additional downtime for the New York Drilling Services, Inc.

5. Fittings

Design altered the installation of the dead ends from mechanical to compression type fittings, which involved additional man-hours.

FISCAL INFORMATION

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

RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Acting Vice President – Project Management, the Vice President - Engineering, the Acting Vice President - Procurement, the Project Manager, and the Regional Manager - Northern New York recommend that the Trustees authorize the Change Order in the amount of \$239,163 to resolve the claims submitted by Michels Power following the completion of the Moses-Willis Circuit Separation Project.

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 Authority's Expenditure Authorization Procedures, capital expenditures in the amount of \$239,163 to resolve the claims submitted by Michels Power following the completion of the Moses –Willis Circuit Separation Project are hereby authorized in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer;

| <u>Contractor</u> | | Contract Approval |
|----------------------|------------------------|--------------------------|
| Michels Power | Original Award | \$2,499,167.53 |
| PO# 4500232257 | Change Order No.1 | 939,934.85 |
| | Current Request | 239,162.63 |
| | Total | \$ <u>3,678,265.01</u> |

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

DISCUSSION AGENDA:

3. STAFF REPORTS:

a. Report of the President and Chief Executive Officer

President Quiniones welcomed new Trustee, Anne Kress to the meeting. He started by saying that, based on the mid-year Performance Scorecard, NYPA has been performing extremely well. The Authority's generation and transmission measures are above target and the financial measure is very strong as well with the debt coverage ratio and budget performance measures performing above target. The Authority has also exceeded its energy services targets and, the workforce management measure which was previously performing below target due to timing and weather considerations, is now performing within target.

President Quiniones pointed out that the Days Away Restrictions and Transfers ("DART") Rate, a safety metric that the Authority has instituted, and the Environmental Incidents measures were below target. He said Phil Toia will provide the details regarding those measures during his report on the Authority's operations.

From a Risk Range perspective, President Quiniones said the Authority exceeded the targets for generation market readiness, transmission system reliability and debt service coverage.

In response to a question from Chairman Koelmel, President Quiniones opined that the Authority will outperform its financial and operational metrics this year. In terms of the Authority's strategic initiative, President Quiniones said later in the meeting staff will formally launch two of the six strategic initiatives to the Board and, in the fall, will request the Board's approval for specific funding to launch the balance of these initiatives. He said this year will mark the start of the strategic transformation of the Power Authority; this in addition to its current base business. These initiatives will provide new opportunities for the Authority as it reinvents and reimage its 5-10-Year Strategic Plan.

Responding to further questioning from Chairman Koelmel, President Quiniones said looking at the external market and what lies ahead for the Authority, although it was a very cold winter which, operationally, was a challenge for the Authority, at the same time, because the Authority has very cost competitive assets, it was able to take advantage of that market stress and enhanced its net income in the short-term. With the summer not being very hot, there is downward pressure on gas prices and this will have a dampening effect on power prices as well. Nevertheless, overall, the Authority will end the year with a positive net income.

President Quiniones continued that from an industry trends perspective, the transformation of the electric power industry is happening faster than was originally predicted. Nontraditional players are entering the industry such as Google which just bought a Smart Thermostat company called Nest Labs for \$3.5 billion.

Utilities now have to challenge the status quo to make sure they are not left behind with all the technological changes in the industry, and that is what the Authority is trying to capture in its strategic plan. The Authority's goal is to be more flexible and to get its staff ready to face the new challenges.

Responding to a question from Trustee Nicandri, President Quiniones said "near misses" are indicators in the DART Rate Index. The Authority measures those "near misses" with the view to implement measures to mitigate actual hours lost in the work place because of "near misses" which are usually slips and falls. He said he has asked Ed Welz and his team to think of other creative things that can be done to heighten situational awareness as it relates to slips and falls at the sites in order to narrow this target. Phil Toia will discuss this in his presentation.

b. Report of the Chief Operating Officer

Mr. Philip Toia, Vice President of Transmission, provided highlights of the Chief Operating Officer's report to the Trustees.

Performance Summary

Operations have continued its strong generation and transmission performance in 2014. To date, the Authority has exceeded its Generation Market Readiness and Transmission Reliability targets. The Generation Market Readiness metric is currently at 99.83% vs. the target of 99.4% and Transmission Reliability is 97.44%, also exceeding the Y-T-D target of 97.24%.

To address the DART Rate and Environmental Incidents to date, Mr. Toia said the DART Rate is 1.38, vs. the target of 0.78. The trend over the past two months has been improving with only one event in June. However, staff is concerned with the DART Rate and the events Y-T-D – About 80% of the events have been due to slips, trips, falls and sprains. In August, the Authority will be implementing a NYPA-wide training program with an outside training specialist specifically in the areas of slips, trips, falls and sprains awareness and prevention in an effort to heighten awareness and reduce those types of injuries.

In response to a question from Trustee Foster, Mr. Toia said, there have been incidents of lacerations and contusions, which make up the additional 20% of incidents Y-T-D, but they have not had any serious events in terms of safety.

Responding to a question from Chairman Koelmel, Mr. Toia said to date, there have been 14 events related to trips, slips and falls; 13 related to material handling strains and 6 events related to contusions/lacerations.

Mr. Tota continued that for the month of June Environmental incidents increased by 4 events for a total of 18 events, exceeding the target of 16 events. He said the majority of the reportable events were related to minor oil leaks or R22 refrigerant releases. The Authority has accelerated its program to address this issue with the replacement of older air conditioner and refrigeration units. He ended by stating that the Authority has had no major environmental events to date and will be able to make its end of year target of 27 events.

Responding to further questioning from Chairman Koelmel, Mr. Toia said some of the slips and trips were because of ice and snow conditions; however, the Authority is taking steps to raise staff's level of awareness

regarding safety. To that end, the Authority has implemented measures where employees can be proactive and be aware of their surroundings to avoid slips, trips and falls.

Responding to still further questioning from Chairman Koelmel, Mr. Welz opined that the Authority has extreme stretch goals, especially in the areas of environmental and safety, hence the struggle to meet its target. He said, however, by industry standards, the Authority is doing significantly better than other utilities in this area. He said Authority staff is encouraged to be proactive and also the management team challenges themselves to put the right metric in place to address the different safety and environment issues.

In response to a question from Trustee Nicandri, Mr. Toia explained that if there is an environmental or safety incident with a contractor, the Authority conducts a TAP Root investigation, or root cause analysis. Based on the result of that analysis, the Authority will make procedural changes in the safety practices and follow up with them to ensure that they implement those changes. This, however, is not reflected in the Safety and Environmental indicators on the Performance Scorecard since the scorecard is only related to the Authority's employees. Mr. Welz added that before a contractor begins work at the Authority's facilities they are given safety training and the Authority's safety administrators and construction managers monitor them as the work progresses.

c. Report of the Chief Financial Officer

Mr. Robert Lurie provided highlights of the report to the Trustees. He said Net income through June 30, 2014, was \$142 million, which was \$97 million above budget. This is due to:

- Higher margins on market-based sales (\$52.9 million) primarily due to higher market energy prices caused by severe winter weather conditions.
- Lower O&M (\$13.9 million) and other operating expenses (\$21.8 million) including underruns in non-recurring projects, industrial incentive awards, and the energy efficiency and solar market acceleration programs.
- Non-operating income was higher by \$12.8 million including a mark-to-market gain on the
 Authority's investment portfolio due to lower market interest rates, and insurance reimbursements
 related to prior year transformer equipment failures.

Debt Service coverage ratio is also projected to be 3.55 times debt service at year's end; this will be an increase of .45 times over budget also as a result of higher net revenues.

The current energy price forecast is slightly above budget. Precipitation over the great lakes is also higher than average for the second quarter and contributed to some of the positive results.

Therefore, the generation forecasts for Niagara and St. Lawrence is about 3% over budget.

• Projected net income for 2014 is expected to be \$300 million or \$121 million above the budget. This is primarily due to the early year positive variances indicated. Earnings for the rest of the year are expected to be closer to budgeted levels as market prices and water flows return to normal levels.

4. **POWER ALLOCATIONS**:

a. Preservation Power Allocation and Notice of Public Hearing

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve a 2,100 kilowatt ('kW') allocation of available Preservation Power to Corning Incorporated for its Canton, St. Lawrence County facility as further described herein and in Exhibits '4a-A' and '4a-A-1.' This allocation would support Corning's capital expansion of \$21.75 million and the creation of 40 jobs in Northern New York ('NNY'). The Trustees are also requested to authorize a public hearing pursuant to Public Authorities Law ('PAL') §1009 on the proposed direct sale contract, the current form of which is attached as Exhibit '4a-B.'

BACKGROUND

In 2005, the New York State Legislature enacted, and the Governor signed, Chapter 313 of the Laws of 2005, which established the Preservation Power program set forth in §1005(13) of Public Authorities Law. Preservation Power ('PP') allows businesses in Northern New York State to be served with low-cost hydroelectric power from the Authority's St. Lawrence/FDR Power Project. This program governs the allocation of any power relinquished from the block of 490 MW of St. Lawrence/FDR Project firm and interruptible power sold to Alcoa and the former GM-Massena facility. The law authorizes the allocation of PP to businesses in Franklin, Jefferson and St. Lawrence counties and applies the same allocation criteria that pertain to the allocations of Replacement Power and Expansion Power.

Each application for an allocation of PP must be evaluated under criteria that include, but need not be limited to, those contained in PAL §1005(13)(a), which sets forth general eligibility requirements. There is currently 7.7 MW of PP available to allocate to qualified businesses.

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.

The Authority works closely with business associations, local distribution companies and economic development entities to garner support for the projects to be recommended for allocations of Authority hydropower. For PP, the Authority confers with Franklin, Jefferson and St. Lawrence counties along with the NNY representative of the Empire State Development Corporation ('ESD') to coordinate other economic development incentives that may help bring projects to New York State. Staff discusses potential recommendations with these entities to help maximize the value of hydropower to improve the economy of NNY and New York State. Each organization has expressed support for the following recommended allocation.

DISCUSSION

Corning Incorporated

Corning Incorporated ('Corning') has submitted an application for hydropower requesting 4,000 kW in connection with a proposed expansion project at its facility located in Canton, St. Lawrence County, to add production and manufacturing equipment and machinery to increase production of its glass and mirror products. Corning is the world leader in specialty glass and ceramics, drawing on more than 160 years of materials science and process engineering knowledge to create and make key components that enable high-technology systems for consumer electronics, mobile emissions control, telecommunications and life sciences.

Headquartered in Corning, New York, Corning has extensive investments in New York State, including general offices, research and development and manufacturing facilities. Corning currently receives five allocations of Recharge New York ('RNY') Power at its facilities located in Canton, Oneonta, Painted Post and Corning, New York. Corning also has been awarded an expansion allocation of RNY at its facility in Painted Post that is currently pending project completion.

Corning's Canton facility, built in 1966, manufactures optical glass for the semiconductor, astronomical, defense and commercial markets. Two products produced at the facility are high purity fused silica and ultra-low expansion glass. The facility currently receives a 2,260 kW allocation of RNY Power and is meeting its commitments under the RNY contract.

Since 2012, Corning has and continues to experience an increase in its customer base and needs space for production and working inventory at its Canton facility to accommodate this growth. The company is looking to expand the Canton facility by 23,500-square-feet with a pre-engineered structural steel building and 7,200-square-foot warehouse. The \$21.75 million expansion would allow Corning to increase production. New equipment and machinery includes furnaces, an ultrasonic tank and cranes. Preparations for construction began in April, and manufacturing operations at the built-out facility are expected to begin in June 2015.

Corning is a major employer in the North Country, a region which has continued to struggle economically since the 2008-2009 financial crisis/recession. The company commits to create 40 new, high-paying jobs over three years as a result of this expansion project. The Canton facility currently employs 234 full-time workers and it should be noted that 40 to 50 jobs have been added since the beginning of the year as planning and preparation for this project began to gain momentum.

The job creation ratio for a recommended amount of 2,100 kW is 19 new jobs per MW. The ratio is below the historic four-year average of 23.3 new jobs per MW for all hydropower allocation awards and below the 34.2 new jobs per MW when compared with just PP awards. The total project investment of \$21.75 million results in a capital investment ratio of \$10.36 million per MW. This ratio is below the four-year historic average of \$21.2 million per MW, but above the \$3.5 million per MW when compared with just PP awards.

Corning is working with ESD on an incentive package and has been approved for a sales and use tax exemption and real property tax abatement from the St. Lawrence County Industrial Development Agency ('IDA'). An allocation of hydropower will help support this Canton facility expansion, bringing 40 new, well-paying manufacturing and technology jobs to the North Country.

Staff recommends that an allocation of 2,100 kW of PP be awarded to Corning for a term of seven years in return for an investment of \$21.75 million and the creation of 40 new jobs at its Canton facility as detailed in Exhibits '4a-A' and '4a-A-1.'

Contract Information

The Authority is in the process of discussing a proposed hydropower sales contract with Corning and anticipates receiving customer approval of a contract substantially similar to the form attached as Exhibit '4a-B.' Accordingly, the Trustees are requested to authorize a public hearing pursuant to PAL §1009 on the contract form attached as Exhibit '4a-B.'

As required by PAL \$1009, when the Authority believes it has reached agreement with its prospective coparty on a contract for the sale of PP, it will transmit the proposed form of contract to the Governor and other elected officials and hold a public hearing on the contract. At least 30-days' notice of the hearing must be given by publication once in each week during such period in each of six selected newspapers. Following the public hearing, the form of contract may be modified, if advisable. Upon approval of the final proposed contract by the Authority, the Authority must 'report' the proposed contract, along with its recommendations and the public hearing records, to the Governor and other elected officials. Upon approval by the Governor, the Authority may execute the contract.

The general form of the proposed contract is consistent with recently approved contracts for the sale of Expansion Power and Replacement Power. The proposed form of contract includes provisions for 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 Service Tariff No. 10. The proposed form of contract would also include (i) commercially reasonable provisions relating to financial security to reflect a direct billing arrangement between the Authority and its hydropower business customers, and (ii) provisions authorizing data transfers and addressing other utility-driven requirements which are necessary for efficient program implementation. Such provisions have been used in other Authority contracts forms, including the Authority's RNY Power program contracts.

As is typical, the provision of electric service for this hydropower allocation is subject to enforceable employment and usage commitments. The standard contract form includes annual job reporting requirements and a job compliance threshold of 90%. Should Corning's reported jobs, or its energy usage, fall below a specified compliance threshold, the Authority has the right to reduce the allocation as provided for in the contract.

The recommended allocation would be sold to Corning pursuant to the Authority's Service Tariff No. 10, also included in Exhibit '4a-B.' Transmission and delivery service would be provided by National Grid in accordance with its Public Service Commission-filed service tariffs.

RECOMMENDATION

The Manager – Business Power Allocations and Compliance recommends that the Trustees approve the allocation of 2,100 kW of Preservation Power to Corning Incorporated for the reasons discussed above and in the attached Exhibits '4a-A' and '4a-A-1.'

The Trustees are also requested to authorize the Corporate Secretary to convene a public hearing on the form of the proposed contract finally negotiated with Corning Incorporated, the current form of which is attached as Exhibit '4a-B,' and transmit copies of the proposed form of contract to the Governor and legislative leaders pursuant to PAL §1009.

Staff will report to the Trustees on the public hearing and the proposed final contract at a later time and make additional recommendations regarding the proposed contract.

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

Mr. Timothy Muldoon provided highlights of staff's recommendation to the Trustees. In response to a question from Trustee Foster, Mr. Muldoon said the 19 jobs per MW is below the Authority's four-year average of 22 jobs per MW range; although the jobs per MW in the application is below the average 22-23 jobs per MW range, staff look at other factors when evaluating the applications recommended.

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

RESOLVED, That an allocation of 2,100 kilowatts of Preservation Power to Corning Incorporated be, and hereby is, approved for the reasons detailed in the foregoing report of the President and Chief Executive Officer and Exhibits "4a-A" and "4a-A-1" attached thereto; 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 direct sale contract for the sale of hydropower and energy finally negotiated with Corning Incorporated (the "Contract"), the current form of

which is attached as Exhibit "4a-B," subject to rates previously approved by the Trustees; and be it further

RESOLVED, That the Corporate Secretary be, and hereby is, authorized to transmit copies 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 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. Western New York Hydropower Allocations and Notice of Public Hearing

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees are requested to approve allocations of 150 kilowatts ('kW') of Expansion Power ('EP') to 3M Company (Erie County), 100 kW of Replacement Power ('RP') to Innomotive Solutions Group LLC (Erie County), and 600 kW of RP to Royal Plastix USA LLC (Erie County), as further described herein and in Exhibits '4b-A,' and '4b-A-1' through '4b-A-3.' These allocations will support capital expansion totaling \$11.2 million and the creation of 82 jobs in Western New York ('WNY').

The Trustees are also requested to authorize a public hearing pursuant to Public Authorities Law ('PAL') §1009 on the proposed direct sale contract for Innomotive Solutions Group LLC and Royal Plastix USA LLC, the current form of which is attached as Exhibits '4b-B-1' and '4b-B-2.' If awarded, the allocation to 3M Company would be added to the company's existing hydropower contracts.

BACKGROUND

Under PAL §1005(13), the Authority may contract to allocate 250 megawatts ('MW') of firm hydroelectric power as 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 garner support for the projects to be recommended for allocations of Authority hydropower. Discussions routinely occur with National Grid, Empire State Development Corporation ('ESD'), the Buffalo Niagara Enterprise and Niagara County Center for Economic Development and Erie County Industrial Development Agency ('IDA') to coordinate other economic development incentives that may help bring projects 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 allocations.

At this time, 8,645 kW of unallocated EP and 32,463 kW of unallocated RP is available to be awarded to businesses under the criteria set forth in PAL §1005(13)(a).

DISCUSSION

3M Company

3M Company ('3M'), located on Sawyer Avenue in Tonawanda, submitted an application for hydropower requesting 256 kW in connection with a proposed three-phased expansion project to repurpose existing unused production equipment and install a new production line at its facility in order to begin manufacturing a new product.

3M is a global company with annual sales totaling \$30.9 billion and headquarters in St. Paul, Minnesota. The company has 145 plant locations in 60 countries, employing 88,000 people worldwide and produces more than 55,000 products, including: adhesives, abrasives, electronic materials, car-care products, household cleaning

products, and optical films. The main products produced at the Tonawanda plant are cellulose sponges and cellulose/abrasive laminate sponges typically used by household consumers and commercial applications.

3M's Tonawanda facility, in existence for 57 years, serves as a 3M Home Care Division which has invested \$175 million at its Tonawanda facility in both infrastructure and process improvements since 1990. 3M currently receives two EP allocations totaling 1,500 kW and one RNY Retention allocation of 1,750 kW, and is compliant with its job commitment total of 345.

The three-phased project involves a total investment of \$1.985 million, including the addition of a hot melt line ('HML') infrared process heater, the replacement of an existing steeping system with an automated, more ergonomic system (associated with cellulose sponge production), and the addition of a new HML line to produce a new sponge.

Construction for the first two phases would begin during the summer of 2014 with both phases operational late 2014/early 2015. If the Tonawanda facility is selected for the third phase, construction of the new production line would begin in August 2014, with operations beginning in May 2015.

At least five other 3M facilities are under consideration for the new production line and 3M believes that an allocation of hydropower is needed to help the Tonawanda facility land the project. A benefit of the new production line would be to move the company to 'insourcing' a product rather than 'outsourcing,' as the sponges that would be produced here are currently purchased by a company in Mexico.

3M would commit to add six well-paying jobs as a result of the expansion project. The job creation ratio for the proposed allocation of 150 kW is 40 new jobs per MW. This ratio is above the historic average of 27 new jobs per MW based on allocations made over the past four years. The total project investment of \$1.985 million would result in a capital investment ratio of \$13 million per MW. This ratio is below the four-year historic average of \$24.9 million per MW.

Staff recommends that an allocation of 150 kW of EP be awarded to 3M Company in order to help secure an investment of \$1.985 million and the creation of six new jobs at its facility in Erie County, as detailed in Exhibits '4b-A' and '4b-A-1.'

Innomotive Solutions Group, LLC

Innomotive Solutions Group LLC ('Innomotive') is looking to expand its operations (currently located in Burlington, Ontario) to the United States. Under the AMDOR name in Canada, the company designs, manufacturers and paints roll-up shutter-style doors for fire apparatus, emergency vehicles and other specialty vehicles.

Innomotive has requested 200 kW of hydropower to support its project to purchase a 21,000-square-foot facility on Walden Avenue in the Town of Lancaster (Erie County), to perform necessary renovations, and construct an additional 10,000 square-feet of space for its operations. The facility would be used to manufacture, assemble and paint roll-up, shutter-style doors for specialty vehicles. Innomotive would invest \$5.5 million for building renovations, the addition, the purchase of manufacturing equipment, and an automated paint system.

The prime driver for this facility is the need to meet increased demand for painted products, particularly in the United States. Innomotive is also considering this expansion at locations in Midwestern states or, alternatively, expanding operations at its Canadian facility. If the Lancaster location is chosen, construction would begin in August 2014 and operations are expected to begin by March 2015. A total of 21 jobs would be created over three years. Currently, Innomotive is doing due diligence in reviewing the Lancaster property.

Additional governmental support includes \$150,000 under the Excelsior Jobs Program from ESD, \$150,000 in a WNY Power Proceeds Allocation, state sales tax incentives, and payment in lieu of taxes ('PILOT') benefits from the Town of Lancaster IDA. Innomotive is also seeking assistance from New York State Energy Research and Development Authority ('NYSERDA').

The job creation ratio for the proposed allocation of 100 is 210 new jobs per MW. This ratio is well above the historic average of 27 new jobs per MW based on allocations made over the past four years. The total project investment of \$5,500,000 would result in a capital investment ratio of \$55 million per MW. This ratio is above the four-year historic average of \$24.9 million per MW.

Staff recommends an allocation of 100 kW of RP be awarded to Innomotive Solutions Group LLC in order to help secure an investment of \$5.5 million and the creation of 21 new jobs at the proposed facility in Western New York, as detailed in Exhibits '4b-A' and '4b-A-2.'

Royal Plastix USA LLC

Royal Plastics USA LLC ('Royal Plastix') has submitted an application for hydropower requesting 843 kW in connection with an expansion project to locate its plastic injection molding business in a vacant 67,393-square-foot building on Bailey Avenue in Buffalo.

Royal Plastix' parent, Royal Sponge Manufacturing Ltd., is a Canadian firm established in 1990 that operates a plastic injection molding business in Brampton, Ontario, Canada. The company is looking to manufacture plastic household items such as buckets, hangers, waste baskets, colanders, and dish pans.

Royal Sponge currently provides its products to distributors and discount retail chains in Canada and four major cities in the USA (Miami, Chicago, Detroit, Los Angeles). The new USA-based company would continue distribution to these areas and look to expand in the northeastern USA market.

Royal Plastix believes locating to the USA will reduce freight costs, allow it to sell 'Made in the USA' products, tap into a larger market for its products, and help to compete with China. Additionally, the company believes a low-cost hydropower allocation will help mitigate operating cost pressures from recent high electric costs in Ontario and, thus, is a critical decision factor in moving forward with a U.S. expansion. The existing Brampton facility would be eventually converted into a warehouse and continue to be used to produce sponges and scrubbers.

The new Buffalo facility would eventually operate three shifts, create 55 new jobs and invest \$3.725 million as part of this expansion over three years. The building itself needs electric service upgrades, including outdoor transformers, inside panels, and high voltage wiring. A large capacity chiller and large compressor would be added, along with 22 new and used injection molding machines. Royal Plastix would start production initially with five molding machines and expect to have the remaining machines installed within a year of starting operations. Royal Plastix also indicated that as production and sales increase, it would continue to expand and invest in Buffalo as its main manufacturing facility.

The job creation ratio for the proposed allocation of 600 kW is 92 new jobs per MW. This ratio is well above the historic average of 27 new jobs per MW based on allocations made over the past four years. The total project investment of \$3.725 million would result in a capital investment ratio of \$6.2 million per MW. This ratio is below the four-year historic average of \$24.9 million per MW.

Additional state support for this project includes up to \$464,075 under the Excelsior Jobs Program from ESD.

Staff recommends that an allocation of 600 kW of RP be awarded to Royal Plastix in order to help secure an investment of \$3.725 million and the creation of 55 new jobs at its proposed facility in Western New York, as detailed in Exhibits '4b-A' and '4b-A-3.'

Contract Information

The Authority is in the process of discussing proposed hydropower sales contracts with Innomotive Solutions and Royal Plastix and anticipates receiving customer approval of a contract substantially similar to the forms attached as Exhibits '4b-B-1' and '4b-B-2.' Accordingly, the Trustees are requested to authorize a public hearing pursuant to PAL §1009 on the contract forms attached as Exhibits '4b-B-1' and '4b-B-2.' A public hearing

is not needed for 3M's allocation as the company is an existing hydropower customer with a standard provision that allows additional allocations and associated commitments to be folded into its existing contract.

As required by PAL \$1009, when the Authority believes it has reached agreement with its prospective coparty on a contract for the sale of EP or RP, it will transmit the proposed form of contract to the Governor and other elected officials, and hold a public hearing on the contract. At least 30-days' notice of the hearing must be given by publication once in each week during such period in each of six selected newspapers. Following the public hearing, the form of contract may be modified, if advisable. Upon approval of the final proposed contract by the Authority, the Authority must 'report' the proposed contract, along with its recommendations and the public hearing records, to the Governor and other elected officials. Upon approval by the Governor, the Authority may execute the contract.

The general form of the proposed contracts is consistent with recently approved contracts for the sale of EP and RP. Some pertinent provisions of the proposed form of contract include the provision for 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, all as set forth in the Authority's Service Tariff No. WNY-1. The proposed form of contract would also include (i) commercially reasonable provisions relating to financial security to reflect a direct billing arrangement between the Authority and its EP/RP customers, and (ii) provisions authorizing data transfers and addressing other utility-driven requirements which are necessary for efficient program implementation. Such provisions have been used in other Authority contract forms, including the Authority's Recharge New York Power Program contracts.

As is typical, the provision of electric service for this hydropower allocation is subject to enforceable employment and usage commitments. The standard contract form includes annual job reporting requirements and a job compliance threshold of 90%. Should actual jobs reported by any company receiving hydropower fall below the compliance threshold, the Authority has the right to reduce the allocation on a pro-rata basis as provided for in the contract.

The recommended allocations would be sold pursuant to the Authority's Service Tariff No. WNY-1, which applies to all allocations of EP and RP. Transmission and delivery service would be provided by National Grid or New York State Electric & Gas Corporation in accordance with their Public Service Commission-filed service tariffs.

RECOMMENDATION

The Manager – Business Power Allocations and Compliance recommends that the Trustees approve allocations of Authority hydropower to 3M Company (150 kW of Expansion Power), Innomotive Solutions Group LLC (100 kW of Replacement Power), and Royal Plastix USA LLC (600 kW of Replacement Power), as further described herein and in Exhibits '4b-A,' and '4b-A-1' through '4b-A-3.'

The Trustees are also requested to authorize the Corporate Secretary to convene a public hearing on the form of the proposed contracts finally negotiated with Innomotive Solutions and Royal Plastix, the current form of which are attached as Exhibits '4b-B-1' and '4b-B-2.' and transmit copies of the proposed form of the contracts to the Governor and legislative leaders pursuant to PAL §1009.

Staff will report to the Board of Trustees on the public hearing and the proposed contracts at a later time and make additional recommendations regarding the proposed contracts.

For the reasons stated, I recommend 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 allocations of Authority hydropower to 3M Company (150 kW of Expansion Power), Innomotive Solutions Group LLC (100 kW of Replacement Power) ("RP"), and Royal Plastix USA LLC (600 kW of RP), as detailed in Exhibit "4b-A" and "4b-A-1" through "4b-A-3", be, and hereby are, approved on the terms set forth in the foregoing report of the President and Chief Executive Officer; 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 direct sale contracts for the sale of hydropower and energy finally negotiated with Innomotive Solutions Group LLC and Royal Plastix USA LLC (the "Contracts"), the current form of which are attached as Exhibits "4b-B-1" and "4b-B-2" subject to rates previously approved by the Trustees; and be it further

RESOLVED, That the Corporate Secretary be, and hereby is, authorized to transmit copies of the proposed Contracts 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 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, all done 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.

c. Recharge New York Power Allocations

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to:

- 1. Approve allocations of Recharge New York ('RNY') Power available for 'retention' purposes to the businesses listed in Exhibit '4c-A;'
- 2. Approve allocations of RNY Power available for 'expansion' purposes to the businesses listed in Exhibit '4c-B;' and
- 3. Authorize the business listed in Exhibit '4c-E' to receive a transitional electricity discount.

These actions have been recommended and/or approved by the Economic Development Power Allocation Board ('EDPAB') at its July 28, 2014 meeting.

BACKGROUND

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

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

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

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

RNY, as the new economic development power program unrelated to the previous Power for Jobs ('PFJ') and Energy Cost Savings Benefit ('ECSB') programs, required customers participating in such programs on its sunset date on June 30, 2012, to apply for RNY in order to be considered for a RNY Power allocation. All RNY applications are considered solely on their merits under the criteria established by the RNY legislation.

PFJ and ECSB customers who submitted applications prior to June 30, 2012 and who did not receive a RNY Power allocation were considered for the transitional electricity discount ('TED'). Pursuant to section 188-a of the economic development law, the Authority is authorized, as deemed feasible and advisable by the Trustees, to

provide such TED as recommended by EDPAB. The amount of the TED for the period of July 1, 2012 through June 30, 2014 shall be equivalent to 66% of the unit (per kilowatt-hour) value of the savings received by the applicant under the PFJ or ECSB during the 12 months ending on December 31, 2010. The amount of the TED for the period July 1, 2014 through June 30, 2016 shall be equivalent to 33% of the unit (per kilowatt-hour) value of the savings received by the applicant under the PFJ or ECSB during the 12 months ending on December 31, 2010.

As part of Governor Andrew M. Cuomo's initiative to foster business activity and streamline economic development, applications for all statewide economic development programs, including the RNY Power Program, have been incorporated into a single on-line Consolidated Funding Application ('CFA') marking a fundamental shift in how State economic development resources are marketed and allocated. Beginning in September 2011, the CFA was available to applicants. The CFA continues to serve as an efficient and effective tool to streamline and expedite the State's efforts to generate sustainable economic growth and employment opportunities. All applications that are considered for an RNY Power allocation are submitted through the CFA process.

Applications for RNY Power are subject to a competitive evaluation process and are evaluated based on the following criteria set forth in the statutes providing for the RNY Power Program (the 'RNY Statutes'):

- '(i) the significance of the cost of electricity to the applicant's overall cost of doing business, and the impact that a recharge New York power allocation will have on the applicant's operating costs;
- (ii) the extent to which a recharge New York power allocation will result in new capital investment in the state by the applicant;
- (iii) the extent to which a recharge New York power allocation is consistent with any regional economic development council strategies and priorities;
- (iv) the type and cost of buildings, equipment and facilities to be constructed, enlarged or installed if the applicant were to receive an allocation;
- (v) the applicant's payroll, salaries, benefits and number of jobs at the facility for which a recharge New York power allocation is requested;
- (vi) the number of jobs that will be created or retained within the state in relation to the requested recharge New York power allocation, and the extent to which the applicant will agree to commit to creating or retaining such jobs as a condition to receiving a recharge New York power allocation;
- (vii) whether the applicant, due to the cost of electricity, is at risk of closing or curtailing facilities or operations in the state, relocating facilities or operations out of the state, or losing a significant number of jobs in the state, in the absence of a recharge New York power allocation;
- (viii) the significance of the applicant's facility that would receive the recharge New York power allocation to the economy of the area in which such facility is located;
- (ix) the extent to which the applicant has invested in energy efficiency measures, will agree to participate in or perform energy audits of its facilities, will agree to participate in energy efficiency programs of the authority, or will commit to implement or otherwise make tangible investments in energy efficiency measures as a condition to receiving a recharge New York power allocation;
- (x) whether the applicant receives a hydroelectric power allocation or benefits supported by the sale of hydroelectric power under another program administered in whole or in part by the authority;
- (xi) the extent to which a recharge New York power allocation will result in an advantage for an applicant in relation to the applicant's competitors within the state; and

(xii) in addition to the foregoing criteria, in the case of a not-for-profit corporation, whether the applicant provides critical services or substantial benefits to the local community in which the facility for which the allocation is requested is located.'

Based on the evaluation of these criteria, the applications were scored and ranked. Evaluations also considered scores provided by the relevant Regional Economic Development Council under the third and eighth criteria.

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

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

RNY Power allocations have been awarded by the Trustees on eight prior occasions spanning from April 2012 through March 2014. There is currently 63 MW of unallocated RNY Power of the 710 MW block made available for business 'retention' purposes. Of that 710 MW retention block, 100 MW was set aside for not-for-profit corporations and small businesses, of which 7.7 MW is available to allocate to such entities. Lastly, there is 121.3 MW of unallocated RNY Power of the 200 MW block made available for business 'expansion' purposes. These figures reflect Trustee actions on RNY Power applications taken prior to any actions the Trustees take today.

DISCUSSION

1. Retention-Based RNY Power Allocations – Action Item

The Trustees are asked to address applications submitted via the CFA process for RNY Power retention-based allocations. Consistent with the evaluation process as described above, EDPAB recommended at its July 28, 2014 meeting that RNY Power retention allocations be awarded to the businesses listed in Exhibit '4c-A.' Each business has committed to create or retain jobs in New York State and to make capital investments in exchange for the recommended RNY Power allocations.

The RNY Power 'retention' allocations identified in Exhibit '4c-A' are each recommended for a term of seven years. An allocation recommended by EDPAB qualifies the subject applicant to enter into a contract with the Authority for the purchase of the RNY Power. The Authority's standard RNY Power contract template, approved by the Trustees at their March 27, 2012 meeting, contains provisions addressing such things as effective periodic audits of the recipient of an allocation for the purpose of determining contract and program compliance, and for the partial or complete withdrawal of an allocation if the recipient fails to maintain mutually agreed upon commitments, relating to among other things, employment levels, power utilization, and capital investments. In addition, there is a requirement that a recipient of an allocation perform an energy efficiency audit at its facility not less than once during the first five years of the term of the allocation.

As noted in Exhibit '4c-A,' some of these applicants are also being recommended for expansion-based allocations, having satisfied the criteria for both components of the RNY Power Program.

2. Expansion-Based RNY Power Allocations – Action Item

The Trustees are also asked to address applications submitted for RNY Power expansion-based allocations via the CFA process which request allocations from the 200 MW block of RNY Power dedicated by statute for 'forprofit' businesses that propose to expand existing businesses or create new business in the State. These applications

sought a RNY Power allocation for either (i) expansion only, in the case of a new business or facility, or (ii) expansion *and* retention, in the case of an existing business. EDPAB recommended at its July 28, 2014 meeting that RNY Power expansion-based allocations be made to the businesses listed in Exhibit '4c-B.' Each such allocation would be for a term of seven years.

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

The respective amounts of the expansion-related allocations listed in Exhibit '4c-B' are largely intended to provide approximately 70% of the individual expansion projects' estimated new electric load. Because these projects have estimated new electric load amounts, and to ensure that an applicant's overestimation of the amount needed would not cause that applicant to receive a higher proportion of RNY Power to new load, the allocations in Exhibit '4c-B' are recommended based on an 'up to' amount basis. Each of these applicants would be required to, among other commitments, add the new electric load as stated in its application, and would be allowed to use up to the amount of their RNY Power allocation in the same proportion of the RNY Power allocation to requested load as stated in Exhibit '4c-B.' The contracts for these allocations would also contain the standard provisions previously summarized in the last paragraph of Section 1 above.

3. <u>Ineligibility Determination – Informational Item</u>

In the process of reviewing the current round of applications for RNY Power, EDPAB determined that the applicants listed on Exhibit '4c-C' either (i) seek RNY Power for a business that constitutes a retail business as defined by EDPAB, or (ii) do not otherwise meet the definition of 'eligible applicant.' In either case, the applicant is not eligible to receive RNY Power. No action by the Trustees is required on these applications.

4. Applications Not Considered – Informational Item

As indicated on Exhibit '4c-D,' EDPAB determined as of the date of its meeting not to consider eight pending applications for RNY Power allocations. The applications were not considered for one or more of the following reasons: (i) the application was withdrawn; (ii) the applicant does not have a demand meter; and/or (iii) the applicant was not responsive to outreach, leaving the application currently incomplete. No action by the Trustees is required on these applications.

5. Transitional Electric Discount – Action Item

As noted above, PFJ and ECSB benefit recipients who applied for RNY Power prior to those programs' sunset date, June 30, 2012, but who were not awarded an allocation may be considered for a TED under Chapter 60. At its June 26, 2012 meeting, EDPAB recommended and the Trustees approved TEDs for 95 applicants. At its September 24, 2012 meeting, EDPAB recommended and the Trustees approved TEDs for 5 additional applicants.

Staff has identified one additional applicant, listed in Exhibit '4c-F' to be reconsidered for a TED. Originally, this company had one allocation of PFJ distributed to several of its facilities in New York City. The company applied for RNY Power prior to June 30, 2012 with individual applications for its multiple facilities. The RNY application for which the TED is now being recommended was initially not recommended for an RNY Power allocation but also inappropriately determined to not be eligible for TED. Upon the applicant's request, staff has reviewed and confirmed that the facility identified in the RNY application was receiving PFJ benefits from the original PFJ allocation, in the form of a PFJ electricity savings reimbursement.

Accordingly, staff confirmed that this PFJ benefit recipient applied for RNY Power prior to the programs' sunset date, and was not awarded a RNY Power allocation, and therefore should be considered for a TED. At its meeting of July 28, 2014, EDPAB recommended to the Trustees that this applicant be provided with a TED.

RECOMMENDATION

The Manager, Business Power Allocations and Compliance recommends that the Trustees: (1) approve the allocations of RNY Power for retention purposes to the businesses listed in Exhibit '4c-A' as indicated therein; (2) approve the allocations of RNY Power for expansion purposes to the businesses listed in Exhibit '4c-B' as indicated therein; and (3) authorize the business listed in Exhibit '4c-E' to receive a transitional electricity discount as indicated therein.

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

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

WHEREAS, the Economic Development Power Allocation Board ("EDPAB") has recommended that the Authority award Recharge New York ("RNY") Power allocations for retention purposes to the applicants listed in Exhibit "4c-A" in the amounts indicated; and

WHEREAS, EDPAB has recommended that the Authority award RNY Power allocations for expansion purposes to the applicants listed in Exhibit "4c-B" in the amounts indicated; and

WHEREAS, EDPAB has recommended that the Authority provide the business listed in Exhibit "4c-E" with a transitional electricity discount ("TED");

NOW THEREFORE BE IT RESOLVED, That the Authority hereby authorizes the allocations of RNY Power for retention purposes to the applicants listed on Exhibit "4c-A" in accordance with the terms described in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority hereby authorizes the allocations of RNY Power for expansion purposes to the applicants listed on Exhibit "4c-B" in accordance with the terms described in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority hereby authorizes the business listed in Exhibit "4c-E" to receive a TED in accordance with the terms described in the foregoing report of the President and Chief Executive Officer; and be it further

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

5. **POWER PROCEEDS:**

Awards of Fund Benefits from the Western New York Economic Development Fund Recommended by the Western 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 Western New York Power Proceeds Allocation Board ('WNYPPAB') and approve the awards of Fund Benefits from the Western New York Economic Development Fund to NFIA Stakeholders Group, Inc. and Praxair, Inc., the eligible applicants listed in Exhibit '5-A,' and authorize the other actions described herein with respect to such applicants and recommended awards.

For informational purposes, Exhibit '5-B' lists applications that were deferred by the WNYPPAB for future consideration.

BACKGROUND

1. Western New York Power Proceeds Allocation Act

On March 30, 2012, Governor Cuomo signed into law the Western New York Power Proceeds Allocation Act (the 'Act'). The Act provides for the creation, by the Authority, of the Western New York Economic Development Fund. The Fund consists of the aggregate excess of revenues received by the Authority from the sale of Expansion Power ('EP') and Replacement Power ('RP') produced at the Niagara Power Project that was sold in the wholesale energy market over what revenues would have been received had such energy been sold on a firm basis to an eligible EP or RP customer under the applicable tariff or contract.

Under the Act, an 'eligible applicant' is a private business, including a not-for-profit corporation. 'Eligible projects' is defined to mean 'economic development projects by eligible applicants that are physically located within the State of New York within a thirty-mile radius of the Niagara Power Project located in Lewiston, New York that will support the growth of business in the state 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 for fund benefits; 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 western New York state tourism and business; and energy-related projects.

Eligible projects do not include 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.

Fund Benefits have been provided to successful eligible applicants in the form of grants. It is anticipated that Fund Benefits will be disbursed as reimbursement for expenses incurred by an Eligible Applicant for an Eligible Project.

At least 15% percent of Fund Benefits must be dedicated to eligible projects which are 'energy-related projects, programs and services,' which is '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.'

Allocations of Fund Benefits may only be made on the basis of moneys that have been deposited in the Fund. No award may encumber future funds that have been received but not deposited in the Fund.

2. Western New York Power Proceeds Allocation Board

Under the Act, the WNYPPAB is charged with soliciting applications for Fund Benefits, reviewing applications, making eligibility determinations, and evaluating the merits of applications for Fund Benefits. WNYPPAB uses the criteria applicable to EP, RP and Preservation Power ('PP'), and for revitalization of industry as provided in Public Authorities Law §1005. Additionally, WNYPPAB is authorized to consider the extent to which an award of Fund Benefits is consistent with the strategies and priorities of the Regional Economic Development Council having responsibility for the region in which an eligible project is proposed. A copy of these criteria (collectively, 'Program Criteria'), adapted from WNYPPAB's 'Procedures for the Review of Applications for Fund Benefits,' is attached as Exhibit '5-C.'

The WNYPPAB met on March 4, 2013 and, in accordance with the Act, adopted by-laws, operating procedures, guidelines related to the application, and a form of application. At that time, WNYPPAB defined 'retail business' to mean a business that is primarily used in making retail sales of goods or services to customers who personally visit such facilities to obtain goods or services.

WNYPPAB also designated the Western New York Regional Director of Empire State Development Corporation ('ESD') to be its designee ('Designee') to act on its behalf on all administrative matters. Among other things, the Designee was authorized to preform analyses of the applications for Fund Benefits and make recommendations to WNYPPAB on the applications.

Under the Act, a recommendation for Fund Benefits by WNYPPAB 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 WNYPPAB. Upon a showing of good cause, the Authority has discretion as to whether to adopt the WNYPPAB's recommendation, or to award benefits in a different amount or on different terms and conditions than proposed by the WNYPPAB. 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. <u>Application Process</u>

In an effort to provide for the efficient review of applications and disbursement of Fund Benefits, the WNYPPAB established a schedule of dates through the end of 2014 on which the WNYPPAB would meet to consider applications. At this time, applications are being accepted on a rolling basis. In addition, the application process was promoted through a media release and with assistance from state and local entities, including the Western New York and Finger Lakes Regional Economic Development Councils, the Empire State Development Corporation and other local and regional economic development organizations within the State. A webpage was created that is hosted on WWW.NYPA.GOV/WNYPPAB with application instructions, a link to the approved application form and other program details including a contact phone number and email address staffed by the Western New York Empire State Development regional office.

DISCUSSION

For this seventh round of WNYPPAB action, the WNYPPAB considered five applications seeking more than \$6.4 million in Fund Benefits. WNYPPAB's staff analyzed the applications and made recommendations to WNYPPAB concerning each of the applications based on eligibility requirements and Program Criteria. Copies of the recommendations from staff to the WNYPPAB regarding recommended awards of Fund Benefits can be found in Exhibit '5-D.'

At its June 23, 2014 meeting, the WNYPPAB took the following actions on applications for Fund Benefits:

1. Recommendations for Awards of Fund Benefits

The WNYPPAB is recommending to the Trustees that the applications listed on Exhibit '5-A' receive an award of Fund Benefits in the amounts indicated. The applicants have indicated that the proposed projects would directly create or retain approximately 1,376 jobs in Western New York. The total to be expended on the proposed projects is expected to exceed \$39 million. These two recommendations are presently before the Trustees for consideration.

Given the nascent stage of the proposed projects, it was not possible at this time to identify all of the terms and conditions that would be applicable to each award and memorialized in an Award Contract. With the Trustees' authorization, it is anticipated that the Authority, in consultation with ESD, will negotiate final terms and conditions with successful applicants after receipt of more detailed information concerning the projects and proposed schedules. In addition to appropriate business terms, staff anticipates that Award Contracts will contain provisions for periodic audits of the successful applicant 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 the applicant fails to maintain agreed-upon commitments, relating to, among other things, employment levels and/or project element due dates.

2. Other WNYPPAB Determinations

The following information is being provided to the Trustees for their information only. No action is required by the Trustees with respect to this matter:

- Exhibit '5-B' lists applications that were deferred for future consideration.

RECOMMENDATION

The Vice President, Marketing recommends that:

- (1) the Trustees accept the recommendations of the Western New York Power Proceeds Allocation Board ('WNYPPAB') and make awards of Fund Benefits to NFIA Stakeholders Group, Inc. and Praxair, Inc., in the amounts identified in Exhibit '5-A,' conditioned upon an agreement to be negotiated with each applicant on the final terms and conditions that would be applicable to each award to be contained in an Award Contract approved by the President and Chief Executive Officer and approved by the Executive Vice President and General Counsel as to form:
- (2) the Senior Vice President Economic Development and Energy Efficiency, or his designee(s), in consultation with ESD, be authorized to negotiate with the applicants concerning such final terms and conditions that will be applicable to the awards; and
- (3) the Senior Vice President Economic Development and Energy Efficiency, or his designee, be authorized to execute, on behalf of the Authority, Award Contracts for the awards subject to the foregoing conditions.

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

Mr. John Giumarra provided highlights of staff's recommendation to the Trustees. In response to a question from Chairman Koelmel, Mr. Giumarra said the \$22 million available to be awarded is as of today.

Responding to further questioning from Chairman Koelmel, Mr. Giumarra said the Authority is in discussion with ESD regarding options to stimulate interest in the program such as doing more active marketing.

President Quiniones added that the Authority will work more closely with ESD and the Western New York

Regional Development Council to increase the pool of potential applicants.

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

WHEREAS, the Western New York Power Proceeds Allocation Board ("WNYPPAB") has recommended that the Authority make awards of Fund Benefits from the Western New York Economic Development Fund ("Fund") to NFIA Stakeholders Group, Inc. and Praxair, Inc., the eligible applicants listed in Exhibit "5-A";

NOW THEREFORE BE IT RESOLVED, That the Authority hereby accepts the recommendation of the WNYPPAB and authorizes the awards of Fund Benefits to the applicants and in the amounts listed in Exhibit "5-A," conditioned upon an agreement between the Authority and each applicant on the final terms and conditions that would be applicable to each 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 and by the Executive Vice President and General Counsel as to form; and be it further

RESOLVED, That the Senior Vice President – Economic Development and Energy Efficiency, or his designee, in consultation with the Empire State Development Corporation, is authorized to negotiate with the successful applicants concerning such final terms and conditions that will be applicable to the awards; and be it further

RESOLVED, That the Senior Vice President – Economic Development and Energy Efficiency, or his designee, is authorized to execute, on behalf of the Authority, Award Contracts for the awards listed on Exhibit "5-A" subject to the foregoing conditions; 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.

6. <u>FINANCIAL MATTERS</u>:

Amendment to the Terms of a Memorandum of Understanding Concerning the Temporary Transfer of Funds to the State Treasury

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees are requested to approve and/or ratify an amendment to the terms of a Memorandum of Understanding between the State and the Authority, dated as of February 23, 2009 ('2009 MOU'), relating to a temporary intra-governmental transfer of assets from the Authority to the State. As discussed in detail below, the amendment would provide for a revised schedule for the return of one of two assets that were temporarily transferred to the State in accordance with the 2009 MOU. Copies of the 2009 MOU and the proposed amendment (entitled 'Amendment to Memorandum of Understanding,' dated as of April 24, 2014), are attached hereto as Exhibits '6-A' and '6-B,' respectively.

BACKGROUND

In light of the severe budget problems facing the State at the time, the Authority was authorized, in Chapter 2 of the Laws of 2009, as deemed feasible and advisable by the Trustees, to make certain voluntary contributions to the State's General Fund, as well as two separate temporary asset transfers to the State in the amounts of \$103 million and \$215 million (referred to in the 2009 MOU as 'Asset A' and 'Asset B', respectively). *See* 2009 MOU, p. 1 (recitals) and Appendix A.

As more specifically provided for in the 2009 MOU, the Authority agreed to transfer to the State an amount equal to Asset A (\$103 million) within 180 days of enactment of the 2009-10 State Budget, and transfer to the State an amount equal to Asset B (\$215 million) by March 27, 2009. 2009 MOU, Article II.

The State agreed to return Asset A not later than September 30, 2014, and return Asset B not later than September 30, 2017. The MOU also contains provisions to provide for the return of Asset A and Asset B or any portion thereof prior to these dates if specified conditions are satisfied. 2009 MOU, § 3.1, 2nd paragraph.

The State also agreed in the 2009 MOU to include in the Executive Budgets for the relevant time periods requested appropriations and other legislation relating to return of the assets in the form attached to the 2009 MOU. 2009 MOU, § 3.1 (1st paragraph and Appendix A and Appendix B).

The 2009 MOU also contains provisions relating to the nature of the State's agreement to return the Assets. See 2009 MOU, Article IV.

In February 2009, the Authority's Trustees authorized the execution of the 2009 MOU and approved the temporary asset transfer of an amount equal to Asset B (\$215 million), which transfer was completed by March 26, 2009.

The Trustees also authorized the second temporary asset transfer of an amount equal to Asset A (\$103 million) to be made within 180 days of the enactment of the 2009-2010 State Budget, with the condition that the payment of this latter amount would require Trustee reaffirmation prior to the actual transfer in order to confirm that the release of such funds remains 'feasible and advisable' and in conformance with the requirements of the Authority's Bond Resolution.

At the time, Authority Staff reviewed the effects of both the voluntary contributions and the asset transfer portions of the Governor's Executive Budget Plan against the Authority's expected cash position and reserve requirements. The primary business criteria used to evaluate the potential transfers are: (a) that the Authority maintains an adequate debt service coverage ratio (at or above the median coverage ratio for comparable wholesale public power systems); and (b) that the Authority maintains in total 100 days' worth of cash on hand to continue to

provide for adequate liquidity. Based on that review, the schedule of payments and transfers contemplated by the Governor's Executive Budget Plan were not expected to violate these criteria assuming the Authority achieves all its financial and operating goals during this period. At their July 28, 2009 meeting, the Trustees provided such reaffirmation and the second transfer was subsequently made.

DISCUSSION

In late 2013, the Division of the Budget asked the Authority whether it would be amenable to revising the 2009 MOU to provide for a scheduled return of an amount equal to Asset A over a five-year period in order to facilitate the State's financial planning. Authority staff agreed to this accommodation, subject to Trustee approval/ratification, and the Authority and the State, acting through the Director of the Budget, executed an 'Amendment to Memorandum of Understanding,' dated as of April 24, 2014 (the 'MOU Amendment'). The MOU Amendment provides that it is not effective until approved/ratified by the Trustees. MOU Amendment, ¶ 5.

In summary, the MOU Amendment ($see \ \P \ 1$) would replace Section 3.1 of the 2009 MOU with a new provision in which the State would agree, subject to appropriation by the State Legislature, to return Asset A to the Authority in five (5) annual installments, to be made no later than September 30th of each of the following five State fiscal years (2014-15 through 2018-19) and the following amounts:

| State Fiscal Year 2014-15: | \$18,000,000 |
|----------------------------|--------------|
| State Fiscal Year 2015-16: | \$21,000,000 |
| State Fiscal Year 2016-17: | \$21,000,000 |
| State Fiscal Year 2017-18: | \$21,000,000 |
| State Fiscal Year 2018-19: | \$22,000,000 |

Like the original provision, revised Section 3.1 provides for the return of either Asset A or B or any portion thereof prior to the dates indicated if specified conditions are satisfied. *See* MOU Amendment, p. 2 (3rd full paragraph). The MOU Amendment does not modify the State's agreement to return Asset B to the Authority not later than September 30, 2017.

The MOU Amendment modifies the appropriation language that the State would agree to include in the Executive Budget to reflect the payment schedule discussed above (attached to the MOU Amendment as Exhibit A).

Provisions of the 2009 MOU that are not specifically modified by the MOU Amendment remain in force and effect.

FISCAL INFORMATION

Based upon the Authority's financial plan projections, it is staff's determination that the State's partial repayment of the \$103 million temporary asset transfer by September 30, 2014 and subsequent installment payments by September 30th of each year 2015-2018, as contemplated by the MOU Amendment, do not adversely affect the Authority's capability of meeting its obligations with respect to its debt service payments or operating and capital program funding, nor does it affect an adequate service coverage ratio or the maintenance of 100 days cash on hand to continue to provide for adequate liquidity.

RECOMMENDATION

The Executive Vice President and Chief Financial Officer recommends that the Trustees ratify an amendment to the terms of the Memorandum of Understanding ('MOU') between the State and NYPA that provides for a new and specific repayment plan for the \$103 million temporary asset transfer approved by the Trustees in 2009 and furnished to the State's general fund in July 2009.

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

Mr. Thomas Davis provided highlights of staff's recommendation to the Trustees. In response to a question from Trustee Foster, Mr. Davis said the amended MOU's return of the \$103 million temporary asset through five annual payments does not incorporate any additional time value of money considerations.

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

RESOLVED, That the Trustees hereby approve and ratify the "Amendment to Memorandum of Understanding," dated as of April 24, 2014, which provides for, among other things, a revised schedule for the State's return of the Authority's \$103 million temporary asset transfer approved by the Trustees in 2009, as recommended in the foregoing report of the President and Chief Executive Officer; and be it further

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

7. <u>INFORMATIONAL ITEM:</u>

Strategic Initiative Business Plans – Process Excellence and Knowledge Management

"SUMMARY

This memorandum provides an informational item to the Trustees on the Authority's Process Excellence Business Plan (Exhibit '7-A') and Knowledge Management Business Plan (Exhibit '7-B').

BACKGROUND

The Authority's 2014 - 2019 Strategic Plan ('Plan') was adopted at the March 25, 2014 Trustees' meeting. The Plan was developed around three key themes that reflect the transformative change taking place in the energy industry and economy. These themes – Customer Empowerment, Infrastructure Modernization and Resource Alignment – are composed of six specific and actionable initiatives. Two of the Resource Alignment initiatives – Process Excellence and Knowledge Management, are being presented in this item. With the implementation of these business plans, staff is strengthening the Authority's foundation while allowing for the flexibility needed to successfully adapt to the change required by the 2014-2019 Strategic Plan.

DISCUSSION

The Process Excellence initiative, through the creation of a new business function, will embed in the organization a culture of process excellence and continuous improvement that is focused on reducing costs, waste, and environmental impact, while assessing and balancing risk.

The Knowledge Management initiative recognizes that access to the right information and knowledge are critical to an organization's success and will ensure the identification, preservation and sharing of these resources; the establishment of an enterprise-wide search mechanism for electronic content; the categorization, organization and consolidation of key topics and areas of information; and the sharing of vital information through knowledge exchange mechanisms and knowledge capture tools.

Mr. Lurie said two of the Authority's six initiatives, Knowledge Management and Process Excellence, would be presented to the Board. He said the two initiatives will require staffing and IT expenses. However, staff is not requesting funding for specific projects at this time. He then asked Maria He and Gerald McGill to make their presentations to the Board.

Process Excellence

Ms. Maria He, Project Manager for the Process Excellence Strategic Initiative, and team leader for the multiple departments in creating the business plan, made the following presentation to the Board.

"The Process Excellence initiative will:

- Provide a holistic approach to optimizing processes.
- Deliver streamlined and sustainable processes that balance cost efficiencies and risk for the benefit of our customers and all New Yorkers.

As we prepared the business plan for this initiative, Executive Management suggested more than 40 processes as potential candidates for review and improvement, indicating a very real opportunity for optimizing processes within NYPA.

One suggestion was Scheduling and Settlement, which includes Billing activities. For this process, there is evidence that an estimated \$750,000 per year could be recovered by identifying and correcting under-billings, and from reducing the number of hours needed to execute the process across multiple departments.

Process redesign could also, for example, automate a manual process by establishing an electronic approval workflow and audit trail that is consistent across several business units. This improvement would streamline and standardize the process, reduce time between hand-offs, and eliminate paper use, while providing increased controls.

In addition to speaking to our Executive Management, we also contacted other organizations, including other utilities, to discuss the effectiveness of process initiatives at those organizations. All the organizations we contacted experienced year after year savings that more than paid for their investments in process improvement programs.

All these organizations had implemented dedicated process improvement groups.

NYPA has pursued individual process improvement projects in the past that have been successful. However, establishing a dedicated process excellence group allows NYPA to do several things:

- We will identify and consistently apply a methodology,
- We will capture processes and document them in a library with a standard notation, for reuse
- We will address processes within enterprise frameworks, allowing redundancies and conflicting processes across departments to be more readily discovered. Frameworks also allow us to identify KPIs and benchmark against them.

We anticipate that expected benefits from this initiative will more than pay for the estimated costs. It's important to note that the costs depicted here are for the overall Process Excellence initiative, and not for each process improvement project.

As each process project is identified and scoped, the Process Excellence group will estimate the project's labor and technology costs, as well as the estimated benefits. This evaluation will help determine if a process project is viable.

We are already taking steps to make this initiative successful:

- We've developed Job descriptions for all three positions, and have started the hiring process for the Manager.
- We've also identified projects that are "quick wins". They will be kicked off this summer.
- Success will also require strong Executive Support and consistent communications and outreach events designed to inform all levels of the organization.

This initiative's long term success will depend on our ability to embed process excellence into NYPA's culture. We will do this through the use of "Change Agents" during each process improvement project.

Change Agents are members of the business unit that are experts in the process being reviewed. They will participate in process redesign, and gain knowledge of Process Excellence methods. Change Agents can then continuously improve processes even after the Process Excellence team has moved on. This will ensure that process improvement is embedded in our day-to-day work.

After all, to quote Aristotle – 'We are what we repeatedly do. Excellence, then, is not an act, but a habit.'"

In response to a question from Trustee Foster, Ms. He said staff had discussions with members of the Executive Management Committee and the process owners and participants in order to identify potential processes for improvement, time savings and estimated dollar savings. The process owners and participants assess the potential improvement projects. Responding to further questioning from Trustee Foster, Mr. Lurie said this is a conservative approach which is forward looking; following a benchmarking process, staff will come back to the Trustees for any necessary funding and justify that request on the basis of the benefits that project would create.

Responding to a question from Chairman Koelmel, Ms. He said this is not a cultural shift for the Authority. Setting up the Process Excellence group will allow the Authority to accomplish things that can cross business unit boundaries and allow it to implement repeatable methodologies and realize more benefits than it does with individual projects.

Knowledge Management

Mr. Gerald McGill made the following presentation to the Board:

"I'm excited to represent the knowledge management initiative team and share the vision of the business plan with you today.

First, I'd like to recognize the team made up of: Jasmine Long, Dennis Willette, and myself, Gerald McGill. This team worked under the leadership of Ed Fisher as the project manager, and Paul Tartaglia as the responsible executive.

NYPA faces many challenges in support of our updated mission and vision. The initiative and projects aim to address the challenges associated with knowledge lost from retirements, and the trend of millennial employees leaving organizations after just a few years.

We also realize that, Internally, NYPA utilizes disparate repositories of electronic content and selected projects to make finding that content more efficient, while also preparing for the vast amount of change facing the energy industry.

The business plan defines a vision for knowledge management that aims to embed it in all aspects of the organization.

As an example scenario, imagine an employee troubleshooting a circuit breaker fault where SF6 gas is in use. The employee will access one or more of the tools provided under the scope of knowledge management, which directs them to procedures identifying safety controls or personnel associated with the installation circuit breaker, aiding in an efficient resolution to the situation. The resulting "lessons-learned" are captured after the event and then included in the repositories for use again in the future.

Imagine a customer requesting support or asking about an Authority statute or policy. Suppose the employee is new to the organization or the request is for information outside their department.

The tools envisioned through this initiative, will connect the employee to digital resources and personnel so NYPA can quickly respond and improve customers' experiences.

These examples are used to illustrate the foundational support knowledge management can offer the forthcoming initiatives and the Authority in general.

The initiative team spent a large amount of time learning during the development of the business plan. We listened to subject matter experts and NYPA executives during the strategic planning workshops, interviewed internal employees, interviewed external professionals that have implemented knowledge management programs, conducted research, and utilized consulting services.

To ensure effective maintenance and continued success of the initiative's projects, it's recommended that a Knowledge Management Office comprised of several employees be created. At the onset, the initiative focuses on three dimensions of knowledge management with specific projects, where the greatest needs and opportunities for improvement exist.

The initiative details a plan for creating communities of practice. These groups provide a structured environment where employees at all levels of expertise can share knowledge on areas of similar responsibility. The primary goal of each community is to facilitate knowledge transfer on a proactive and continual basis. This will be supplemented by continuing the knowledge capture effort previously started within the human resources department.

The prior examples highlight an enterprise search capability across many of the existing electronic content repositories. This capability is also intended to complement another project, which is easily described as a tool similar to linked-in. This tool will enable employees to quickly identify experts within the company with a specific skill, having worked on a specific project, or experience with a customer.

The plan intends to deliver a resource we've called enterprise module. Enterprise module is an online portal that provides an interactive, diagrammatic representation of NYPA's business functions and the relationship that those functions have with each other.

In summary, these projects intend to quickly connect employees to electronic assets and subject matter expert employees, while also facilitating the transfer of knowledge and broaden employees understanding of the organization.

The costs listed in the table are incremental costs associated with the initiative and represent additional full-time employees and implementation project resources. In 2015, three of the projects will be started which is reflected in the more significant cost.

Quantitative benefits for the initiative are based on eliminating time lost by employees searching for information. While time savings doesn't directly result in funds received to the organization, it represents the scale and value of Authority employees being able to use their time more effectively.

The calculations used, balance "time lost and spent looking for information" from an internal survey and the independent research of APQC. Further, these benefits are incremental based on the assumption that adoption of the tools will improve as the initiative moves forward.

In addition to restoring time lost searching for information, the initiative anticipates benefits associated with reduction in errors, reduction in employees onboarding time and effort, mitigation of risk, and increased innovation & agility.

Ensuring success requires strong executive support, attention to corporate and facility culture, and appropriate change management practices. The chosen order of projects focus on quick-wins

aimed at gaining employee buy-in, and we've already set in motion some components of the initiative:

We are finalizing the job description for the manager position, and plan to begin the hiring process upon your review of the plan.

We've discussed the existing knowledge capture program with HR and are preparing for the knowledge management team to pick up where it left off.

Thank you for your time, and I'm happy to address any questions you might have."

Responding to a question from Vice Chair Mahoney, Mr. McGill said the Knowledge Management initiative team has taken into account the amount of time it is going to take employees to have a social network added to their other duties. However, HR already has systems that have information about employees, and so knowledge management will allow employees to carry the process forward.

Responding to a question from Trustee Kress, Mr. McGill said part of the expense of enterprise search is using taxonomy; most of the Authority's repositories support that ability and the Authority's Operations and Communications Business Units support it. There are outreach events planned throughout the organization to demonstrate its effectiveness.

In response to a question from Chairman Koelmel, Mr. Lurie said it is critical to institutionalize that knowledge particularly as personnel turnover accelerates.

8. **GOVERNANCE**:

a. Election of Executive Vice President and General Counsel

The Chairman of the Governance Committee submitted the following report:

"SUMMARY

The Trustees are requested to consider the election of Justin E. Driscoll as Executive Vice President and General Counsel of the Authority effective immediately.

BACKGROUND AND DISCUSSION

The election of non-statutory officers is governed by the Authority's By-laws. Article V, Section 3, requires the Governance Committee to make recommendations to the Board of Trustees on the election of non-statutory officers and their compensation. Article IV, Section 2, provides that non-statutory officers shall be elected by the Trustees upon the recommendation of the Governance Committee. Section 3 of the same Article provides that such non-statutory officers shall hold office until his successor is chosen and qualified or his earlier removal, resignation or death.

RECOMMENDATION

It is recommended by the Governance Committee that, pursuant to the Authority's By-laws, originally adopted in April 9, 1954 and last amended on March 27, 2012, Justin E. Driscoll be elected as Executive Vice President and General Counsel, effective immediately, to hold such office until his successor is chosen and qualified or his earlier removal, resignation or death.

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

Trustee Nicandri provided highlights of the recommendation to the Trustees. He said the Governance Committee approved the proposed resolution for the election of Mr. Justin Driscoll as Executive Vice President and General Counsel.

Chairman Koelmel welcomed Mr. Driscoll to the team.

The following resolution, as submitted by the Chairman of the Governance Committee, was unanimously adopted.

RESOLVED, That pursuant to Article IV, Section 2 of the Authority's By-Laws, Justin E. Driscoll is hereby elected as Executive Vice President and General Counsel, effective immediately, to hold office until his successor is chosen and qualified or his earlier removal, resignation or death.

b. Retirement Resolution - Arthur T. Cambouris

President Quiniones made the following remarks:

"Arthur Cambouris joined the Power Authority's Law Department in October of 1983 after working as an attorney in the New York City Legal Aid Society's Criminal Appeals Bureau and in private practice in the City.

Within little more than a year at NYPA, Arthur had been promoted to Assistant General Counsel. And in the decades that followed, he established himself as one of the most accomplished and influential attorneys in the Authority's history.

As a master litigator, negotiator and strategist, Arthur put his professional and personal stamp on virtually every critical legal issue that arose at NYPA during his tenure. As a fellow lawyer put it-- if it was important, you wanted Arthur in the room.

Arthur served most recently as the Authority's Acting Executive Vice President and General Counsel, meeting a major need for us and doing so with utmost distinction. He took on this role essentially as a favor to me and to the Authority at a time when he very much wanted to move ahead with his retirement. My sincere thanks to him for doing this--and for doing it so well. Eight days ago, Arthur's delayed retirement finally took effect. To no one's surprise, we already miss him.

I have here the following proposed resolution for the Trustees' consideration."

Trustee Nicandri said Mr. Cambouris has always been steadfast and straightforward and he always appreciated that. Trustee Foster said he will be missed tremendously and Chairman Koelmel thanked him for his many years of service to the Authority.

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

WHEREAS, Arthur T. Cambouris enlightened and inspired the New York Power Authority's Law Department during a career of nearly 31 years that was distinguished by his superior legal skills; his striking intelligence and boundless intellectual curiosity; and his singular gifts as a teacher, raconteur and conversationalist; and

WHEREAS, the acuity and artistry of Mr. Cambouris' briefs and oral arguments, along with his uncanny ability to analyze and clarify the most complex of matters; his unmatched talent for counseling and challenging his colleagues; and his unfailing insistence on probing strategies to the

deepest depths and executing them at the highest levels, earned him widespread recognition as a "Lawyer's Lawyer"; and

WHEREAS, in serving for much of his career as the head of NYPA's litigation group, Mr. Cambouris was responsible for a series of court and regulatory proceedings that resulted in landmark rulings in such vital areas as hydroelectric power rates and allocations and Native American land claims; and

WHEREAS, as an Assistant General Counsel for nearly a quartercentury and later as Deputy General Counsel, he also played prominent roles in transactions and negotiations on a wide range of critical issues that included, in part, value sharing agreements and other matters related to NYPA's sale of its nuclear power plants, major power purchase agreements and efforts to buttress New York State's electric transmission system; and

WHEREAS, in recognition of his exemplary insight, integrity and judgment and of his demonstrated abilities as a consummate corporate attorney able to balance legal requirements and organizational goals, Mr. Cambouris was, during three separate periods, called upon to serve as NYPA's Acting General Counsel, filling that position with his customary aplomb and effectiveness; and

WHEREAS, Mr. Cambouris relished the role of mentor to young attorneys, allowing them to take on important cases while nevertheless subjecting them to his rigorous questioning, demanding standards and incisive editorial comments; and

WHEREAS, beyond his professional prowess, Mr. Cambouris graced the Law Department and others with such benefits as his ready wit (generally best displayed after the morning hours); his words of the day; his widely shared views on restaurants, travel, and female fashion; and his unique ability to launch and maintain a discussion by posing and pursuing a provocative, if seemingly irrelevant, question; and

WHEREAS, following his most recent stint as Acting Executive Vice President and General Counsel, Mr. Cambouris has retired in anticipation of welcoming a second grandchild and pursuing his many and varied interests;

NOW THEREFORE BE IT RESOLVED, That the Trustees of the Power Authority of the State of New York convey their profound thanks to Arthur Cambouris for his immense contributions to the Authority and for the wise counsel that he provided to this Board and NYPA's senior management and that they wish him; his wife, Diana; and their family many years of health, happiness and ongoing personal and professional fulfillment.

July 29, 2014

9. <u>Motion to Conduct an Executive Session</u>

Mr. Chairman, I move that the Authority conduct an executive session pursuant to the Public Officers

Law of the State of New York section §105 to discuss an ongoing investigation, contract negotiations, labor

negotiations, and matters leading to the promotion or demotion of a particular person. Upon motion made and seconded an Executive Session was held.

10. <u>Motion to Resume Meeting in Open Session</u>

Mr. Chairman, I move to resume the meeting in Open Session. Upon motion made and seconded, the meeting resumed in Open Session.

11. COMMITTEE RECOMMENDATION:

Upstate New York Strategic Fuel Reserve Program

The Chairman of the Finance Committee submitted the following report:

"SUMMARY

The Trustees are requested to authorize the payment of up to \$10 million in funds to the New York State Energy Research and Development Authority ('NYSERDA') to support the State's Upstate Fuel Reserve initiative which NYSERDA will implement.

BACKGROUND

Superstorm Sandy, in 2012, damaged fuel terminals and shut down gasoline suppliers and stations, creating gaps in the supply of gasoline for use by first responders, utility repair crews (including NYPA crews), and victims of the storm, and hampered rescue and recovery efforts. The storm and associated flooding left large areas of the State without power.

In October 2013, Governor Andrew M. Cuomo launched the first State-based strategic gasoline reserve initiative, known as the 'Fuel NY' initiative ('Fuel NY'). The Fuel NY initiative, which includes a Downstate Strategic Gasoline Reserve and backup generator programs for strategic retail motor fuel stations ('DSGR'), is designed to mitigate fuel distribution disruptions in the region.

The State has determined to expand Fuel NY to establish an Upstate Strategic Fuel Reserve ('USFR') of refined products including gasoline and diesel, focused on ensuring fuel availability to emergency responder communities during a declared State energy emergency. The USFR will be designed to create physical fuel reserves in various regions of Upstate NY for the purpose of serving local emergency responders as a supplement to market deliveries that are maintained during emergency rescue and recovery efforts. At this time, it is anticipated that the geographic locations include the following Upstate New York economic regions: Capital District, Central New York, Finger Lakes, Mid-Hudson, Mohawk Valley, North Country, Southern Tier, and Western New York. Given its experience with the DSGR Initiative, NYSERDA will implement the USFR Initiative.

NYSERDA is currently seeking proposals from terminal owners and operators, wholesale fuel marketers, or any other entities that may be able to provide some or all of the following services: fuel purchase, transportation to designated storage facilities, and storage, for both regular grade finished motor gasoline (including ethanol) and diesel fuel. Additional services are expected to include, but are not limited to, wholesale fuel procurement and delivery to storage, fuel management, sales and distribution, product insurance, and any other ancillary services.

DISCUSSION

NYPA has been asked to provide up to \$10 million to support the USFR Initiative. Staff anticipates that such funding would be made available to NYSERDA during the Authority's 2014 fiscal year. NYSERDA would need to secure additional funding after NYPA funding is exhausted.

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. Any such contribution or transfer of funds must: (1) be authorized by law; (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'). In addition, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 is to be used as a reference point in considering any such payments or transfers.

NYPA supplies power to hundreds of public and private entities throughout Upstate NY, and therefore has a vital interest in seeing that safe and reliable electric service in the State is restored and maintained in the event of a

storm or other emergency. In an emergency, first responders and utility crews, including those who repair NYPA assets and other electricity assets, must have ready access to fuels which power the equipment needed for both rescue and recovery efforts as well as power restoration. Accordingly, in staff's view, the USFR Initiative supports NYPA's overall mission and is consistent with its legal authority to supply and, when necessary, restore power to its customers statewide.

Staff has reviewed the effects of the release of up to \$10 million at this time on the Authority's expected financial position and reserve requirements. These funds are not needed for any of the purposes set forth in the Bond Resolution. In addition, in accordance with the Board's Policy Statement, staff calculated the impact of this transfer amount on the Authority's debt service coverage ratio and determined it would not fall below the 2.0 reference point level. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to release \$10 million at this time.

If the Trustees approve the funding request, staff anticipates that NYPA and NYSERDA would enter into a memorandum of understanding relating to the USFR Initiative.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to transfer up to \$10 million to NYSERDA 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.

RECOMMENDATION

The Finance Committee recommends that the Trustees authorize, as feasible and advisable, the payment of up to \$10 million to NYSERDA.

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

Mr. Gerard Vincitore provided highlights of staff's recommendation to the Trustees. In response to a question from Chairman Koelmel, Mr. Vincitore said the Fuel NY initiative started in downstate New York with a NYSERDA funded program downstate for the Long Island market. The initiative being recommended by staff today will focus on the upstate region and is essentially Phase 2 of the Fuel NY initiative.

Responding to further questioning from Chairman Koelmel, Mr. Vincitore said NYPA's obligations under this agreement is only for the transfer of \$10 million. It is estimated that the \$10 million will be used to set up and manage the reserve for at least for one year; any ongoing expenses will be the obligation of NYSERDA.

NYPA has no ongoing responsibility within the program.

Responding to still further questioning from Chairman Koelmel, Mr. Vincitore said if a storm comes through, the first responder community will have access to the fuel reserve. They would have to pay for the fuel and it gets replenished.

Responding to a question from Trustee Kress, Mr. Vincitore reiterated that NYPA's responsibility extends to the transfer of the \$10 million; NYSERDA is responsible for the effective management of the \$10

million. The Authority is only funding the initial part of the program; any future obligations will be to NYSERDA's discretion and decision on how to fund those expenses.

Responding to a question from Trustee Nicandri, Mr. Vincitore said from the Authority's perspective it wants to make sure that in the case of an extreme situation, such as a storm, the state can recover from transmission outages and get the grid back up and running. Therefore, this will help the Authority's customers directly, but indirectly it benefits the state on the whole. Responding to further questioning from Trustee Nicandri, Mr. Vincitore said this recommendation is not a part of the budget that was adopted by the Board which included a voluntary contribution to the state for specific projects. However, it is included in the projected financials that were provided to the Board today.

The following resolution, as submitted by the Chairman of the Finance Committee, was unanimously adopted.

RESOLVED, That the Trustees hereby authorize a payment of up to \$10 million from the Operating Fund to New York State Energy Research and Development Authority ("NYSERDA") as discussed in the foregoing report of the Chairman of the Finance Committee; and be it further

RESOLVED, That the amount of up to \$10 million to NYSERDA described in the foregoing resolution 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 resolution, on the day of such payments, the Treasurer or the Deputy Treasurer shall certify that such monies are not then needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented; and be it further

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

12. <u>Next Meeting</u>

The Regular Meeting of the Trustees will be held on **September 30, 2014, at 11:00 a.m., at the Niagara Power Project, Lewiston, New York,** unless otherwise designated by the Chairman with the concurrence of the Trustees.

Closing

Upon motion made and seconded, the meeting was adjourned by the Chairman at approximately 1:00 p.m.

Karen Delince

Corporate Secretary

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EXHIBITS

For
July 29, 2014
Regular Meeting
Minutes

I. <u>Underwriters for Authority Debt Issuances</u> RFQ Q-14-5577MR

1. Senior Managers

Academy Securities One Chase Manhattan Plaza, 39th Floor New York, NY 10005

Bank of America Merrill Lynch One Bryant Park, 12th Floor New York, NY 10036

Barclays Capital Inc. 745 Seventh Avenue New York, NY 10019

Blaylock Beal Van, LLC 600 Lexington Avenue, 3rd Floor New York, NY 10022

Citigroup Global Markets Inc. 390 Greenwich Street, 2nd Floor New York, NY 10013

Duncan-Williams, Inc. 6750 Poplar Avenue Suite 300 Memphis, TN 38138

Estrada Hinojosa & Company, Inc. 230 Park Avenue, 10th Floor New York, NY 10169

Goldman, Sachs & Co. 200 West Street New York, NY 10282

J.P. Morgan Securities LLC 383 Madison Avenue, 8th Floor New York, NY 10179

Loop Capital Markets LLC 88 Pine Street, 25th Floor New York, NY 10005

Mesirow Financial, Inc. 666 Third Avenue, 14th Floor New York, NY 10017 Morgan Stanley & Co. LLC 1585 Broadway, 16th Floor New York, NY 10036

Ramirez & Co., Inc. 61 Broadway, Suite 2924 New York, NY 10006

Rice Financial Products Company 55 Broad Street, 27th Floor New York, NY 10004

Wells Fargo Bank, N.A.
375 Park Avenue, 6th Floor
New York, NY 10152

2. Co-Managers

BMO Capital Markets 3 Times Square, 28th floor New York, NY 10036

BNY Mellon Capital Markets, LLC 101 Barclay Street, 3rd Floor New York, NY 10286

CastleOak Securities L.P. 110 59th Street, 2nd Floor New York, NY 10022

Drexel Hamilton, LLC 77 Water Street Suite 201 New York, NY 10005

M&T Securities, Inc. 350 Park Avenue, 5th Floor New York, NY 10022

RBC Capital Markets, LLC 3 World Financial Center 200 Vesey Street New York, NY 10281

Roosevelt & Cross Incorporated One Exchange Plaza 55 Broadway, 22nd Floor New York, NY 10006

Siebert Brandford Shank & Co., L.L.C.

Exhibit A

100 Wall Street, 18th floor New York, NY 10005 TD Securities LLC 31 West 52nd Street New York, NY 10019

The Williams Capital Group, L.P. 650 Fifth Avenue, 11th Floor New York, NY 10019

3. Selling Group

Robert W. Baird & Co., Incorporated 380 Knollwood Street Suite 440 Winston-Salem, NC 27103

Backstrom McCarley Berry & Co., LLC 115 Sansome Street, Mezzanine A San Francisco, CA 94101

Cadwyn Point Partners LLC 26 Point Road Norwalk, CT 06854

Great Pacific Securities 151 Kalmus Drive Suite H8 Costa Mesa, CA 92626

NW Capital Markets Inc. 2 Hudson Place, 3rd Floor Hoboken, NJ 07030

Stern Brothers & Co. 8000 Maryland Avenue Suite 800 St. Louis, MO 63105

Amendment to Standby Rate Provisions of NYPA's Governmental Customer Service Tariffs - Notice of Proposed Rulemaking

Exhibit "A"

Trustee Meeting

July 29, 2014

Rider A – Standby Rate

A. Applicability

Applicable to Customers who would otherwise receive service under Service Classifications No. 65, 68, 69, 80, 82, 85, 91, 93 and 98 rates having generating facilities on their premises that are not in excess of eighty (80) megawatts, and which are interconnected with Authority through the Utility electric system. The nameplate rating of a Customer's on-site generation facilities must meet or exceed 15 percent of the Customer's maximum potential demand, consistent with the Utility tariff requirements.

Service under this Rider is limited to Customers who meet the requirements set forth in Rule 20 of Con Edison's Electric Tariff, P.S.C No. 10. Customers must also meet the requirements set forth in Service Class 11 of Con Edison's Electric Tariff, P.S.C No. 10 if they wish to receive compensation for Excess Energy from the Utility.

Customers receiving service under this Rider A may be required to pay for the installation and/or upgrade of equipment necessary to protect the safety or adequacy of electric service provided to other Customers, as set forth in Rule 20 and Service Class 11, if applicable, of the Utility tariff.

Customer shall provide upon request of the Authority all documentation necessary to bill the Customer under this Rider A, including but not limited to data necessary to determine Production Contract Standby Demand for each applicable Account, including load, generator, and interconnection data.

The Customer must also submit NYPA's Production Standby Service application to be considered. The application is available upon request. The Company reserves the right to limit service under this Rider.

B. Type of Service

NYPA will furnish power for standby service hereunder. The type of service supplied will depend upon the voltage available from Utility.

C. Definitions:

<u>Total Load:</u> The total amount of metered demand in kilowatts consumed by a Customer and recorded on each account's meter during each 30 minute interval in a billing period (as defined in section G of General Provisions), inclusive of kilowatts of power provided by the Authority and kilowatts of power generated by Customer's qualifying generating facility. For Customers with multiple Standby Accounts, Customer generation will be apportioned to each Account in accordance with the Utility tariff.

Production Contract Standby Demand: The Account's maximum Total Load in kilowatts from the preceding 12 months, or the months for which data is available if the Account has not been in service for 12 months. If insufficient history is available, or Account's Total Load is expected to change due to installation or removal of equipment, or Customer implementation of energy efficiency measures, the Authority will determine the Contract Demand after consulting with customer regarding project specifications and/or Account's past capacity needs. Customer may request in writing an adjustment to Contract Demand once per calendar year.

<u>As-Used Daily Standby Demand:</u> The demand in kilowatts that is metered or calculated for each day as the maximum positive difference between the Account's Total Load less the

Date of Issue:

Date Effective:

generation kilowatts allocated to the Account in any 30-minute interval of each day during the Billing Period. In no instance will the As-Used Daily Standby Demand be less than zero.

Excess Energy- Energy generated by the Customer that exceeds Customer's total energy usage in an interval and is exported to the Utility's system.

D. Rules of Service

All Accounts at the Customer's premises taking standby service shall have interval metering and shall be billed under applicable Service Class rates.

The Production minimum demand charge as discussed in Section VI. B of the Service Tariff will not apply under this Rider A.

Authority power delivered under this schedule shall not be used for resale or as a substitute for power contracted for or which may be contracted for under any other schedule of Authority tariff.

Adjustments for NYC Governmental Customers will occur in accordance with the Annual Planning and Pricing Process (described in their 2005 Long Term Agreements with Authority) to establish new rates effective January 1 of the following year.

Customer shall provide Authority with 30 days advance written notice of planned maintenance outages, specifying the starting date and duration of the planned outage

E. Determination of Production Demand Charges

The Production Standby Demand Charges in any Billing Period shall be the sum of the "Billed Contract Standby Demand Charge" and the "Billed Daily As-Used Standby Demand Charge" for the billing period.

Billed Production Contract Standby Demand Charge: shall be equal to the Production Contract Standby Demand determined for each Account multiplied by the applicable Production Contract Standby Demand Charge (see below). Where there are multiple Accounts, these values will then be summed.

Billed As-Used Daily Standby Demand Charge: Shall be the sum of the Account-level daily charges, calculated as the maximum As-Used Daily Standby Demand in each day during the Billing Period multiplied by the applicable As-Used Daily Standby Demand Charge.

Service Classification 65 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.260 | 0.250 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.276 | 0.265 |

Service Classification 68 Conventional

| | Low Tension | High |
|---|-------------|----------------------|
| Production Contract Standby Demand Charge (\$/kW) | 0.470 | Tension 0.443 |
| | | |

Date of Issue:

Date Effective:

| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.500 | 0.471 |
|---|-------|-------|
| | | |

Service Classification 68 Time of Day

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.427 | 0.402 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.453 | 0.427 |

Service Classification 69 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.356 | 0.336 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.378 | 0.357 |

Service Classification 69 Time of Day

| | Low Tension | High |
|---|-------------|------------------|
| Production Contract Standby Demand Charge (\$/kW) | 0.388 | Tension 0.372 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.412 | 0.395 |

Service Classification 80 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.053 | 0.050 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.056 | 0.053 |

Service Classification 82 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.317 | 0.298 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.337 | 0.317 |

Service Classification 85 Conventional

Date of Issue:

| Production Contract Standby Demand Charge (\$/kW) | 0.401 | 0.389 |
|---|-------|-------|
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.426 | 0.413 |

Service Classification 91 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.303 | 0.286 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.322 | 0.304 |

Service Classification 91 Time of Day

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.409 | 0.386 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.435 | 0.410 |

Service Classification 93 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.241 | 0.229 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.256 | 0.244 |

Service Classification 98 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.145 | 0.136 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.154 | 0.145 |

Service Classification 98 Time of Day

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.304 | 0.291 |
| As-Used Daily Standby Demand Charge (\$/kW-day) | 0.323 | 0.310 |

Date of Issue:

F. Production Energy Service

Authority will provide energy service to the Customer under the production service class energy rates applicable to the Customer's Account(s).

G. Excess Energy Compensation

The Authority will assist the Customer in applying to the Utility to receive compensation for Excess Energy exported into the Utility system.

H. Delivery Service Charges

The rates for Delivery Service will be a direct pass through the currently effective Utility tariff rates, including all Special Provisions, applicable to the Customer, as amended from time to time by Utility.

I. Metering

The Customer's metering, for each account, will conform to the Utility's metering provisions,

In the event the Customer requests an additional meter for standby service, the Customer shall pay the cost of the meter and installation.

J. Power Factor Correction

The Power Factor will be handled by the Utility in accordance with the Utility tariff or any applicable agreements between the Customer and Utility.

Date of Issue:

Rider A – Standby Rate

A. Applicability

Applicable to Customers who would otherwise receive service under Service Classifications No. 68, 69, 82 rates having generating facilities on their premises that are not in excess of eighty (80) megawatts, and which are interconnected with Authority through the Utility electric system. The nameplate rating of a Customer's on-site generation facilities must meet or exceed 15 percent of the Customer's maximum potential demand, consistent with the Utility tariff requirements.

Service under this Rider is limited to Customers who meet the requirements set forth in Rule 20 of Con Edison's Electric Tariff, P.S.C No. 10. Customers must also meet the requirements set forth in Service Class 11 of Con Edison's Electric Tariff, P.S.C No. 10 if they wish to receive compensation for Excess Energy from the Utility.

Customers receiving service under this Rider A may be required to pay for the installation and/or upgrade of equipment necessary to protect the safety or adequacy of electric service provided to other Customers, as set forth in Rule 20 and Service Class 11, if applicable, of the Utility tariff.

Customer shall provide upon request of the Authority all documentation Necessary to bill the Customer under this Rider A, including but not limited to data necessary to determine Production Contract Standby Demand for each applicable Account, including load, generator, and interconnection data.

The Customer must also submit NYPA's Production Standby Service application to be considered. The application is available upon request. The Company reserves the right to limit service under this Rider

B. Type of Service

NYPA will furnish power for standby service hereunder. The type of service supplied will depend upon the voltage available from Utility.

C. Definitions:

<u>Total Load:</u> The total amount of metered demand in kilowatts consumed by a Customer and recorded on each Account's meter during each 30 minute interval in a billing period (as defined in section G of General Provisions), inclusive of kilowatts of power provided by the Authority and kilowatts of power generated by the Customer's qualifying generating facility. For Customer's with multiple Standby Accounts, Customer generation will be apportioned to each Account in accordance with the Utility tariff.

<u>Production Contract Standby Demand:</u> The Account's maximum Total Load in kilowatts from the preceding 12 months, or the months for which data is available if the account has not been in service for 12 months. If insufficient history is available, or Account's Total Load is expected to change due to installation or removal of equipment, or Customer implementation of energy efficiency measures, the Authority will determine the Contract Demand after consulting with the Customer regarding project specifications and/or Account's past capacity needs. Customer may request in writing an adjustment to Contract Demand once per calendar year.

As-Used Standby Demand: The demand in kilowatts that is metered or calculated for each day as the positive difference between the Account's Total Load less the generation kilowatts allocated to the Account in any 30-minute interval of each day during the Billing Period.

Date of Issue:

Date Effective:

In no instance will As-Used Daily Standby Demand be less than zero.

Excess Energy- Energy generated by the Customer that exceeds Customer's total energy usage in an interval and is exported to the Utility's system.

D. Rules of Service

All Accounts at the Customer's premises taking standby service shall have interval metering and shall be billed under applicable Service Class.

The Production minimum demand charge as discussed in Section VI. B of the Service Tariff will not apply under this Rider A.

Authority power delivered under this schedule shall not be used for resale or as a substitute for power contracted for or which may be contracted for, under any other schedule of Authority tariff.

Adjustments for WES Governmental Customers will occur in accordance with the provisions of the 2007 Supplemental Agreement with Authority to establish new rates effective January 1 of the following year.

Customer shall provide Authority with 30 days advance written notice of planned maintenance outages, specifying the starting date and duration of the planned outage

E. Determination of Production Demand Charges

The Production Standby Demand Charges in any billing period shall be the sum of the "Billed Contract Standby Demand Charge" and the "Billed Daily As-Used Standby Demand Charge" for the billing period.

Billed Production Contract Standby Demand Charge: shall be equal to the Production Contract Standby Demand determined for each Account multiplied by the applicable Production Contract Standby Demand Charge (see below). Where there are multiple Accounts, these values will then be summed.

Billed As-Used Daily Standby Demand Charges: Shall be the sum of the Account-level daily charges, calculated as the maximum As-Used Daily Standby Demand in each day during the Billing Period multiplied by the applicable As-Used Daily Standby Demand Charge.

Service Classification 68 Conventional

| | Low Tension | High Tension |
|---|-------------|-----------------|
| Production Contract Standby Demand Charge (\$/kW) | 0.068 | 0.064 |
| As-Used Standby Demand Charge (\$/kW-day) | 0.072 | 0.068 |

Service Classification 69 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.054 | 0.051 |
| As-Used Standby Demand Charge (\$/kW-day) | 0.057 | 0.054 |

Service Classification 69 TOD

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.077 | 0.074 |
| As-Used Standby Demand Charge (\$/kW-day) | 0.082 | 0.079 |

Service Classification 82 Conventional

| | Low Tension | High |
|---|-------------|---------|
| | | Tension |
| Production Contract Standby Demand Charge (\$/kW) | 0.068 | 0.064 |
| As-Used Standby Demand Charge (\$/kW-day) | 0.072 | 0.068 |

F. Production Energy Service

Authority will provide energy service to the Customer under the production service class energy rates applicable to the Customer's Account(s).

G. Excess Energy Compensation

The Authority will assist the Customer in applying to the Utility to receive compensation for Excess Energy exported into the Utility System.

H. Delivery Service Charges

The rates for Delivery Service will be a direct pass through the currently effective Utility tariff rates, including all Special Provisions, applicable to the Customer, as amended from time to time by Utility.

I. Metering

The Customer's metering, for each account, will conform to the Utility's metering provisions, In the event the Customer requests an additional meter for standby service, the Customer shall

J. Power Factor Correction

pay the cost of the meter and installation.

The Power Factor will be handled by the Utility in accordance with the Utility tariff or any applicable agreements between the Customer and Utility.

Firm Market Power Service Tariff Amendment – Notice of Proposed Rulemaking

Exhibit "A"
Draft: Service Tariff No. 1C



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

Schedule of Rates for Sale of Firm Market Power

Service Tariff No. 1C

(Supersedes ST-1 & ST-1B)

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Schedule of Rates for Sale of Firm Market Power

I. Applicability

To direct sales of Firm Market Power in total or in part to a Customer for firm Electric Service.

II. Frequently Used Abbreviations and Terms

kW kilowatt(s)kWh kilowatt-hour(s)

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

organization

OATT NYISO Open Access Transmission Tariff

PAL New York Public Authorities Law

ROS Rest of StateRY Rate Year

UCAP Unforced Capacity

<u>Adjusted Energy Usage</u>: This term has the meaning provided for in Section IV.B of this Service Tariff.

Allocation: The amount of Market Power allocated to the Customer by the Authority.

<u>Agreement</u>: An executed agreement between the Authority and a Customer setting forth the terms and conditions applicable to the allocation and sale of Market Power to the Customer, including any amendments made to the agreement.

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

Billing Demand: The Contract Demand.

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

<u>Billing Period</u>: 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 receiving the Firm Market Power allocation is located.

<u>Contract Demand</u>: The amount of Firm Market Power allocated to the Customer which the Customer agrees to take and pay for in accordance with the Agreement. The Contract Demand shall equal the Allocation.

<u>Customer</u>: A customer that has received an Allocation and who purchases such Allocation from the Authority.

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

<u>Facility</u>: The Customer's place of business specified in the Agreement that will receive or is receiving the Allocation.

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

<u>Firm Market Power:</u> Firm capacity (kW) supplied by Authority to the Customer from market sources and/or the Authority's non-Hydro Project-based resources as determined to be available for such use by the Authority.

<u>Market Capacity Charge</u>: This term has the meaning provided for in Section III.A.1 of this Service Tariff.

<u>Market Energy Charge</u>: This term has the meaning provided for in Section III.A.2 of this Service Tariff.

<u>Minimum Demand Charge</u>: This term has the meaning provided for in Section III.B.7 of this Service Tariff.

NYISO Day-Ahead Market: This term has the meaning provided for in the NYISO Tariffs.

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

NYPA Administrative Charge: This term has the meaning provided for in Section III.A.3 of this Service Tariff.

Real-Time Market: This term has the meaning provided for in the NYISO Tariffs.

Rate Year: Rate Year or RY: The July Billing Period through the June Billing Period of the following year, beginning July 2012, subject to change based on the Authority's sole discretion.

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

Service Tariff: This service tariff, denominated as "Schedule of Rates for Sale of Firm Market Power," as amended from time to time by the Authority.

<u>Takedown</u>: The portion of an Allocation the Customer requests to be scheduled for a specific period as provided for in the Agreement.

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

Zone: Geographical regions within New York State (sometimes referred to as "load zones" or "energy regions") designated by the NYISO and identified by letter (A-K) that are used to facilitate energy transactions and administration of the State's power grid.

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

Unless otherwise indicated, all other capitalized terms and abbreviations used but not defined in this Service Tariff shall have the meaning as set forth in the Agreement.

III. Monthly Rates and Related Charges

A. Monthly Rates and Charges

Subject to the other provisions of this Service Tariff, the monthly rates and charges to be charged to the Customer by the Authority will be set as follows:

1. Market Capacity Charge

The Market Capacity Charge will be based on the following:

- a) The amount of capacity (kW) the Authority needs to secure on the Customer's behalf as required by the NYISO's rules. This is currently expressed by the NYISO as the Unforced Capacity or "UCAP" obligation. The UCAP obligation is inclusive of any locational requirements and adjustments for reserves needed to meet the installed reserve margin.
 - Capacity can be secured through a combination of sources consisting of the bilateral contracts, NYISO auctions, or any other means as determined to be most appropriate by the Authority in its sole discretion.
- b) The market capacity rate based on the actual monthly capacity price paid by the Authority in securing the NYISO UCAP obligation for the capacity (kW) or any other market capacity rate determined to be the most applicable by the Authority in its sole discretion.
- c) The market capacity rate multiplied by the monthly capacity (kW) quantity will yield the applicable Market Capacity Charge.

2. Market Energy Charge

The Market Energy Charge will be based on the actual costs incurred by the Authority in each Billing Period, as described below:

- a) The Authority may procure Firm Market Energy using short and long-term purchases, including purchases from the NYISO Day-Ahead Market or Real-Time Market, or through a purchase power agreement to the extent the Authority deems them appropriate. Financial hedging instruments may be used for the purposes of mitigating the risk in price movements. Any purchases of Firm Market Energy will be made in whichever portfolio combination the Authority deems to be appropriate in its sole discretion.
- b) The Customer shall be responsible for payment of any and all Market Energy Charges incurred by the Authority for procuring Firm Market Energy on the Customer's behalf. Such charges may include, but are not limited to, forward energy purchases, balancing energy transactions, financial hedging costs or any third party costs.

c) Upon request by the Customer, the Authority will report the kilowatt-hours associated with the Market Energy Charge.

If there is more than Firm Market Power being billed to the Customer, the Authority will determine the apportionment of the kilowatt-hours on a case by case basis. Generally, the total number of kilowatt-hours recorded on the meter shall be multiplied by a percentage based on:

- 1. The methodology provided for in any agreement between the Authority and the Customer's local electric utility for delivery of Firm Market Energy and/or
- 2. The methodology provided for in Section IV.B of this Service Tariff.

3. NYPA Administrative Charge

The NYPA Administrative Charge will be based on the following:

- a) The amount of the highest interval integrated demand (kW) during each Billing Period recorded on the Customer's meter multiplied by a percentage based on the methodology provided for in any agreement between the Authority and the Customer's local electric utility for delivery of Market Power. Demand (kW) may not exceed the amount of the Contract Demand.
- b) Monthly NYPA Administrative rate set by the Authority each Rate Year based on any associated overhead and other assigned costs as determined appropriate by the Authority.
- c) The NYPA Administrative rate multiplied by the demand (kW) allocated to the Customer will yield the applicable NYPA Administrative Charge.

B. Other Charges

The Customer shall be responsible for payment of such other charges (collectively, "Other Charges") as a separate charge from the monthly rates and charges to the extent they apply to such Customer.

1. NYISO Transmission Related Charges ("NYISO Charges")

NYISO Charges for services associated with the Authority's responsibilities as load serving entity for the Customer, provided by the NYISO pursuant to NYISO Tariffs, NYISO-related agreements and NYISO procedures associated with the Authority's provision of Electric Service to the Customer. NYISO Charges to be charged to the Customer by the Authority include:

- **a.** Charges for Ancillary Services 1 through 6 and any new ancillary services as may be provided in accordance with NYISO Tariffs;
- **b.** Transmission Usage Charges ("TUC") which are Marginal Losses and Congestion costs;
- c. The New York Power Authority "Transmission Adjustment Charge" or "NTAC";

- **d.** Congestion costs, less any associated grandfathered Transmission Congestion Contracts ("TCCs") as provided in Attachment K of the OATT NYISO wide uplift as provided for in the NYISO Tariffs:
- **e.** Any and all other charges, assessments, or other amounts associated with delivery of Market Power sold to Customers by the Authority, or otherwise associated with the Authority's responsibilities as a load serving entity for Customers, that the NYISO assesses on the Authority under the provisions of the OATT or under other applicable NYISO Tariffs;
- 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 third party; and
- g. For avoidance of doubt, if any NYISO Charges described above are incurred by the Authority for any reason with respect to Electric Service to the Customer when the Authority is not serving as the load serving entity for the Customer under this Service Tariff and the Agreement, the Customer shall reimburse the Authority for all such NYISO Charges.

2. Taxes

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

3. Market Transaction Charges

The Authority based on its sole discretion will pass through to the Customer any costs incurred from procuring any financial products described in Sections III.A.1 and III.A.2 of this tariff if applicable.

4. Transmission, Wheeling and Delivery Charges

Generally, transmission, wheeling and delivery charges are billed directly to the Customer by the local electric utility.

If there are any charges for transmission, wheeling and delivery made applicable to the Customer under other Authority's tariffs and contracts, they will be charged to the Customer by the Authority as provided for in those documents.

5. Local Electric Utility Charges

The Customer shall reimburse the Authority for all charges, assessments, fees and other amounts, if any, the local electric utility imposes on the Authority in any way related to the provision of data and other information the Authority requires from the local electric utility in connection with providing Electric Service to the Customer. In the event that the local

electric utility seeks to impose any such charges, assessments, fees and other amounts on the Authority for the provision of data and other information required by the Authority in order to provide Electric Service to the Customer, the Authority shall provide prior notice thereof to the Customer, and the Customer and the Authority will discuss (i) the nature and amount of such charges, assessments, fees and other amounts, and (ii) whether there are alternative means for obtaining and providing such required data and information which are acceptable to the parties, provided that no party shall be required to agree to any alternative means for obtaining and providing such required data and information.

6. New Charges

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

7. Minimum Demand Charge

In the Authority's sole discretion, the Customer shall be subject to a monthly minimum billing demand charge calculated as follows. If in any given month Customer's monthly demand usage is less than 75 percent of its Contract Demand, a minimum demand charge equal to 75 percent of the Customer's Contract Demand, times the applicable NYPA Administrative Charge rate shall apply for that month. Such minimum monthly charge shall be in addition to all other charges provided for in this Service Tariff, including but not limited to Market Energy Charge, Market Capacity Charge and Other Charges as provided for in this Service Tariff.

8. Estimated Billing

If the Authority, in its sole 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 demand (kW) for an Estimated Bill, the demand (kW) will be calculated based on an average of the Customer's allocated demand (kW) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated demand (kW) value for the Estimated Bill will equal the Customer's Contract Demand (kW) amount, based on the Authority's sole discretion.

For the purpose of calculating energy (kWh) for an Estimated Bill, the energy (kWh) will be calculated based on an average of the Customer's allocated energy (kWh) values for the previous three (3) consecutive Billing Periods. If such historical data is not available, then the estimated energy value (kWh) will be equal to the Contract Demand (kW) amount at 75 percent load factor for that Billing Period, based on the Authority's sole discretion.

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 in accordance with Section III.B.9 of this Service Tariff and, as appropriate, render a revised bill (or provide a credit) to the Customer.

The provisions of Section IV.D of this Service Tariff shall apply to Estimated Bills.

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

9. 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, the receipt of actual, additional, or corrected data concerning Customer meter data and NYISO rebills.

IV. General Provisions

A. Scheduling of Firm Market Energy and Firm Market Power

In each Billing Period the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, schedule and provide to the Customer Firm Market Energy associated with Firm Market Power in an amount equal to the product of: (i) Contract Demand; (ii) the number of hours in the Billing Period; and (iii) Estimated Load Factor. Such Firm Market Energy shall be scheduled to the load bus established by the NYISO for the Facility or any successor load bus thereto established by the NYISO.

With respect to each month in which Electric Service is provided to the Customer by the Authority, the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, ensure that it does not schedule to the Customer in any hour more energy than the lesser of Customer's load in such hour, or Customer's Contract Demand.

With respect to each month in which Electric Service is provided to the Customer by the Authority, the Authority shall, in accordance with the NYISO Tariffs, NYISO manuals and NYISO procedures, schedule and provide UCAP in an amount equal to the applicable value calculated pursuant to Section III.A.1 of this Service Tariff.

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

B. Reconciliation of Adjusted Energy Usage and Billing Energy

Where Firm Market Energy is delivered under this Service Tariff in conjunction with other firm energy, including but not limited to firm hydro energy, the amounts supplied by the Authority hereunder shall be reconciled as following.

In any Billing Period in which the Customer's Adjusted Energy Usage is less than the amount of Firm Energy scheduled in accordance with firm hydro power service tariff and/or Agreement applicable to the Customer (hereinafter referred to as an "Under Consumption"), the Authority will bill the Customer and the Customer shall pay an additional charge (i.e., in addition to any other amounts due under this Service Tariff and/or the Agreement) in an amount equal to the amount of the Under Consumption (measured in kWh) multiplied by the positive difference, if any, between (i) the average of the applicable NYISO Day-Ahead Market locational based marginal price for the Zone for the Billing Period and (ii) the monthly base rate for Billing Energy applicable to the Customer under the firm hydro power service tariff.

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

The Authority will perform reconciliations for each Billing Period in accordance with this Section after the Authority obtains actual metered demand and energy data recorded on the Facility's meter from the local electric utility or as otherwise provided for in any Agreement.

C. Delivery of Market Power

The Customer's local electric utility shall be responsible for delivering Firm Market Power to the Customer. The Authority shall have no responsibility for delivering any Firm Market Power to the Customer.

For the purpose of this Service Tariff, Firm Market Power and Firm Market Energy will be deemed to be offered when the Authority is able to supply Firm Market Power and Firm Market 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 will not be subject to a billing adjustment pursuant to Section 454.6(d) of the Rules.

D. Rendition and Payment of Bills

- 1. Specific Customer billed dates will be determined by the Authority on a case by case basis. Generally the Authority will render bills to the Customer for Electric Service no later than the 20th calendar day of the month for charges due for the previous Billing Period. Bills will reflect the amounts due and owing, and are subject to adjustment as provided for in this Service Tariff and the Rules. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority shall render bills to the Customer electronically.
- 2. Specific Customer payment dates will be determined by the Authority on a case by case basis. Generally the payment of bills by the Customer shall be due and payable by the Customer no later than the 1st business day of the following month.
- 3. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
- **4.** Unless otherwise agreed to by the Authority and the Customer in writing, in the event the Customer disputes any item of a bill rendered by Authority, the Customer shall pay such bill in the time provided for by this Service Tariff, and adjustments, if necessary, will be made thereafter.
- 5. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to this Service Tariff, 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

Service Tariff for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its sole discretion to suspend Electric Service to the Customer or terminate this Service Tariff.

E. Conflicts

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

F. Resale

No customer shall resell any of the power supplied by Authority under this Service Tariff.

Proc Awards Exh A final

2

Procurement (Services) Contracts - Awards (For Description of Contracts See "Discussion")

EXHIBIT "A" July 29, 2014

Authorized

| Bus Unit/ Plant Site | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation Limit | Amount Expended <u>To Date</u> | Expenditures For Life Of Contract |
|---|---|---------------------------|--|---|---|------------------------|--------------------------------------|-----------------------------------|
| ECONOMIC DEVELOPMENT & ENERGY EFFICIENCY - ENERGY EFFICIENCY - ENGINEERING & DESIGN | Q14-5582; 4 awards: 1. DACK CONSULTING SOLUTIONS, INC. White Plains, NY 2. HAIDER ENGINEER-ING, P.C. Farmingdale, NY 3. HILL INTERNATIONAL, INC. New York, NY 4. NASCO CONSTRUCTION SERVICES, INC. Armonk, NY (PO#s TBA) | 08/01/14 (on or about) | Provide for cost estimating and scheduling ser- vices in connection with Energy Effi- ciency projects | 07/31/19 (3-yr award + option to extend for up to 2 addt'l yrs) | B/P | *Note: represents aggi | regate total for up to 5-y | \$1,000,000* rear term |
| ENTERPRISE SHARED SERVICES - IT | Q14-5579; 6 prequalified firms: 1. AVEPOINT PUBLIC SECTOR, INC. Arlington, VA 2. EMC CORP. Hopkinton, MA 3. JORNATA, LLC Boston, MA [continued on next page] | 08/01/14 (on or about) | Provide for consulting services in connection with implementation of SharePoint 2013 | 07/31/19 | B/P | *Note: represents aggi | regate total for up to 5-y | \$1,200,000* rear term |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name) B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search M / WBE:

1 Award Basis:

Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

<u>Procurement (Services) Contracts - Awards</u> (For Description of Contracts See "Discussion")

EXHIBIT "A" July 29, 2014

| Bus Unit/ Plant Site | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation Limit | Amount Expended <u>To Date</u> | Authorized Expenditures For Life Of Contract |
|---|---|---------------------------|--|--|---|---|--------------------------------------|---|
| | [Q14-5579 continued from | orevious page] | | | | | | |
| | 4. KMQ ENTERPRISES, IN dba TAILWIND ASSOC Schenectady, NY | | | | | | | |
| | 5. STELLAR SERVICES, I New York, NY | NC. ♦ | | | | | | |
| | 6. SUMMIT 7 SYSTEMS, II Huntsville, AL (PO#s TBA) | NC. | | | | | | |
| ENTERPRISE SHARED SERVICES - IT | SHAREKNOWLEDGE INC. / COMPETENTUM Bellevue, WA (Q14-5565; PO# TBA) | 08/01/14 (on or about) | Provide for Learning Management System software, implementa- tion, consulting and 5-year maintenance | 07/31/19 | B/S | *Note: represents total for u | p to 5-year term | \$430,000* |
| LAW | ERNST & YOUNG LLP New York, NY (4500245948) | 04/28/14 | Provide for the services of a third party(may be auditor to assist with the management of the Authority's Internal Audit Dept. during transition | 12/31/14 e extended to 4/27/15, if nee w/o additional Ti approval, per the curement Guide | rustee e Pro- | \$900,000 *Note: represents total antic 8-month term, including ex | | \$1,653,000* current |
| OPERATIONS - POWER GEN - FLYNN Plant & BRENTWOOD SCPP | ALL STATE CLEANING Brentwood, NY (Q14-5585; PO# TBA) | 08/01/14 (on or about) | Provide for janitorial services for the Flynn Plant and SCPP at Brentwood | 07/31/19 | B/S | *Note: represents total for u | p to 5-year term | \$200,000* |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name) B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search M / WBE:

1 Award Basis:

2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

<u>Procurement (Services) Contracts – Awards</u> (For Description of Contracts See "Discussion")

EXHIBIT "A" July 29, 2014

| Bus Unit/ Plant Site | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation Limit | Amount Expended To Date | Authorized Expenditures For Life Of Contract |
|---|--|-----------------------------|---|---|---|---|-------------------------------|---|
| OPERATIONS- \$ * | ARCADIS OF | 08/01/14 | 4 Provide for on-call | 05/31/19 | 9 B/S | | | |
| SUPPORT SERVICES - EH&S | NEW YORK, INC. White Plains, NY (Q13-5541; PO# TBA) | (on or about) | general environmental services | (coterminous with five other contracts for such services, approved by Trustees 5/22/1 | | *Note: included in the previ \$4 million for five other cor 5-year term | | |
| OPERATIONS - POWER GEN - NIAGARA | CB&I ENVIRONMENTAL & INFRASTRUCTURE INC (formerly Shaw Environ.) Latham, NY (RFQ 6000149093; PO# TBA) | 08/01/14 . (on or about) | Provide for zebra mussel testing services for the Niagara Project | 07/31/18 (3-year award + 1-year option) | B/S | *Note: represents total for | up to 4-year term | \$48,000* |
| OPERATIONS SUPPORT SERVICES - EH&S | Q14-5573; 2 awards: 1. COLDEN CORP. East Syracuse, NY 2. LOUIS BERGER & ASSOCIATES, P.C. New York, NY (PO#s TBA) | 08/01/14 (on or about) | Provide for industrial hygiene, occupational health, and safety field and consulting services statewide | 07/31/19 | B/S | *Note: represents aggrega | te total for up to 5-yea | \$3,000,000 * ar term |
| OPERATIONS - POWER GEN - SENY | E-J ELECTRIC INSTALLATION CO. Long Island City, NY (Q14-5588; PO# TBA) | 08/01/14 (on or about) | Provide for electrical support services for power plants and re- lated facilities in the SENY Region | 07/31/19 | B/S | *Note: represents total for | up to 5-year term | \$5,000,000* |
| OPERATIONS SUPPORT SERVICES - PROJ MGMT + STL | G.C. ZARNAS & CO. , INC. NY Bethlehem, PA (4500246837) | 06/24/14 | Provide for painting of two Long Sault Dam gantry cranes at STL Project | 06/23/16 | B/C | *Note: represents total for amount of \$1,554,905 + ex | | |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name) B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search M / WBE:

1 **Award Basis:**

2 Contract Type: P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service

<u>Procurement (Services) aContracts – Awards</u> (For Description of Contracts See "Discussion")

EXHIBIT "A" July 29, 2014

| Bus Unit/ Plant Site | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation Limit | Amount Expended <u>To Date</u> | Authorized Expenditures For Life Of Contract |
|--|--|---------------------------|--|---|--|--|--------------------------------------|---|
| OPERATIONS - POWER GEN - | RFQ 6000149152; 3 awards: | 08/01/14 (on or about) | Provide for environmental sampling and lab analysis | 07/31/18 (3-year award | B/S | | | \$750,000* |
| NIAGARA | 1. LIRO ENGINEERS, INC. Buffalo, NY | | and consulting services for the Niagara Project, as needed | + 1-year option) | | *Note: represents aggrega | ate total for up to 4-ye | ear term |
| | 2. STOHL ENVIRON- MENTAL, LLC Blasdell, NY | | | | | | | |
| | 3. WATTS ARCHITECTURE & ENGINEERING, D.P.C dba WATTS ARCHITECT & ENGINEERING → Buffalo, NY (PO#s TBA) | • | | | | | | |
| OPERATIONS- SUPPORT SERVICES - EH&S | OP-TECH ENVIRONMENTAL SERVICES, INC. East Syracuse, NY (Q14-5581; PO# TBA) | 08/01/14 (on or about) | Provide for on-call emergency spill response, clean-up and disposal services, as needed | 05/31/19 (coterminous with five other contracts for such services, approved by Trustees 5/22/1 | | *Note: included in the prev \$15 million for five other of 5-year term | | |
| OPERATIONS - TRANSMISSION - CEC | AVIATION SERVICES UNLIMITED, LLC Oriskany, NY (RFQ 6000146607; PO# TBA) | 08/01/14 (on or about) | Provide for helicopter patrol services to support high-voltage transmission line inspections | 07/31/17 | B/S | *Note: represents total for | up to 3-year term | \$900,000* |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name) B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search M / WBE:

1 **Award Basis:**

2

P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service Contract Type:

<u>Procurement (Services) Contracts – Awards</u> (For Description of Contracts See "Discussion")

EXHIBIT "A" July 29, 2014

Authorized

| Bus Unit/ Plant Site | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation Limit | Amount Expended <u>To Date</u> | Expenditures For Life <u>Of Contract</u> |
|---|---|----------------------|---|---------------------------|--|-------------------------------|--------------------------------------|--|
| PUBLIC & REGULATORY | BERNIER CARR & ASSOCIATES, P.C. Westerland NIV | 07/01/14 | Provide for construction management and design | 06/30/17 (2-year award | B/P | \$30,000 | o to 2 veer term | \$690,000* |
| AFFAIRS - PROJ. DEV. & LICENSING + STL | Watertown, NY (4600002809) | | services for environmental, recreational and shoreline improvements at the STL Project | + 1-year option) | | *Note: represents total for u | o to 5-year term | |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name) B= Competitive Bid; S= Sole Source; Si= Single Source; C= Competitive Search M / WBE: **†**

Award Basis: 2

P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; A= Architectural & Engineering Service; L= Legal Service Contract Type:

Proc Ext Exh B

2

<u>Procurement (Services) Contracts – Extensions and/or Additional Funding</u> (For Description of Contracts See "Discussion")

EXHIBIT "B" July 29, 2014

Authorized

| Plant Site/ Bus. Unit | Company Contract # | Start of Contract | Description of Contract | Closing Date | Award Basis ¹ Contract Type ² | Compensation <u>Limit</u> | Amount Expended <u>To Date</u> | Expenditures For Life Of Contract |
|--|---|----------------------|---|--------------|---|---------------------------------|--|---|
| ECON. DEV. & ENERGY EFFICIENCY - | ENERGY ICT, INC. Raleigh, NC 4600002103 | 04/15/09 | Provide for equipment and services for the End-Use Metering and | 04/14/16 | B/S | \$5,000,000 ("Target Value") | \$740,766 ("Released Amt") | \$5,000,000* |
| MARKETING ANAL. & ADMIN. | | | Monitoring project | | | Note: represents origin | ally approved amount of DING REQUESTED | \$5 million; |
| OPERATIONS SUPPORT | NORTHLINE UTILITIES, LLC | 05/21/13 | Provide for services in connection with the Alcoa | 08/31/14 | B/C | \$2,628,249 | \$2,255,864 | \$2,772,217* |
| SERVICES - PROJ. MGMT | Au Sable Forks, NY 4500232210 | | Transmission Line Relocation Project | | | | y approved amount of \$2 33 authorized per the EAI T FOR \$143,968 | |
| OPERATIONS SUPPORT | NORTHLINE UTILITIES, LLC | 06/28/13 | Provide for clearance remediation work on | 08/31/14 | B/C | \$2,884,770 | \$2,126,102 | \$2,884,770* |
| SERVICES - PROJ. MGMT + STL | Au Sable Forks, NY 4500233515 | | medium and high prio- rity transmission lines in the STL region | | | | y approved amount of \$1 34 authorized per the EAI DING REQUESTED | |
| PUBLIC & REG. AFFAIRS - | ABB INC. Raleigh, NC | 03/14/13 | Provide for studies in connection with the | 12/31/14 | B/P | \$222,500 | \$155,000 | \$272,500* |
| PROJ. DEV. & LICENSING | 4500229444 | | Marcy South Series Compensation ("MSSC") Project | | | + an additional \$22,500 | y approved amount of \$2 authorized per the EAP T FOR \$50,000, if a des | s |

New York State-certified Minority / Women-owned Business Enterprise (indicated by the • symbol after the Company Name)
B= Competitive Bid; C= Competitive Search; S= Sole Source; Si = Single Source
P= Personal Service; S= (Non-Personal) Service; C= Construction; E= Equipment; N= Non-Procurement; L= Legal Service M / WBE:

¹ Award Basis:

Contract Type:

BASIC LEASE TERMS AUTHORITY TO BERMAN

PREMISES: 7,814 rsf on the 17th floor of the C. D. Rappleyea Building

TERM: Five years commencing October 1, 2014. No extension

terms or options.

ELECTRIC: \$3.00 per rentable square foot for the term of the lease.

FIXED ANNUAL RENTAL RATE¹:

October 1, 2014 – September 30, 2016 \$24.00/s.f. or

\$187,536 per annum

October 1, 2016 – September 30, 2018 \$24.50/s.f. or

\$191,443 per annum

October 1, 2018 – September 30, 2019 \$25.00/s.f. or

\$195,350 per annum

RENT COMMENCEMENT: October 1, 2014

TERM COMMENCEMENT: October 1, 2014

LANDLORD'S CONTRIBUTION None

TO TENANT'S WORK:

ESCALATIONS: Proportionate share of increases in real estate taxes over a

base year of 2014. Proportionate share of increases in

operating expenses over a base year of 2015.

EARLY TERMINATION: Tenant may elect to terminate after 1 year upon 6 months'

notice.

PARKING: Tenant to have seven (7) reserved parking spaces at \$125

per space and seven (7) unreserved spaces at \$105 per

space.

BROKERAGE

COMMISSIONS: A brokerage commission to be paid as set forth in the

Authority's exclusive brokerage agreement with CBRE,

Inc.

-

¹ Exclusive of electricity.

President & Chief Executive Officer Report

Gil Quiniones

July 29, 2014

Board of Trustees Meeting



NYPA Overall Performance

June 2014

| Goal | Measure – |) | /ear-to-Date 20 | 14 | Year 2015 |
|---------------------------------|---|--------|-----------------|--------|--|
| Goal | ivieasure _ | Status | Target | Actual | Risk Range |
| Maintain | Generation Market Readiness (%) | | 99.40 | 99.83 | Early Warning Threshold Risk Range 96% 97% 98% 99% |
| Infrastructure | Transmission System Reliability <i>(%)</i> | | 97.24 | 97.44 | Early Warning Threshold Risk Range 80% 85% 90% 95% 100% |
| Financial | Debt Coverage (Ratio) | | 3.10 | 3.55* | Early Warning Threshold Risk Range 1.50 2.00 2.50 3.00 3.50 4.00 4.50 |
| Management | O&M Budget Performance (\$ Millions) | | 177.2 | 163.3 | Risk Range → Year-to-Date Actual |
| | MMBTU's Saved | | 120.2 | 122.7 | Risk Threshold Projected risk ranges to |
| Energy Services | Energy Efficiency Investment in State Facilities <i>(\$ Millions)</i> | | 23.0 | 30.1 | be reported quarterly |
| Workforce Management | Retention (# of Touchpoints) | | 387 | 493* | Status Meeting or Exceeding Target |
| Safety Leadership | DART Rate (Index) | | 0.78 | 1.38 | Below TargetSignificantly Below Target |
| Environmental Responsibility | Environmental Incidents (Units) | | 16 | 18 | |

^{*}Results updated quarterly



123 Main Street White Plains, NY 10601-3170 914.681.6675 Edward.Welz@nypa.gov



Edward Welz Chief Operating Officer

TO: NYPA BOARD OF TRUSTEES

FROM: EDWARD WELZ, CHIEF OPERATING OFFICER

DATE: JULY 11, 2014

SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

This report covers performance of the Operations group in June 2014.

Operations

Plant Performance

Systemwide net generation¹ was 2,196,604 MWh (megawatt-hours²) for June which is above the projected net generation of 2,057,787 MWh. For the year, net generation was 12,595,988 MWh which is below the projected target of 12,721,266 MWh.

The fleet availability factor³ was 91.30 percent in June, and was 89.62 percent for the year. Generation Market Readiness factor⁴ was 99.94 percent in June, which is better than the monthly target of 99.40 percent. Year-to-date Generation Market Readiness factor was at 99.83 percent, which is above the annual target of 99.40 percent.

There were no significant forced outages⁵ in June.

Generation Net Revenue in June was \$27.3 million with a loss of revenue of \$5,400. For the year, net revenue was \$230.2 million while revenue loss is \$0.79 million.

Niagara River flows in June were above the historical average and are expected to be above normal levels for the year. St. Lawrence River flows for June were above forecast levels and are expected to be above historical levels for the year.

Transmission Performance

Transmission reliability^[i] in June was 98.31 percent, which was below the target of 99.54 percent. Year-to-date transmission reliability is 97.44 percent, above the target of 97.24 percent.

There were two significant unplanned transmission events in June to report. The MA-2 was removed from service on emergency for 29 hours to repair broken cross arms. The emergent Y-49 cable repair outage, taking 96 hours, had a significant impact on the monthly performance and was primarily responsible for the missed target.

Safety

The NYPA DART (Days Away, Restricted or Transferred) Rate for June is 0.77. For the year, the DART Rate is 1.38 compared to the target of 0.78.

The Operations DART Rate for June is 1.17. For the year, the DART Rate is 2.02 compared to the target of 1.08.

There was one lost time incident in June that met the DART criteria. For the year, there have been 11 injuries that resulted in lost time and met the DART criteria.

Environmental

There were six reportable incidents in June.

- 1. At the Vischer Ferry Small Hydro Plant, tree debris caught in a trash rake caused an oil spill into the river. All but a few ounces were contained.
- 2. The Astoria 500MW Unit 7A PEECC Bart unit developed a low pressure leak at the controller. About 12 pounds of R-22 refrigerant was released into the environment.
- 3. A release of 291 pounds of R-22 refrigerant occurred at the Clark Energy Center on Chillers 1 to 3.
- 4. Auto Transformer No. 2 at the St. Lawrence Switchyard discharged oil onto the ground.
- 5. Two oil spills occurred among NYPA's fleet vehicles:
 - a. At Massena, a tractor experienced a leak on its hydraulic line releasing 5 to 10 gallons of oil.
 - b. At Niagara, a hydraulic line on a slope mower failed which resulted in a leak of 2 gallons of oil.

For the year, there have been eighteen (18) incidents. The annual target is 32 incidents.

Transmission LEM

T-LEM is a multiyear program that will upgrade the Authority's existing transmission system to maintain availability, increase reliability, and ensure regulatory compliance. The Program encompasses Authority transmission assets in the Central, Northern, and Western Regions. The Program is estimated to cost \$726 million and is comprised of several projects:

- St. Lawrence Breaker & Relay Replacement:
 - o STL Breaker Installation: O'Connell Electric has mobilized and commenced trenching and conduit installation.
 - o STL Breaker Procurement: Fabrication of the circuit breakers is ongoing. First breaker shipment delivered 6/26.
 - o 100MVAR Capacitor Banks: Delivery expected at the end of July.
- CEC Autotransformer/Reactor Refurbishment:
 - o Reactor 1A completed.
 - o Reactor 1X refurbishment in progress. One additional reactor will be refurbished in Fall 2014.
 - On April 23, while ABB was placing vacuum on Auto-Transformer 1X, the tank wall failed resulting in external and internal damage. ABB is currently preparing to ship it to the factory for repair, although NYPA has informed ABB that it will not accept a repair and has requested that a new unit be supplied.
- Massena Substation Reactor Refurbishment:
 - Two reactors are scheduled to be refurbished during the July October 2015 period.
- NIA, BG & CEC Relay Replacements:
 - The project team continues to design, procure equipment and install relays.
- Massena Substation Autotransformer Replacement:
 - o The spare autotransformer was energized on 6/13/14.
 - O Three additional auto-transformers have arrived at the Port of Erie; the remaining three units are currently being transported from the factory in the Netherlands.
 - Since the NYISO has indicated that summer line outages should be avoided, installation of the first three auto-transformers are planned for the Fall 2014 and the second three Fall 2015.
 - A contract was awarded to O'Connell Electric for site prep of Banks #1&2.
- Tower Modeling:
 - O Tower modeling of the weathering steel structures and grillage was completed.

- Tower Painting:
 - Tower painting proposals were received and are being evaluated for work at STL starting in 2015.
- STL, CEC & BG Switchyard LEM & STL Substation LEM:
 - The project team has assessed switchyard and substation equipment and determined the priority of equipment replacements.
 - o Project Plans have been issued for review.
- NIA Switchyard LEM
 - o A partial CEAR for the NIA Switchyard LEM was approved at the May Trustee meeting.
 - o Design is in progress. RFQs for long lead equipment have been issued and bids received; review of proposals is in progress.
- PV-20 Submarine Cable Replacement:
 - Preliminary engineering activities are ongoing by CHA in collaboration with VELCO.
 - Cable specification has been issued and is undergoing final review by VELCO & NYPA.

LPGP LEM

The assembly of the third turbine runner is nearing completion and the assembly of the fourth has begun at Mitsubishi Hitachi Power Systems America's (MHPS's) facility located in Japan. Casting of components for the fifth turbine have been completed by MHPS's sub-contractor, Litostroj, located in Slovenia and are in transit to MHPS's facility in Japan for assembly. The fabrication of the sixth turbine at MHPS's two new facilities has commenced: Japan Steel Works, located in Japan, is fabricating the runner crown and band; and, Voestalpine, located in Austria, is fabricating the blades. The seven blades at Voestalpine were inspected and had acceptable test results. The insolvency proceedings regarding the Litostoj foundry are still pending; MHPS is considering the fabrication of the next runner components by Voestalpine and will be requesting for the fabrication release in the very near future in order to maintain schedule, quality and to reduce cost escalations by having runners fabricated in advance of the unit outage schedule.

As previously reported during the post-unit upgrade mechanical testing on Unit 11, several deficiencies were discovered and the testing was not completed. The main issues related to the overheating of the rotor pole connections, unit vibrations at speed no load, and shaft miss-alignment have all been addressed. Unit 11 is presently being reassembled and the mechanical testing will resume by the end of July. The third unit outage (Unit 7) is scheduled to start August 11th. Fabrication of two additional sets of spare shafts is also well underway, with one of the sets of shafts being expedited in order to have it available in time for Unit 7 reassembly, if required. The LPGP LEM program is scheduled to be completed in 2020.

Technical Compliance - NERC Reliability Standards

Enforcement Actions – Northeast Power Coordinating Council (NPCC)

NYPA has three (3) minimal risk possible violations being processed pursuant to NYPA's participation in a NERC-sponsored enforcement pilot program (see Reliability Assurance Initiative (RAI) section below). Staff expects these violations to be designated as "compliance exceptions" in July, which means they will not be subject to enforcement and filing with NERC and FERC.

Internal Investigation of Possible Violations

In June, two (2) new investigations were initiated and four (4) investigations were closed. There are currently three (3) open investigations. The four (4) investigations that were closed resulted in the identification of two (2) new possible violations which are candidates for processing under the NERC-sponsored enforcement pilot program.

New Bulk Electric System (BES) Definition

As stated in earlier reports, the Federal Energy Regulatory Commission (FERC) approved the new Bulk Electric System (BES) definition and that NYPA will have over 40 newly identified BES elements that will be subject to the NERC reliability standards in July 2016.

Under this new definition NYPA may be required to register as a Transmission Operator (TOP) and/or a Transmission Planner (TP). In June, NYPA continued its participation in meetings with the NYISO and the other NY Transmission Owners to assess new state-wide functional registration and compliance management impacts and actions pursuant to the new BES definition. NYPA staff also met with NPCC staff to discuss NYPA's position on these matters.

NYPA staff continued discussions with LIPA to reach an agreement that clarifies the roles and responsibilities for compliance management for the Transmission Owner (TO) standards related to assets LIPA operates and maintains for NYPA in southeast New York (a similar agreement was executed with Con Edison earlier). NYPA also continued to meet separately with National Grid and New York State Electric and Gas to address projected gaps in compliance for the Transmission Owner (TO) standards for newly identified NYPA BES assets located within their substations. NYPA's discussions with these NY Transmission Owners also focused on reaching agreement, before April 2016, for managing compliance with the Version 5 Critical Infrastructure Protection (CIP) cyber security standards for assets owned by NYPA, but operated and maintained by others.

Critical Infrastructure Protection (CIP) Standards - Version 5

In June, NYPA staff continued to monitor regulatory developments and implement a plan for demonstrating compliance with Version 5 of NERC's Critical Infrastructure Protection (CIP) reliability standards for cyber security. In a recent development, FERC directed NERC to revisit some of the requirements in Version 5 that will result in a Version 6 for some of the CIP standards. These new reliability standards will have substantive impacts on NYPA's operations-related cyber security compliance program.

NYPA's effort to identify and classify its 'high' and 'medium' impact Cyber Systems is progressing and nearing conclusion. The results will be used to confirm the scope and costs of the implementation plan NYPA must execute to demonstrate compliance with the revised standards. In parallel, a Request for Proposal for the physical security modifications required under the new standards was developed and will be issued shortly. The results of the bids will be used as input to a Capital Expenditure Request that will be presented to the Board of Trustees in 2014. Expenditure estimates for implementation of the revised standards have been included in the Operations budget plan for 2014-2016.

Physical Security Standard

As a result of recently distributed information about an April 2013 coordinated physical attack on a Pacific Gas and Electric Corporation substation, several US Senators requested FERC and NERC to consider whether NERC should establish and enforce standards for physical security for critical electric facilities. As a result, FERC directed NERC to develop a new physical security standard (CIP-014) that is expected to be approved by FERC in 2014.

In anticipation of FERC's approval of this standard, NYPA is assessing the applicability and impacts to NYPA's facilities and is regularly updating management. Pursuant to the applicability criteria in the standard several of NYPA's transmission stations and substations may be subject to the standard. The next step is to identify the stations and substations though system modeling studies that if rendered inoperable or damaged as a result of a physical attack, could result in instability uncontrolled separation, or cascading within an Interconnection. This analysis is being conducted in consultation with the New York Independent System Operator (NYISO). Those facilities that are identified from the modeling studies will be subject to other requirements including a vulnerability assessment and a documented security plan that must be reviewed and updated every 30 months.

NERC Reliability Assurance Initiative (RAI)

NYPA has been actively supporting NERC and NPCC in moving this important NERC program forward. NYPA continues to participate in two pilot programs to test new compliance monitoring and enforcement tools. These pilot programs are being conducted in several regions across the country to establish the basis for a more risk-based, continent-wide compliance monitoring process. One is focusing on methods for assessing a company's risk and internal controls for managing compliance and one is focusing on new tools for processing minimal risk violations of the standards.

During the period, NYPA agreed to extend its participation in the RAI pilot program for Aggregation of Minimal Risk Issues for another six (6) months into October 2014. NYPA delivered presentations on its participation in this pilot program at the May 2014 NPCC Compliance and Standards Workshop and in a NERC-sponsored webinar in June 2014. NYPA received very positive feedback from the regulator for its participation in this pilot program.

Energy Resource Management

NYISO Markets

In June, Energy Resource Management (ERM) bid 2.53 million MWh of NYPA generation into the NYISO markets, netting \$55.7 million in power supplier payments to the Authority. Year-to-date net power supplier payments are \$509.6 million.

Fuel Planning & Operations

In June, NYPA's Fuels Group transacted \$23.6 million in natural gas and oil purchases, compared with \$26.6 million in June 2013. Year-to-date natural gas and oil purchases are \$252.1 million, compared with \$182.6 million at this point in 2013. The total \$69.5 million increase is mainly due to the higher cost of fuel and/or fuel consumption at the Astoria Energy II Plant (\$28.4 million), 500-MW Combined Cycle Plant (\$36.8 million), and Richard M. Flynn Power Plant (\$10.7 million), which was offset by a decrease at the Small Clean Power Plants (-\$6.4 million).

Regional Greenhouse Gas Initiative

Auction 24 of the Regional Greenhouse Gas Initiative was held on June 4th, 2014. Auction 24 cleared at \$5.02 and NYPA was awarded 2.4 million allowances. This covers the majority of NYPA's compliance obligation for 2014, leaving approximately 1 million allowances to be procured before the end of the year. Since inception, NYPA has purchased over 18.2 million RGGI allowances for a total cost of nearly \$50.2 million, averaging \$2.76 per allowance.

GLOSSARY

1 -

¹ **Net Generation** – The energy generated in a given time period by a power plant or group of plants, less the amount used at the plants themselves (station service) or for pumping in a pumped storage facility. Preliminary data in the COO report is provided by Accounting and subject to revision.

² **Megawatt-hour (MWh)** – The amount of electricity needed to light ten thousand l00-watt light bulbs for one hour. A megawatt is equal to 1,000 kilowatts and can power about 800 homes, based on national averages.

³ **Availability Factor** – The Available Hours of a generating unit over the Period Hours (hours in a reporting period when the unit was in an active state). Available Hours are the sum of Service Hours (hours of generation), Reserve Shutdown Hours (hours a unit was not running but was available) and Pump Hours (hours a pumped storage unit was pumping water instead of generating power).

⁴ **Generation Market Readiness Factor** – The availability of generating facilities for bidding into the New York Independent System Operator (NYISO) market. It factors in available hours and forced outage hours that drive the results.

⁵ **Significant Unplanned Generation Events** – Those events (forced or emergency outages of individual generator units) of duration greater than 72 hours, or have a total repair cost of greater than \$75,000, or result in greater than \$50,000 of lost revenues.

⁶ **Transmission Reliability** - A measurement of the impact of forced and scheduled outages on the statewide system's ability to transmit power.

⁷ **Significant Unplanned Transmission Events** – Those events (forced or emergency outages of individual transmission lines) which directly affect the reliability of the state's transmission network, or affect the availability of any component of the state's transmission network for greater than 8 hours, or that have a repair cost greater than \$75,000.

Chief Financial Officer – Summary Report

For the Six months ended June 30, 2014



Financial Summary

- Net income through June 30, 2014, was \$141.9 million, which was \$97.3 million higher than the budget :
 - Higher margins on market-based sales (\$52.9 million) primarily due to higher market energy prices caused by severe winter weather conditions.
 - Lower O&M (\$13.9 million) and other operating expenses (\$21.8 million) including underruns in non-recurring projects, industrial incentive awards, and the energy efficiency and solar market acceleration programs.
 - Non-operating income was higher by \$12.8 million including a mark-to-market gain on the Authority's investment portfolio due to lower market interest rates, and insurance reimbursements related to prior year transformer equipment failures.
- Projected net income for 2014 is expected to significantly exceed the budget primarily due to the early
 year positive variances above. Earnings for the rest of the year are expected to be closer to budgeted
 levels as market prices and water flows return to normal levels.
- Pursuant to Trustee authorization, \$25 million in funds was released to the Empire State Development Fund in furtherance of statewide economic development initiatives. The contribution was made on June 27th, bringing the total contribution for the year to \$90 million.



Net Income

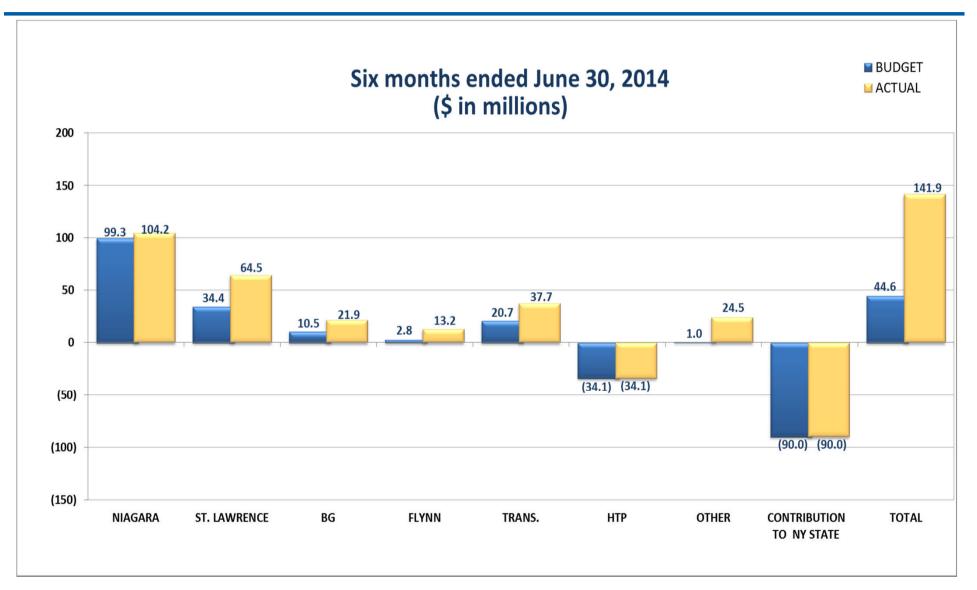




Exhibit "A"

| | | | | | | | Estimated | New Jobs | Power | Power | | |
|-----|----------------------|---------|--------|--------------|------|------|--------------|-----------|-----------|-------------|----------|--|
| | | | | | Base | New | Capital | Avg. Wage | Requested | Recommended | Contract | |
| | Company Name | Program | City | County | Jobs | Jobs | Investment | Benefits | (kW) | (kW) | Term | |
| A-1 | Corning Incorporated | PP | Canton | St. Lawrence | 234 | 40 | \$21,750,000 | \$68,000 | 4,000 | 2,100 | 7 Years | |

APPLICATION SUMMARY Preservation Power

Company: Corning Incorporated

Location: Canton, NY

County: St. Lawrence

IOU: National Grid

Business Activity: Specialty glass and ceramics

Project Description: Corning is planning to expand its existing facility with a 23,500-square

foot addition, a new, 7,200-square-foot warehouse and machinery and equipment to increase its production of glass and mirror products.

Existing Allocation(s): 2,260 kW of Recharge New York Power

Power Request: 4,000 kW

Power Recommended: 2,100 kW

Job Commitment:

Base: 234 jobs New: 40 jobs

New Jobs/Power Ratio: 19/ MW

New Jobs -

Avg. Wage and Benefits: \$61,700

Capital Investment: \$21.75 million

Capital Investment/MW: \$10.36/MW

Other ED Incentives: Sales and use tax exemption and real property tax abatement from St.

Lawrence County IDA. Working with Empire State Development.

Summary: With several facilities throughout New York State and a current

increase in customers, Corning has chosen Canton as the location for this expansion to meet increased needs from a new customer. Corning has been an important employer in Canton for six decades and this project stands to create 40 new, well-paying jobs in the North Country

which could have a major impact in St. Lawrence County.

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

to CORNING INCORPORATED

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 1 of Article 5 of the New York Public Authorities Law ("PAL"), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for the Sale of Preservation Power and Energy ("Agreement") to Corning Incorporated, having facilities at 334 County Road 16, Canton, NY 13617 ("Customer"). The Authority and the Customer are from time to time referred to in this Agreement individually as a "Party" or collectively as the "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, PP consists of 490 megawatts ("MW") of firm hydroelectric power and associated energy produced by the St. Lawrence-FDR Power Project;

WHEREAS, St. Lawrence-FDR Power Project hydroelectric power plays an important role in providing competitively priced power for sale to attract and retain business investment and to promote economic development in New York State;

WHEREAS, the Authority has the authority under PAL § 1005(13)(a) to award allocations of PP based on, among other things, the criteria listed in the PAL, including but not limited to an applicant's long-term commitment to the region as evidenced by the current and planned capital investment; the type and number of jobs supported or created by the allocation; and the state, regional and local economic development strategies and priorities supported by local units of governments in the area in which the recipient's facilities are located;

WHEREAS, the Customer has applied for an allocation of PP for use at facilities located at 334 County Road 16, Canton, NY 13617 (defined in Article I of this Agreement as the "Facility") to be received upon completion of an expansion of the Facility as provided for in the Capital Expansion Program described in this Agreement;

WHEREAS, on July 29, 2014, the Authority's Board of Trustees ("Trustees") approved a 2,100 kilowatt allocation of PP (defined in Article I of this Agreement as the "Allocation") to the Customer for a seven year term, as further described in this Agreement;

WHEREAS, the provision of Electric Service (defined in Article I of this Agreement) associated with the Allocation is an unbundled service separate from the transmission and delivery service necessary for the Customer to receive the Allocation which will be performed by the Customer's local utility company;

WHEREAS, the Authority has complied with requirements of PAL § 1009 which specifies the approval process for contracts negotiated by the Authority; and

WHEREAS, the Governor of the State of New York has approved the terms of this Agreement pursuant to PAL § 1009(3).

NOW THEREFORE, in consideration of the mutual covenants herein, the Authority and the Customer agree as follows:

Article I. Definitions

- A. **Agreement** means this Agreement as further described in the preamble, including all documents and other matters attached to and incorporated into the Agreement.
- B. **Allocation** refers to the total amount of PP and associated energy set forth in Schedule A to this Agreement awarded to the Customer.
- C. **Contract Demand** has the meaning set forth in the Service Tariff.
- D. **Electric Service** is Firm Power and Firm Energy associated with the Allocation and sold to the Customer in accordance with the provisions of this Agreement, the Service Tariff, and the Rules.
- E. **Energy Efficiency Audit** means a physical inspection of a building in a manner approved by the Authority that should include the following elements: (1) an assessment of a building's energy use, cost and efficiency which produces an energy utilization index for the building (such as an Energy Use Intensity or Energy Performance Indicator); (2) a comparison of the building's index to indices for similar buildings; (3) an analysis of low-cost/no-cost measures for improving energy efficiency; (4) a listing of potential capital improvements for improving energy consumption; and (5) an initial assessment of potential costs and savings from such measures and improvements.
- F. **Facility** means the Customer's facility identified in Schedule A.
- G. **Firm Energy** has the meaning set forth in the Service Tariff.
- H. **Firm Power** has the meaning set forth in the Service Tariff.
- I. **FERC** means the Federal Energy Regulatory Commission (or any successor organization).
- J. **FERC License** means the license issued by FERC to the Authority for the continued operation and maintenance of the St. Lawrence Project, pursuant to Section 15 of the Federal Power Act, which became effective October 22, 2003 after expiration of the Project's original license issued in 1953.
- K. **Hydro Projects** is a collective reference to the Authority's Niagara Project and St. Lawrence-FDR Project.

- L. **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.
- M. **Load Serving Entity** (or **LSE**) means an entity designated by a retail electricity customer to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO Tariffs, rules, manuals and procedures.
- N. **NYISO** means the New York Independent System Operator, Inc. or any successor organization.
- O. **NYISO Charges** has the meaning set forth in the Service Tariff.
- P. **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.
- O. **PAL** means the New York Public Authorities Law.
- R. **Preservation Power** (or **PP**) has the meaning set forth in the Service Tariff.
- S. **Niagara Project** means the Authority's Niagara Power Project, FERC Project No. 2216.
- T. **Rules** refers to the Authority's Rules and Regulations for Power Service (Part 454 of Chapter X of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York), as may be modified from time to time by Authority.
- U. **Service Tariff** means the Authority's Service Tariff No. 10, 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.
- V. **St. Lawrence Project** means the Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.
- W. **Schedule A** refers to the Schedule A to this Agreement entitled "Preservation Power Allocations" which is attached to and made part of this Agreement.
- X. **Schedule B** refers to the Schedule B to this Agreement entitled "Preservation Power Commitments" which is attached to and made part of this Agreement.
- Y. **Schedule C** refers to Schedule C to this Agreement entitled "Takedown Schedule" which is attached to and made part of this Agreement.

- Z. **Substitute Energy** means energy that the Authority provides at the request of the Customer to replace hydroelectric power that would otherwise have been supplied to the Customer under this Agreement.
- AA. **Taxes** have the meaning set forth in the Service Tariff.
- BB. **Unforced Capacity** (or **UCAP**) is the electric capacity required to be provided by Load Serving Entities to serve electric load as defined by the NYISO Tariffs, rules, manuals and procedures.

Article II. Electric Service

- A. The Authority shall provide Electric Service to the Customer to enable the Customer to receive the Allocation in accordance with this Agreement, the Service Tariff and the Rules. The Customer shall not be entitled to receive Electric Service for any PP Allocation that is not specified in Schedule A.
- B. The Authority will provide, and the Customer shall pay for, Electric Service with respect to the Allocation specified on Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall take and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
- C. 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.
- D. The Customer acknowledges and agrees that Customer's local electric utility shall be responsible for delivering the Allocation to the Facility specified in Schedule A, and that the Authority has no responsibility for delivering the Allocation to the Customer.
- E. The Contract Demand and the Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as PP from the St. Lawrence 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, as applicable, based on the terms of such ruling, order, or decision. The Authority will use reasonable efforts to provide at least thirty (30) days prior written notice to the Customer of any such modification unless such notice is inconsistent with such ruling, order or decision.
- F. The Contract Demand may not exceed the Allocation.
- G. By entering into this Agreement, 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 PP to the

Customer, the proper and efficient implementation of the PP power program, billing related to PP Power, 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 the Authority determines are necessary to effectuate such exchanges of information.

- H. 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 PP on terms and conditions that are acceptable to the Authority.
- I. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, provide documentation, execute consents and provide other information (collectively, "Information") the Authority determines is necessary for the provision of Electric Service, the delivery of PP, billing related to the PP program, the effective and proper 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 such Information shall be grounds for the Authority in its sole discretion to withhold or suspend Electric Service to the Customer.

Article III. Rates, Terms and Conditions

- A. The Authority will provide Electric Service to the Customer based on the rates, terms and conditions established in accordance with this Agreement, the Service Tariff and the Rules.
- B. The Service Tariff and the Rules may be amended from time to time by the Authority. 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 subsequent 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.
- C. Notwithstanding any provision of this Agreement to the contrary, the power and energy rates shall be subject to increase by the Authority at any time upon 30 days prior written notice to Customer if, after consideration by the Authority of its legal obligations, the marketability of the output or use of the St. Lawrence Project and the Authority's competitive position with respect to other suppliers, the Authority determines in its discretion that increases in rates obtainable from any other Authority customers will not provide revenues, together with other available Authority funds not needed for operation and maintenance expenses, capital expenses, and reserves, sufficient to meet all requirements specified in the Authority's bond and note resolutions and covenants with the holders of its financial obligations. The Authority shall use its best efforts to inform the Customer at the earliest practicable date of its intent to increase the power and energy rates pursuant to this provision. Any rate increase to the Customer under this subsection shall be on a non-discriminatory basis as compared to other Authority customers that are subject to the Service Tariff after giving consideration to the

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

Article IV. Billing and Billing Methodology

- A. The billing methodology for the Allocation shall be determined on a "load factor sharing" basis in a manner consistent with the local electric utility's applicable tariffs 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.
- B. The Authority shall render bills for power and energy by the tenth (10th) business day of the month for charges due for the previous month. Such bills shall include the NYISO Charges and Taxes (as such terms are defined in the Service Tariff) associated with the Allocation. NYISO Charges and Taxes billed to the Customer are subject to adjustments consistent with any subsequent NYISO re-billings to Authority.
- C. The Authority may render bills to the Customer electronically.
- D. The Authority and the Customer may agree in writing to an alternative method for the rendering of bills and for the payment of bills, including but not limited to the use of an Authority-established customer self-service web portal.
- E. 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.
- F. Unless otherwise agreed to by the Authority and the Customer in writing, if the Customer fails to pay any bill when due, an interest charge of two percent (2%) of the amount unpaid shall be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent (1 1/2%) of the sum unpaid shall be added on the first day of each succeeding billing period until the amount due, including interest, is paid in full.
- G. 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. If at any time after commencement of Electric Service the Customer fails to make complete and timely payment of any two (2) bills for Electric Service, the Authority shall have the right to require the Customer to deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit shall be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. If the Customer fails or refuses to provide the deposit within thirty (30) days of a request for such deposit, the Authority may, in its sole discretion, suspend Electric Service to the Customer or terminate this Agreement.
- I. All other provisions with respect to billing are set forth in the Service Tariff.
- J. 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 V. Transmission and Delivery of Power and Energy

- A. The Customer shall responsible for securing arrangements with its local utility for transmission and delivery service associated with the Allocation unless otherwise agreed to by the Parties.
- B. The Customer will pay its local utility for transmission and delivery service associated with the Allocation in accordance applicable contracts and all applicable tariffs, rulemakings, and orders, in order to deliver to the Customer the Firm Power and Firm Energy supplied by the Authority under this Agreement. To the extent the Authority incurs transmission and delivery service charges or other costs associated with the Allocation during the term of this Agreement, the Customer agrees to compensate the Authority for all such charges and costs incurred.
- C. 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 as may be required under the applicable local utility company tariffs. In no event shall the Authority act as the LSE for the power and energy consumed by Customer other than Electric Service (inclusive of Substitute Energy, if any) sold by the Authority under this Agreement. The Customer understands and acknowledges that it will be responsible to the Authority for all charges and other costs incurred by the Authority associated with the provision of Electric Service to enable the Customer to receive the Allocation, including charges and costs contained in the NYISO Tariffs or other applicable tariffs (including local utility company tariffs), regardless of whether such charges and costs are transmission-related. Such charges and costs are in addition to the charges for power and energy.

Article VI. Preservation Power Commitments

- A. Schedule B sets forth the Customer's specific "Preservation Power Commitments." Such commitments are in addition to any other rights and obligations of the Parties provided for in the Agreement.
- B. The Authority's obligation to provide Electric Service to the Customer under this Agreement is expressly conditioned upon the Customer's timely completion of the Capital Expansion Program regarding the Facility as described in Schedule B.
- C. In the event of partial completion of the Capital Expansion Program which results in the Facility expansion being partially completed, the Authority may, upon the Customer's request, provide Electric Service to the Customer in an amount determined by the Authority to fairly correspond to the completed portion of the Facility expansion, provided that the Customer demonstrates that the amount of requested Electric Service is needed to support operations thereat.
- D. The Customer shall give the Authority not less than ninety (90) days' advance notice in writing of the anticipated date of partial or full completion of the Facility expansion. The Authority will inspect the Facility expansion for the purpose of verifying the completion status of the Facility expansion and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service in accordance with this provision within a reasonable time after verification based on applicable operating procedures of the Authority, the Customer's local electric utility and the NYISO.
- E. In the event the Customer fails to complete the Facility expansion by July 29, 2017 (*i.e.*, within three (3) years of the Authority's award of the Allocation), (i) the Authority may, at its option and discretion, cancel the Allocation, or reduce it by the total amount of kilowatts determined by the Authority to fairly correspond to the uncompleted portion of the Facility expansion, or (ii) upon request of the Customer, such date may be extended by the Authority in its sole discretion.

Article VII. Rules and Service Tariff; Conflicts

The Service Tariff is hereby incorporated into this Agreement with the same force and effect as if set forth herein at length. In the event of any inconsistencies, conflicts or differences between the provisions of the Service Tariff and the Rules, the provisions of the Service Tariff shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and the Service Tariff, the provisions of this Agreement shall govern.

Article VIII. Hydropower Curtailments and Substitute Energy

A. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of the Authority's firm power customers served by the Authority from the Hydro Projects,

curtailments (*i.e.*, reductions) in the amount of Firm Power and Firm Energy associated with the Allocation to which the Customer is entitled shall be applied on a *pro rata* basis to all firm power and energy customers served from the Hydro Projects, consistent with the Service Tariff as applicable.

- B. The Authority shall provide reasonable notice to the Customer of any curtailments referenced in Article VIII.A of this Agreement that could impact Customer's Electric Service under this Agreement.
- C. Upon written request by the Customer, the Authority will provide Substitute Energy to the Customer to replace the hydroelectricity that would otherwise have been supplied under this Agreement. The provision of Substitute Energy may be terminated by the Authority or the Customer on fifteen (15) days' prior written notice.
- D. For each kilowatt-hour of Substitute Energy supplied by the Authority, the Customer will 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. Billing and payment for Substitute Energy shall be governed by the Billing and Payments provision of the Authority's Rules (Section 454.6) and shall apply directly to the Substitute Energy service supplied to the Customer.
- E. The Parties may enter into a separate agreement to facilitate the provision of Substitute Energy, provided, however, that the provisions of this Agreement shall remain in effect notwithstanding any such separate agreement. The provision of Substitute Energy may be terminated by the Authority or the Customer on fifteen (15) days' prior written notice.

Article IX. Additional Allocations

- A. Upon application by the Customer, the Authority may award additional allocations of PP to the Customer at such rates and on such terms and conditions as set forth in the Service Tariff. Once the Customer agrees to purchase Electric Service associated with such additional allocations, the Authority will produce modified or supplemental Schedules A and B which will reflect any such additional allocations and other pertinent terms as appropriate. The Authority will furnish the Customer with any such modified or supplemental Schedules within thirty (30) days of the commencement of Electric Service for any such additional allocation.
- B. The Customer shall furnish such documentation and other information as the Authority requests to enable the Authority to evaluate (i) whether any additional allocations should be made to the Customer, and (ii) the terms relating to any additional allocation.

Article X. Notification

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

To: The Authority

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

Telephone:

Facsimile: (914) 390-8156

Electronic mail:

Attention: Manager – Business Power Allocations and Compliance

To: Customer

Corning Incorporated 334 County Road 16 Canton, New York 13617 Telephone: Facsimile: Electronic mail: Attention:

B. 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: (1) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (2) 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; (3) if delivered by hand, with written confirmation of receipt; (4) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (5) if sent by electronic mail to the appropriate address as set forth above, with written confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing. Any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and rulings by the IJC and without regard to conflicts of law provisions.

Article XI. Venue

Each Party consents to the exclusive jurisdiction and venue of any state or federal court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement.

Article XII. Successors and Assigns; Transfers; Resale of PP

- A. 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, however, 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 in each case obtained.
- B. The transfer of any portion of the Allocation, or any benefits relating the Allocation, by the Customer to any person, to a different owner or operator of the Facility, or to a different facility, is prohibited unless (i) specifically approved by the Authority, and, (ii) all other legal requirements applicable to such a transfer are complied with. Any transfer that occurs without such approval and compliance shall be invalid and transfer may in the Authority's sole discretion subject the transferor to revocation or modification of the Allocation and/or this Agreement.
- C. The Customer may not resell any portion of the Allocation to any person. If such a sale occurs, the Authority may, in its sole discretion, terminate the Allocation and/or this Agreement.

Article XIII. Previous Agreements and Communications

This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the sale of PP, and supersedes all previous communications between the Parties hereto, either oral or written, with respect to the sale of PP. 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.

Article XIV. Waiver

- A. 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.
- B. 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.

Article XV. Severability and Voidability

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

Article XVI. Term, Modification, Termination and Effect

- A. Electric Service under this Agreement shall continue with respect to an Allocation until the earliest of: (1) termination by the Customer with respect to all of the Allocation upon at least ninety (90) days prior written notice to the Authority; (2) termination by Authority pursuant to the Rules upon required notice; or (3) expiration of the Allocation by its own term as specified in Schedule A.
- B. The Customer may exercise a partial termination of the Allocation upon at least thirty (30) days prior written notice to the Authority. The termination shall be effective commencing with the first "Billing Period" as defined in the Service Tariff following the required notice.
- C. The Authority may modify or terminate Electric Service hereunder or modify the quantities of power and energy associated with an Allocation: (1) if such termination 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 or in the Rules.
- D. This Agreement shall become legally binding and effective only upon satisfaction of the following conditions precedent: (1) receipt of approval of this Agreement by the Authority Board of Trustees; (2) receipt of approval of this Agreement by the Governor of the State of New York pursuant to PAL § 1009; and (3) execution of this Agreement by the Authority and the Customer.

Article XVII. Execution

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery

of an executed counterpart of this Agreement by email as a PDF file 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: | | | | | |
|--|--|--|--|--|--|
| CORNING INCORPORATED | | | | | |
| BY: | | | | | |
| Title: | | | | | |
| Date: | | | | | |
| | | | | | |
| AGREED: | | | | | |
| POWER AUTHORITY OF THE STATE OF NEW YORK | | | | | |
| By: John R. Koelmel, Chairman | | | | | |
| Date: | | | | | |

SCHEDULE A

PRESERVATION POWER ALLOCATIONS

Customer: CORNING INCORPORATED

| Type of | Allocation (kW) | Trustee | Expiration Date | Facility |
|------------|-----------------|---------------|--------------------------------|-----------------------------|
| Allocation | | Approval | | |
| | | Date | | |
| | | | Seven (7) years from | 334 County Road 16, Canton, |
| | | | commencement of Electric | NY 13617 |
| | | | Service of any portion of this | |
| PP | 2,100 | July 29, 2014 | Allocation | |
| | | | | |

SCHEDULE B

PRESERVATION POWER COMMITMENTS

ARTICLE I. EMPLOYMENT COMMITMENTS

A. Base Employment Level

The Customer shall establish and maintain the employment level as provided for in the Appendix to this Schedule B (the "Base Employment Level"). Unless otherwise provided for in Schedule B, such Base Employment Level shall be the total number of full-time positions held by: (1) individuals employed by the Customer at the Facility identified in the Appendix to this Schedule B; and (2) individuals who are contractors or are employed by contractors of the Customer and who are assigned to such Facility (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 at least 20 hours but not more than 35 hours per week shall be counted as one Base Level Employee.

The Customer shall not establish or maintain the Base Employment Level by transfers of employees from previously held positions with the Customer or its affiliates located within New York State, 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.

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. The Authority shall have the sole discretion to make any such change.

B. Employment Records and Reports

A record shall be kept monthly by the Customer, and provided on a calendar year basis to the Authority, of the total number of Customer employees and contractor employees at the Facility, as reported to the United States Department of Labor (or as reported in such other record as agreed upon by the Authority and the Customer). Such report shall separately identify Customer employees and contractor employees 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.

ARTICLE II. REDUCTIONS OF CONTRACT DEMAND

A. Employment Levels

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in this Schedule B, for the subject calendar year, the Authority may reduce the Contract Demand subject to Article II.C of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

B. Power Utilization Levels

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 facilities receiving the power covered by the Agreement. If the average of the Customer's six (6) highest Billing Demands (as such term is defined in the Service Tariff) for PP is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to Article II.C of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

C. 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 this Schedule, the Authority shall provide the Customer with at least thirty (30) days prior written notice of such reduction, specifying the amount of the reduction of Contract Demand and the reason for the reduction, provided, however, that before making the reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance or facilities upgrading periods when such events temporarily reduce plant employment levels or electrical demand as well as business cycle.

ARTICLE III. CAPITAL INVESTMENT

The Customer agrees to undertake the Capital Expansion Program set forth in the Appendix to this Schedule B.

ARTICLE IV. ENERGY EFFICIENCY AUDITS AND INFORMATION REQUESTS

The Customer shall undergo an Energy Efficiency Audit of its facilities and equipment at which the Allocation is consumed at the Customer's expense at least once during the term of this Agreement but in any event not less than once every five years. The Customer will provide the Authority with a copy of the audit or, at the Authority's option, a report describing the results of the audit, and provide documentation requested by the Authority to verify the implementation of any efficiency measures implemented at the facilities.

The Customer agrees to cooperate to make its facilities available at reasonable times and intervals for energy audits and related assessments that the Authority desires to perform, if any, at the Authority's own expense.

The Customer shall provide information requested by the Authority or its designee in surveys, questionnaires and other information requests relating to energy efficiency and energy-related projects, programs and services.

The Customer may, after consultation with the Authority, exclude from written copies of audits, reports and other information provided to the Authority under this Article trade secrets and other information which if disclosed would harm the competitive position of the Customer.

APPENDIX TO SCHEDULE B

I. Base Employment Level

In accordance with Article I of Schedule B, the Customer agrees to a Base Employment Level at the Customer's Facility as indicated below.

| Base Employment Level | Facility | Miscellaneous/Notes |
|--|---|-----------------------|
| Not less than two hundred seventy four (274) persons in full-time positions at the Facility within three (3) years of the commencement of Electric Service of any portion of the Allocation to the Facility. | 334 County Road 16, Canton, NY 13617 | Wilselfalleous/1votes |
| | | |

II. Capital Expansion Program

The Customer shall make a total capital investment of at least \$21,750,000 in connection with an expansion of the Facility (the "Capital Investment"). The Capital Investment is expected to consist of the following specific expenditures:

Building Expansion (~30,700 sq. ft): \$6,950,000

Machinery & Equipment (furnaces, ultrasonic

tank, crane, and associated equipment): \$14,800,000

Total Capital Investment: \$21,750,000

The Capital Investment shall be made, and the expansion of the Facility shall be completed and fully operational, not later than July 29, 2017 (*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 sole discretion of the Authority.

SCHEDULE C

TAKEDOWN SCHEDULE

N/A



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

Schedule of Rates for Sale of Firm Power to Preservation Power Customers

Service Tariff No. 10

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Preservation Power (as defined below) directly to a qualified business Customer (as defined below) for firm power service.

II. Abbreviations and Terms

A. The following abbreviations are used:

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

- B. The term "Agreement" means an executed Agreement for the Sale of Preservation Power and Energy between the Authority and the Customer (each as defined below).
- C. The term "Annual Adjustment Factor" or "AAF" shall have the meaning set forth in Section V herein.
- D. The term "Authority" means 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."
- E. The term "Customer" means a business customer who has received an allocation for Preservation Power from the Authority and who purchases Preservation Power directly from the Authority.
- F. The term "Electric Service" means the power and energy provided to the Customer in accordance with the Agreement, this Service Tariff and the Rules.

- G. The term "Preservation Power" means 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).
- H. The term "Firm Power" means 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.
- I. The term "Firm Energy" means energy (kWh) associated with Firm Power.
- J. The term "Load Serving Entity" or "LSE" shall have the meaning set forth in the Agreement.
- K. The term "Project" means the Authority's St. Lawrence-FDR Power Project, FERC Project No. 2000.
- L. The term "Rate Year" or "RY" means the period from July 1 through June 30 of the following year.
- M. The term "Rules" means 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.
- N. The term "Service Tariff" means this Service Tariff No. 10.

All other capitalized terms and abbreviations used but not defined herein shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. <u>Preservation Power Base Rates</u>

The monthly base rates for demand and energy charges paid by Customer to Authority shall be:

| Rate Year | Demand <u>Charge</u> \$/kW-mo. | Energy <u>Charge</u> \$/MWh | | |
|-----------|--------------------------------------|-----------------------------------|--|--|
| 2010 | 6.15 | 10.52 | | |
| 2011 | 6.71 | 11.48 | | |
| 2012 | 7.32 | 12.52 | | |
| 2013 | 7.99 | 13.66 | | |

Beginning with the 2014 Rate Year (July 1, 2014), and for each Rate Year thereafter, such rates shall be subject to an Annual Adjustment Factor set forth in Section V herein.

B. Preservation Power Rates No Lower Than Rural/Domestic Rate

At all times the applicable 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) and PAL § 1005(5) (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 Preservation Power 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 charge 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.

E. Billing Period

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

F. Billing Demand

The billing demand shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

G. Billing Energy

The billing energy shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

H. Contract Demand

The contract demand of each Customer will be the amount of Preservation Power, not to exceed the Customer's Allocation, provided to such Customer by the Authority in accordance with the Agreement. The minimum Contract Demand for any Preservation Power Allocation is 100 kW.

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. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of NYPA's Firm Power customers served from the Hydro Projects, hydropower curtailments (i.e. reductions) in the amount of Firm Power and Firm Energy to which the Customer is entitled shall be applied on a pro rata basis to all Firm Power and Firm Energy customers served from the Hydro Projects. Reductions as a percentage of the otherwise required Firm Power and Firm Energy sales will be the same for all Firm Power and Firm Energy customers served from the Hydro Projects. The Authority shall be under no obligation to deliver and will not deliver any such curtailed energy to the Customer in later billing periods. The Customer will receive appropriate bill credits as provided under the Rules.

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.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the 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 and Billing

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

- The billing methodology to be used to render bills to the Customer related to its Allocation shall be determined in accordance with the Agreement and delivery agreement between the Authority and, as applicable, the Customer or local electric utility or both.
- 2. Billing Demand Unless separately metered, the billing demand charged by the Authority to each Customer will be the highest 15-minute integrated demand during each billing period recorded on the Customer's meter multiplied by a percentage based on load factor sharing, as applicable.
- 3. Billing Energy Unless separately metered, the kilowatt-hours charged by the Authority to each Customer will be the total number of kilowatt-hours recorded on the Customer's meter for the billing period multiplied by a percentage based on load factor sharing, as applicable.

F. Payment by Customer to Authority

1. <u>Demand and Energy Charges, Taxes</u>

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 monthly minimum charge as defined herein:

- a. The demand charge 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 charge 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 ("NYISO Charges")

The Customer shall compensate the Authority for the following NYISO Charges assessed on the Authority for services provided by the NYISO pursuant to 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, less any associated grandfathered Transmission Congestion Contracts ("TCCs") 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 third 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.

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. 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. 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. Adjustment of Charges

1. Distribution Losses

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

2. Transformer Losses

If delivery is made at transmission voltage but metered on the low-voltage side of the Customer's substation, the meter readings will be increased two percent to compensate for transformer losses.

3. Power Factor

Power factor is the ratio of real power (kW) to apparent power (kVa) for any given load and time. The Authority may require the Customer to maintain a power factor of not less than 90%, lagging or leading, at the point of delivery, or as may otherwise be imposed upon the Authority by the local electric utility providing delivery and/or NYISO.

| Н. | <u>Conflicts</u> |
|----|---|
| | 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, the provisions of the Agreement shall govern. |
| I. | <u>Customer Resales Prohibited</u> |
| | The Customer may not resell any quantity of Preservation Power. |
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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."

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: 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 by the Parties to reflect, the Customer and the Authority shall mutually select a substitute Index. The Parties agree to mutually select substitute indices within 90 days, once notified by the other party that the indices are no longer available or no longer reflect the relevant factors or changes with the indices were intended by the Parties to reflect. Should the 90day 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 unable to reach agreement on substitute indices within the 90-day period, the Parties 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 and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. <u>Sample Computation of the AAF (hypothetical values for July 1, 2014 implementation):</u>

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 | Measuring |
|------------------|---------------|---------------|
| | Year | Year - 1 |
| | <u>(2013)</u> | <u>(2012)</u> |
| January | 171.2 | 167.8 |
| February | 172.8 | 167.6 |
| March | 171.6 | 168.2 |
| April | 173.8 | 168.6 |
| May | 175.1 | 171.6 |
| June | 185.7 | 180.1 |
| July | 186.4 | 182.7 |
| August | 184.7 | 179.2 |
| September | 185.5 | 181.8 |
| October | 175.5 | 170.2 |
| November | 172.2 | 168.8 |
| December | 171.8 | 166.6 |
| Average | 177.2 | 172.8 |
| Ratio of MY/MY-1 | | 1.03 |

| • Index 2 – EIA Ir | ndustrial Rate | | |
|--------------------|----------------------|-----------------------|--------------------------|
| <u>State</u> | Revenues (\$000s) | <u>Sales</u> (MWh) | Avg. Rate (cents/kWh) |
| Measuring Y | ear (2012) | | |
| СТ | 590,972 | 6,814,757 | |
| MA | 1,109,723 | 13,053,806 | |
| ME | 328,594 | 4,896,176 | |
| NH | 304,363 | 2,874,495 | |
| NJ | 1,412,665 | 15,687,873 | |
| NY | 2,001,588 | 26,379,314 | |
| ОН | 3,695,978 | 78,496,166 | |
| PA | 3,682,192 | 63,413,968 | |
| RI | 152,533 | 1,652,593 | |
| VT | 155,903 | 2,173,679 | |
| TOTAL | 13,434,511 | 215,442,827 | 6.24 |
| Measuring Y | ear -1 (2011) | | |
| СТ | 579,153 | 6,678,462 | |
| MA | 1,076,431 | 12,662,192 | |
| ME | 310,521 | 4,626,886 | |
| NH | 298,276 | 2,817,005 | |
| NJ | 1,370,285 | 15,217,237 | |
| NY | 1,891,501 | 24,928,452 | |
| ОН | 3,622,058 | 76,926,243 | |
| PA | 3,571,726 | 61,511,549 | |
| RI | 144,144 | 1,561,700 | |
| VT | 152,785 | | |
| TOTAL | | 209,059,931 | 6.23 |
| Ra | tio of MY/MY-1 | | 1.00 |

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

| | Measuring Year | Measuring Year -1 |
|---------------|-------------------|----------------------|
| | (2013) | (2012) |
| | <u>(2010)</u> | <u>(2012)</u> |
| January | 190.1 | 187.2 |
| February | 190.9 | 188.0 |
| March | 191.6 | 188.7 |
| April | 192.8 | 189.9 |
| May | 194.7 | 191.8 |
| June | 195.2 | 192.3 |
| July | 195.5 | 192.3 |
| August | 196.0 | 193.1 |
| September | 196.1 | 193.2 |
| October | 196.2 | 193.8 |
| November | 196.6 | 193.7 |
| December | 196.7 | 194.0 |
| Average | 194.4 | 191.5 |
| Ratio of MY/M | IY-1 | 1.02 |

STEP 2 Determine AAF by Summing the Weighted Indices

| | Ratio of MY | | <u>Weighted</u> |
|--------------------------------------|---------------------------------------|---------------|-----------------|
| <u>Index</u> | to MY-1 | <u>Weight</u> | <u>Factors</u> |
| | · · · · · · · · · · · · · · · · · · · | | |
| PPI Industrial Power | 1.03 | 0.35 | 0.361 |
| EIA Industrial Rate | 1.00 | 0.40 | 0.400 |
| PPI Industrial Commodities less fuel | 1.02 | 0.25 | 0.255 |
| AAF | | | 1.016 |

STEP 3

Apply AAF to Calculate the New Rate Year Base Rate

| | <u>Demand</u> \$/kW-mo. | Energy \$/MWh |
|-----------------------------|----------------------------|------------------|
| Current Rate Year Base Rate | 7.99 | 13.66 |
| New Rate Year Base Rate | 8.12 | 13.88 |

| | | | | | | | Estimated | New Jobs | Power | Power | |
|---------|--------------------------------|---------|-----------|--------|---------------------|------|-------------|------------|-----------|-------------|----------|
| Exhibit | | | | | Base | New | Capital | Avg. Wage | Requested | Recommended | Contract |
| Number | Company Name | Program | City | County | Jobs ⁽¹⁾ | Jobs | Investment | & Benefits | (kW) | (kW) | Term |
| A-1 | 3M Company | EP | Tonawanda | Erie | 345 | 6 | \$1,985,000 | \$67,100 | 256 | 150 | 7 Years |
| A-2 | Innomotive Solutions Group LLC | RP | Lancaster | Erie | 0 | 21 | \$5,500,000 | \$36,600 | 200 | 100 | 7 Years |
| A-3 | Royal Plastix USA LLC | RP | Buffalo | Erie | 0 | 55 | \$3,725,000 | \$36,300 | 843 | 600 | 7 Years |
| | Totals | | | | | 82 | 11,210,000 | | | 850 | |

(1) Represents employment at time of application or, in the case of existing customer, the higher of existing employment or the highest contract employment commitment

APPLICATION SUMMARY

Expansion Power

Company: 3M Company

Project Location: Tonawanda

County: Erie

IOU: National Grid

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

Project Description: Looking at a three-phase project to make production more efficient,

improve employee safety with increased automation and bring on new

product production.

Existing Allocation(s): Two EP allocations totaling 1,500 kW and a 1,750 kW RNY retention

allocation.

Power Request: 256 kW

Power Recommended: 150 kW

Job Commitment:

Base: 345 jobs **New:** 6 jobs

New Jobs/Power Ratio: 40/MW

New Jobs -

Avg. Wage and Benefits: \$67,100

Capital Investment: \$1.985 million

Capital Investment/MW: \$13 million/MW

Other ED Incentives: None

Summary: The 3M Tonawanda facility is in competition with five other 3M facilities

outside of NYS for a new production line that would move the company from "outsourcing" to "insourcing" a new sponge product. A hydropower allocation will assist 3M's decision to move forward with this investment in Tonawanda helping it to add 6 well-paying jobs to 3M's WNY payroll.

APPLICATION SUMMARY Replacement Power

Company: Innomotive Solutions Group LLC

Project Location: Lancaster

County: Erie

IOU: NYSEG

Business Activity: Manufacturer of roll-up shutter-style doors for specialty vehicles

Project Description: Renovate and add on to an existing building to facilitate the manufacture,

assembly and painting of roll-up shutter-style doors for fire apparatus and

emergency vehicles.

Existing Allocation(s): None

Power Request: 200 kW

Power Recommended: 100 kW

Job Commitment:

Current: 0 jobs New: 21 jobs

New Jobs/Power Ratio: 210/MW

New Jobs -

Avg. Wage and Benefits: \$36,600

Capital Investment: \$5.5 million

Capital Investment/MW: \$55 million/MW

Other ED Incentives: WNY Power Proceeds Allocation of \$150,000 and \$150,000 in assistance

from the Excelsior Jobs Program from Empire State Development, sales tax and PILOT support from the Town of Lancaster IDA and NYSERDA.

Summary: Innomotive is looking to expand its operations to the United States from

its main manufacturing site in Burlington, Ontario, Canada. The company is considering Midwest states or, alternatively, expanding at its current facility, but believes that state and local incentives from New York, including an allocation of hydropower, would justify locating the expansion of its manufacturing operations in Lancaster (Erie County).

APPLICATION SUMMARY **Replacement Power**

Company: Royal Plastix USA LLC

Project Location: Buffalo

Erie **County:**

IOU: National Grid

Business Activity: Manufacturer of plastic household items

Project Description: Looking to move injection molding manufacturing to USA to increase

> production capacities and serve both the Canadian and northeast US corridor. The project involves the purchase and renovation of a vacant facility and the installation of 22 injection molding machines when

completed.

Existing Allocation(s): None

Power Request: 843 kW

Power Recommended: 600 kW

Job Commitment:

New: 55 jobs

New Jobs/Power Ratio: 92/MW

New Jobs -

Avg. Wage and Benefits: \$36,300

Capital Investment: \$3.725 million

Capital Investment/MW: \$6.21/MW

Other ED Incentives: Up to \$464,075 under the Excelsior Jobs Program from Empire State

Development.

Royal Plastix USA LLC is looking to purchase and upgrade a vacant **Summary:**

67,000-square-foot building on Buffalo's eastside in order to manufacture

plastic household products. An allocation of low cost hydropower

remains a critical part of the transaction for the company to succeed in its highly competitive marketplace. Royal Plastix plans to operate 3 full shifts to dramatically increase production to meet the demands of its Canadian and Northeastern USA customers/ market with "Made in the USA"

products.

POWER AUTHORITY

OF THE

STATE OF NEW YORK

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

AGREEMENT FOR THE SALE
OF EXPANSION POWER AND/OR REPLACEMENT POWER
to
INNOMOTIVE SOLUTIONS GROUP, LLC

The POWER AUTHORITY OF THE STATE OF NEW YORK ("Authority"), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law ("PAL"), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for the Sale of Expansion Power and/or Replacement Power ("Agreement") with Innomotive Solutions Group, LLC ("Customer"), with offices at 4304 Walden Avenue, Lancaster, NY 14086. The Authority and the Customer are from time to time referred to in this Agreement as "Party" or collectively as "Parties" and agree follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the Niagara Power Project, Federal Energy Regulatory Commission ("FERC") Project No. 2216, known as "Expansion Power" (or "EP"), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the Niagara Power Project, FERC Project No. 2216, known as "Replacement Power" (or "RP"), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, EP consists of 250 megawatts ("MW") of firm hydroelectric power and associated firm energy produced by the Niagara Power Project;

WHEREAS, RP consists of 445 MW of firm hydroelectric power and associated firm energy produced by the Niagara Power Project;

WHEREAS, the Authority is authorized pursuant to PAL § 1005(13)(a) to award EP and/or RP based on, among other things, the criteria listed in the PAL, including but not limited to an applicant's long-term commitment to the region as evidenced by the current and planned capital investment; the type and number of jobs supported or created by the allocation; and the state, regional and local economic development strategies and priorities supported by local units of governments in the area in which the recipient's facilities are located;

WHEREAS, the Customer applied to the Authority for an allocation of hydropower to support operations at a new and/or expanded facility to be constructed and operated by the Customer (defined in Section I of this Agreement as the "Facility");

WHEREAS, on July 29, 2014, the Authority's Board of Trustees ("Trustees") approved a 100 kilowatt ("kW") allocation of RP to the Customer for a seven (7) year term (defined in Section I of this Agreement as the "Allocation") in connection with the construction and operation of the Facility as further described in this Agreement;

WHEREAS, on July 29, 2014, the Trustees authorized the Authority to, among other things, take any and all actions and execute and deliver any and all agreements and other documents necessary to effectuate its approval of the Allocation;

WHEREAS, the provision of Electric Service associated with the Allocation is an

unbundled service separate from the transmission and delivery of power and energy to the Customer, and delivery service will be performed by the Customer's local electric utility in accordance with the Utility Tariff;

WHEREAS, the Parties have reached an agreement on the sale of the Allocation to the Customer on the terms and conditions provided for in this Agreement;

WHEREAS, the Authority has complied with requirements of PAL § 1009 which specifies the approval process for certain contracts negotiated by the Authority; and

WHEREAS, the Governor of the State of New York has approved the terms of this Agreement pursuant to PAL § 1009(3).

NOW THEREFORE, in consideration of the mutual covenants herein, the Authority and the Customer agree as follows:

NOW THEREFORE, the Parties hereto agree as follows:

I. Definitions

- A. **Agreement** means this Agreement.
- B. **Allocation** refers to the allocation of EP and/or RP awarded to the Customer as specified in Schedule A.
- C. **Contract Demand** is as defined in Service Tariff No. WNY-1.
- D. **Electric Service** is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, Service Tariff No. WNY-1 and the Rules.
- E. **Expansion Power** (or **EP**) is 250 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(5) and (13).
- F. **Facility** means the Customer's facilities as described in Schedule A to this Agreement.
- G. **Firm Power** is as defined in Service Tariff No. WNY-1.
- H. **Firm Energy** is as defined in Service Tariff No. WNY-1.
- I. **FERC** means the Federal Energy Regulatory Commission (or any successor organization).
- J. **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.

- K. **Hydro Projects** is a collective reference to the Project and the Authority's St. Lawrence-FDR Project, FERC Project No. 2000.
- L. **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.
- M. **NYISO** means the New York Independent System Operator or any successor organization.
- N. **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.
- O. **Project** means the Niagara Power Project, FERC Project No. 2216.
- P. **Replacement Power** (or **RP**) is 445 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(5) and (13).
- Q. **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.
- R. **Service Tariff No. WNY-1** means the Authority's Service Tariff No. WNY-1, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.
- S. **Schedule A** refers to the Schedule A entitled "Expansion Power and/or Replacement Power Allocations" which is attached to and made part of this Agreement.
- T. **Schedule B** refers to the Schedule B entitled "Expansion Power and/or Replacement Power Commitments" which is attached to and made part of this Agreement.
- U. **Schedule C** refers to the Schedule C entitled "Takedown Schedule" which is attached to and made part of this Agreement.
- V. **Substitute Energy** means energy that the Authority provides at the request of the Customer to replace hydroelectricity that would otherwise have been supplied to the Customer under this Agreement. Unless otherwise agreed upon by the Parties, Substitute Energy refers to energy purchased by the Authority for the Customer from markets administered by the NYISO.
- W. **Taxes** is as defined in Service Tariff No. WNY-1

- X. **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.
- Y. **Utility Tariff** means the retail tariff(s) of the Customer's local electric utility filed and approved by the PSC applicable to the delivery of EP and/or RP.

II. Electric Service

- A. The Authority shall make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, Service Tariff No. WNY-1 and the Rules. The Customer shall not be entitled to receive Electric Service under this Agreement for any EP and/or RP allocation unless such EP and/or RP allocation is identified on Schedule A.
- B. The Authority will provide, and the Customer shall pay for, Electric Service with respect to the Allocation specified on Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall take and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
- C. The Authority shall provide UCAP in amounts necessary to meet the Customer's NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with Service Tariff No. WNY-1.
- D. The Customer acknowledges and agrees that Customer's local electric utility shall be responsible for delivering the Allocation to the Facility specified in Schedule A, and that the Authority has no responsibility for delivering the Allocation to the Customer.
- E. The Contract Demand for the Customer's Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as EP or RP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all EP and RP customers, as applicable, based on the terms of such ruling, order, or decision.
- F. The Contract Demand may not exceed the Allocation.

III. Rates, Terms and Conditions

- A. Electric Service shall be sold to the Customer based on the rates, terms and conditions provided for in this Agreement, Service Tariff No. WNY-1 and the Rules.
- B. 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. Any rate increase to Customer under this subsection shall be on a nondiscriminatory basis as compared to other Authority customers after giving consideration to the factors set forth in the first sentence of this subsection. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.

IV. Expansion Power and/or Replacement Power Commitments

- A. Schedule B sets forth the Customer's specific "Expansion Power and/or Replacement Power Commitments." The commitments agreed to in Schedule B are in addition to any other rights and obligations of the Parties provided for in the Agreement.
- B. The Authority's obligation to provide Electric Service under this Agreement, and the Customer's obligation to take and pay for such Electric Service, are expressly conditioned upon the Customer's timely completion of the commitments described in Schedule B.
- C. In the event of partial completion of the Facility which has resulted in such Facility being partly operational and the partial attainment of the Base Employment Level, the Authority may, upon the Customer's request, provide Electric Service to the Customer in an amount determined by the Authority to fairly correspond to the completed portion of the Facility, provided that the Customer demonstrates that the amount of requested Electric Service is needed to support the operations of the partially completed Facility.
- D. The Customer shall give the Authority not less than ninety (90) days' advance notice in writing of the anticipated date of partial or full completion of the Facility. The Authority will inspect the Facility for the purpose of verifying the completion status of the Facility and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time after verification based on applicable operating procedures of the Authority, the Customer's local electric utility and the NYISO.
- E. In the event the Customer fails to complete the Facility by July 29, 2017 (*i.e.*, within three (3) years of the Authority's award of the Allocation), the Allocation, at the option and discretion of the Authority, may be canceled or reduced by the total amount of kilowatts determined by the Authority to fairly correspond to the uncompleted portion of the Facility, provided that in such event, and upon request of the Customer, such date may be extended by the Authority in its sole discretion.

V. Rules and Service Tariff

Service Tariff No. WNY-1, as may be modified or superseded from time to time by the Authority, is hereby incorporated into this Agreement with the same force and effect as if set forth herein at length. In the event of any inconsistencies, conflicts, or differences between the provisions of Service Tariff No.WNY-1 and the Rules, the provisions of Service Tariff No. WNY-1 shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and Service Tariff No. WNY-1, the provisions of this Agreement shall govern.

VI. Transmission and Delivery of Firm Power and Firm Energy; Responsibility for Charges

- A. The Customer shall be responsible complying with all requirements of its local electric utility 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. The Customer shall be solely responsible for paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff. Should the Authority incur any charges associated with such delivery service, the Customer shall reimburse the Authority for all such charges.
- C. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in Service Tariff No. WNY-1 or any successor service tariff, regardless of whether such NYISO Charges are transmission-related. Such NYISO Charges shall be in addition to the charges for power and energy.
- D. By entering into this Agreement, the Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that the Authority and the local electric utility determine is necessary to provide for the Allocation, sale and delivery of EP and/or RP to the Customer, the proper and efficient implementation of the EP and/or RP programs, billing related to EP and/or RP, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters.
- E. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement or other form of understanding between the Authority and the Customer's local electric utility on terms and conditions that are acceptable to the Authority.
- F. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, provide documentation, execute consents and provide other information (collectively, "Information") which the Authority determines is necessary for the provision of Electric Service, the delivery of EP and/or RP, billing

related to the EP and/or RP program, the effective and proper administration of the EP and/or RP 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 such Information shall be grounds for the Authority in its sole discretion to withhold or suspend Electric Service to the Customer.

VII. Billing and Billing Methodology

- A. 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.
- B. The Authority will render bills by the 10th business day of the month for charges due for the previous month. 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 other applicable charges.
- C. The Authority may render bills to the Customer electronically.
- D. The Authority and the Customer may agree in writing to an alternative method for the rendering of bills and for the payment of bills, including but not limited to the use of an Authority-established customer self-service web portal.
- E. 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.
- F. Unless otherwise agreed to by the Authority and the Customer in writing, if the Customer fails to pay any bill when due, an interest charge of two percent (2%) of the amount unpaid shall be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent (1 1/2%) of the sum unpaid shall be added on the first day of each succeeding billing period until the amount due, including interest, is paid in full.
- G. 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. If at any time after commencement of Electric Service the Customer fails to make complete and timely payment of any two (2) bills for Electric Service, the Authority shall

have the right to require the Customer to deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit shall be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. If the Customer fails or refuses to provide the deposit within thirty (30) days of a request for such deposit, the Authority may, in its sole discretion, suspend Electric Service to the Customer or terminate this Agreement.

- I. All other provisions with respect to billing are set forth in Service Tariff No. WNY-1 and the Rules.
- J. 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.

VIII. Hydropower Curtailments and Substitute Energy

- A. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of the Authority's firm power customers served by the Authority from the Hydro Projects, curtailments (*i.e.* reductions) in the amount of Firm Power and Firm Energy associated with the Allocation to which the Customer is entitled shall be applied on a *pro rata* basis to all firm power and energy customers served from the Hydro Projects, consistent with Service Tariff No. WNY-1 as applicable.
- B. The Authority shall provide reasonable notice to Customer of any curtailments referenced in Section VIII.A of this Agreement that could impact Customer's Electric Service under this Agreement. Upon written request by the Customer, the Authority will provide Substitute Energy to the Customer to replace the Firm Power and Firm Energy that would otherwise have been supplied pursuant to this Agreement.
- C. For each kilowatt-hour of Substitute Energy supplied by the Authority, the Customer will 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. Billing and payment for Substitute Energy shall be governed by the Billing and Payments provision of the Authority's Rules (Section 454.6) and shall apply directly to the Substitute Energy service supplied to the Customer.
- D. The Parties may enter into a separate agreement to facilitate the provision of Substitute Energy, provided, however, that the provisions of this Agreement shall remain in effect notwithstanding any such separate agreement. The provision of Substitute Energy may be terminated by the Authority or the Customer on fifteen (15) days' prior written notice.

IX. Effectiveness, Term and Termination

- A. This Agreement shall become effective and legally binding on the Parties upon execution of this Agreement by the Authority and the Customer.
- B. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (1) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (2) termination by the Authority pursuant to this Agreement, Service Tariff No. WNY-1, or the Rules; or (3) expiration of the Allocation by its own term as specified in Schedule A.
- C. The Customer may exercise a partial termination of the Allocation upon at least thirty (30) days' notice prior written notice to the Authority. The termination shall be effective commencing with the first billing period as defined in Service Tariff No. WNY-1.
- D. 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 relicensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, Service Tariff No. WNY-1, or the Rules.

X. Additional Allocations

- A. Upon proper application by the Customer, the Authority may in its discretion award additional allocations of EP or RP to the Customer at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (i) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (ii) 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.
 - B. 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 additional allocations and consider the terms and conditions that should be applicable of any additional allocations.

XI. Notification

A. Correspondence involving the administration of this Agreement shall be addressed 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 |
| |
| Γo: The Customer |

Innomotive Solutions Group, LLC 4304 Walden Avenue Lancaster, NY 14086 Email: Facsimile:

Attention:

The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XI.B of this Agreement.

B. 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: (1) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (2) 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; (3) if delivered by hand, with written confirmation of receipt; (4) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (5) if sent by electronic mail to the appropriate address as set forth above, with written confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

XII. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a).

XIII. Venue

Each Party consents to the exclusive jurisdiction and venue of any state or federal court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement.

XIV. Successors and Assigns; Resale of Hydropower

A. The Customer may not assign or otherwise transfer an interest in this Agreement.

- B. The Customer may not resell or allow any other person to use any quantity of EP and/or RP it has purchased from the Authority under this Agreement.
- C. Electric Service sold to the Customer pursuant to this Agreement may only be used by the Customer at the Facility specified in Schedule A.

XV. Previous Agreements and Communications

- A. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the subject matter hereof, and supersedes all prior negotiations, representations, warranties, commitments, offers, contracts and writings, written or oral, with respect to the subject matter hereof.
- B. Except as otherwise provided in this Agreement, no modification 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.

XVI. Severability and Voidability

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

XVII. Waiver

- A. 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.
- B. 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.

XVIII. Execution

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall

not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement by email as a PDF file 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: | |
|----------|----------------------------------|
| INNOMOTI | IVE SOLUTIONS GROUP, LLC |
| Ву: | |
| Title: | |
| Date: | |
| | |
| AGREED: | |
| POWER AU | THORITY OF THE STATE OF NEW YORK |
| By: | |
| | John R. Koelmel, Chairman |
| | |

SCHEDULE A TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/OR REPLACEMENT POWER TO CUSTOMER

EXPANSION POWER AND/OR REPLACEMENT POWER ALLOCATIONS

Customer: Innomotive Solutions Group, LLC

| | Allocation | | Trustee | Expiration Date |
|--------------------|-------------|---------------------|---------------|----------------------|
| Type of Allocation | Amount (kW) | Facility | Approval Date | |
| | | | | Seven (7) years from |
| | | | | commencement of |
| | | | | Electric Service of |
| | | 4304 Walden Avenue | | any portion of this |
| Replacement Power | 100 kW | Lancaster, NY 14086 | July 29, 2014 | Allocation. |
| | | | | |

SCHEDULE B TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/OR REPLACEMENT POWER TO CUSTOMER

EXPANSION POWER AND/OR REPLACEMENT POWER COMMITMENTS

I. <u>Employment Commitments</u>

A. Employment Levels

The provision of EP and/or RP to the Customer hereunder is in consideration of, among other things, the Customer's creation and/or maintenance of the employment level set forth in the Appendix of this Schedule (the "Base Employment Level"). Such Base Employment Level shall be the total number of full-time positions held by: (1) individuals who are employed by the Customer at Customer's Facility identified in the Appendix to this Schedule, and (2) 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.

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.

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 sole discretion.

B. Employment Records and Reports

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.

II. Reductions of Contract Demand

A. Employment Levels

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in this Schedule B, for the subject calendar year, the Authority may reduce the Contract Demand subject to Article II.D of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

B. Power Utilization Levels

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. If the average of the Customer's six (6) highest Billing Demands (as such term is described in Service Tariff No. WNY-1) for Expansion Power and/or Replacement Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to Article II.D of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

C. Capital Investment

The Customer agrees to undertake the capital investment set forth in the Appendix to this Schedule.

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 obligations provided for in this Schedule B.

D. 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 this Schedule, the Authority shall provide the Customer with at least thirty (30) days prior written notice of such reduction, specifying the amount of the reduction of Contract Demand and the reason for the reduction, provided, however, that before making the reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance or Facility upgrading periods when such events temporarily reduce plant employment levels or electrical demand as well as business cycle.

III. Energy Efficiency Audits; Information Requests

Unless otherwise agreed to by the Authority in writing, the Customer shall undergo an energy efficiency audit of its Facility and equipment at which the Allocation is consumed at the Customer's expense at least once during the term of this Agreement but in any event not less than once every five years. The Customer will provide the Authority with a copy of the audit or, at the Authority's option, a report describing the results of the audit, and provide documentation requested by the Authority to verify the implementation of any efficiency measures implemented at the Facility.

The Customer agrees to cooperate to make its Facility available at reasonable times and intervals for energy audits and related assessments that the Authority desires to perform, if any, at the Authority's own expense.

The Customer shall provide information requested by the Authority or its designee in surveys, questionnaires and other information requests relating to energy efficiency and energy-related projects, programs and services.

The Customer may, after consultation with the Authority, exclude from written copies of audits, reports and other information provided to the Authority under this Article trade secrets and other information which if disclosed would harm the competitive position of the Customer.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

Within three (3) years of commencement of Electric Service, the Customer shall employ at least twenty-one (21) full-time employees ("Base Employment Level") at the Customer's Facility. The Base Employment Level shall be maintained thereafter for the term of the Allocation in accordance with Article I of Schedule B.

CAPITAL INVESTMENT

The Customer shall make a total capital investment of at least \$5,500,000 to renovate and furnish the Facility (the "Capital Investment"). The Capital Investment for the Facility is expected to consist of the following specific expenditures:

Building Acquisition, Renovation & Expansion: \$2,000,000 Manufacturing Equipment: \$500,000 Paint System: \$3,000,000

Total Capital Investment: \$5,500,000

The Capital Investment shall be made, and the Facility shall be completed and fully operational, no later than July 29, 2017 (*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 sole discretion of the Authority.

SCHEDULE C TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/OR REPLACEMENT POWER TO CUSTOMER

TAKEDOWN SCHEDULE

N/A



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

Schedule of Rates for Sale of Firm Power to Expansion and Replacement Customers located
In Western New York

Service Tariff No. WNY-1

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Expansion Power and/or Replacement Power (as defined below) directly to a qualified business Customer (as defined below) for firm power service.

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

Agreement: An executed "Agreement for the Sale of Expansion and/or Replacement Power and Energy" between the Authority and the Customer (each as defined below).

<u>Annual Adjustment Factor</u> or <u>AAF</u>: This term shall have the meaning set forth in Section V herein.

<u>Authority</u>: 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."

<u>Customer</u>: A business customer who has received an allocation for Expansion Power and/or Replacement Power from the Authority and who purchases Expansion Power and/or Replacement Power directly from the Authority.

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

Expansion Power and/or **Replacement Power**: 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).

<u>Firm Power</u>: 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.

<u>Load Serving Entity</u> or **<u>LSE</u>**: This term shall have the meaning set forth in the Agreement.

Load Split Methodology or **LSM**: A load split methodology applicable to a Customer's allocation. It is usually provided for in an agreement between the Authority and the Customer's local electric utility, an agreement between the Authority and the Customer, or an agreement between the Authority, the Customer and the Customer's local electric utility, or such local utility's tariff, regarding the delivery of WNY Firm Power. The load split methodology is often designated as "Load Factor Sharing" or "LFS", "First through the Meter" or "FTM", "First through the Meter Modified" or "FTM Modified", or "Replacement Power 2" or "RP 2".

Project: The Authority's Niagara Power Project, FERC Project No. 2216.

Rate Year or **RY**: The period from July 1 through June 30 starting July 1, 2013, and for any year thereafter.

<u>Rules</u>: 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. WNY-1.

Target Rate: This term shall have the meaning set forth in Section III herein.

All other capitalized terms and abbreviations used but not defined herein shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Expansion Power (EP) and Replacement Power (RP) Base Rates

Beginning on July 1, 2013, there will be a 3-year phase-in to new base rates. The phase-in will be determined by the rate differential between the 2012 EP/RP rates and a "Target Rate." The Target Rate, specified in Section III.A.1. below, is based on the rates determined by the Authority to be applicable in RY 2013 for sales of "preservation power" as that term is defined in PAL § 1005(13). The following Sections III.A.1-4 describe the calculation and implementation of the phase-in.

- 1. The initial rate point will be established by the EP/RP rates (\$/kW and \$/MWh), determined by mid-April 2012 and made effective on May 1, 2012 in accordance with the Authority's then-applicable EP and RP tariffs. The Target Rate (*i.e.* demand and energy rates) for RY 2013 shall be \$7.99/kW and \$13.66/MWh.
- 2. The difference between the two rate points is calculated and divided by 3 to correspond with the number of Rate Years over which the phase-in will occur. The resulting quotients (in \$/kW and \$/MWh) are referred to as the "annual increment."
- 3. The annual increment will be applied to the base rates for the 3-year period of the 2013, 2014 and 2015 Rate Years, which shall be as follows:

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RY 2013: July 1, 2013 to June 30, 2014
RY 2014: July 1, 2014 to June 30, 2015
RY 2015: July 1, 2015 to June 30, 2016
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The annual rate adjustments normally made effective on May 1, 2013 under then-applicable EP and RP tariffs will be suspended, such that demand and energy rates established in 2012 shall be extended through June 30, 2013.

- 4. Effective commencing in RY 2013, the Annual Adjustment Factor ("AAF") described in Section V herein, shall be applied as follows:
 - A. For the RY 2013 only, the AAF will be suspended, and the RY 2013 rate increase will be subject only to the annual increment.
 - B. For the RYs 2014 and 2015, the AAF will be applied to the demand and energy rates after the addition of the annual increment to the rates of the previous RY rates. Such AAF will be subject to the terms and limits stated in Section V herein.
 - C. Beginning in RY 2016, the AAF will be applied to the previous RY rates, and the annual increment is no longer applicable.

B. EP and RP Rates no Lower than Rural/Domestic Rate

At all times the applicable 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) and PAL § 1005(5) (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 EP and RP 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 charge 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.

E. Estimated Billing

If the Authority, in its sole 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 the Customer's Load Split Methodology as following:

- For Customers whose allocation is subject to a Load Factor Sharing/LFS LSM, the estimated demand (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 (kW) value for the Estimated Bill will equal the Customer's Takedown (kW) amount.
- For Customers whose allocation is subject to a First through the Meter/FTM, FTM Modified, or RP 2 LSM, the estimated demand (kW) value 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 the Customer's Load Split Methodology as following:

• For Customers whose allocation is subject to a Load Factor Sharing/LFS LSM, 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 value (kWh) will be equal to the Takedown (kW) amount at 70 percent load factor for that Billing Period.

• For Customers whose allocation is subject to a First through the Meter/FTM, FTM Modified, or RP 2 LSM, the estimated energy (kWh) will be equal to the Takedown (kW) amount at 100 percent load factor for that Billing Period.

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 B.D. shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended 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, the receipt of actual, additional, or corrected data concerning Customer energy or demand usage.

G. Billing Period

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

H. Billing Demand

The billing demand shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

I. Billing Energy

The billing energy shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

J. Contract Demand

The contract demand of each Customer will be the amount of Expansion Power and/or Replacement Power, not to exceed their Allocation, provided to such Customer by the Authority 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. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of NYPA's Firm Power customers served from the Hydro Projects, hydropower curtailments (*i.e.* reductions) in the amount of Firm Power and Energy to which the Customer is entitled shall be applied on a *pro rata* basis to all Firm Power and Energy customers served from the Hydro Projects. Reductions as a percentage of the otherwise required Firm Power and Energy sales will be the same for all Firm Power and Energy customers served from the Hydro Projects. The Authority shall be under no obligation to deliver and will not deliver any such curtailed energy to the Customer in later billing periods. The Customer will receive appropriate bill credits as provided under the Rules.

C. <u>Delivery</u>

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.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the 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 and Billing

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

1. The billing methodology to be used to render bills to the Customer related to its Allocation shall be determined in accordance with the Agreement and delivery agreement between the Authority and, as applicable, the Customer or local electric utility or both.

- 2. Billing Demand –The Billing Demand charged by the Authority to each Customer will be the highest 15 or 30-minute integrated demand, as determined by the local utility, during each Billing Period recorded on the Customer's meter multiplied by a percentage based on the Load Split Methodology provided for in any contract between the Authority and the Customer's local electric utility, any contract between the Authority and the Customer, or any contract between the Authority, the Customer and the Customer's local electric utility for delivery of WNY Power. Billing Demand may not exceed the amount of the Contract Demand.
- 3. Billing Energy –The kilowatt-hours charged by the Authority to each Customer will be the total number of kilowatt-hours recorded on the Customer's meter for the Billing Period multiplied by a percentage based on the methodology provided for in any contract between the Authority and the Customer's local electric utility for delivery of WNY Power.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power and Energy during any billing period the higher of either (i) the sum of (a), (b) and (c) below or (ii) the monthly minimum charge as defined herein:

- a. The demand charge 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 charge 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 Expansion Power and/or Replacement 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 ("NYISO Charges")

The Customer shall compensate the Authority for the following NYISO Charges assessed on the Authority for services provided by the NYISO pursuant to 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, less any associated grandfathered Transmission Congestion Contracts ("TCCs") 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 third 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. 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. 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. Bills will reflect the amounts due and owing, and are subject to adjustment as provided for in the Agreement, Service Tariff No. WNY-1 and the Rules. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority shall render bills to the Customer electronically.
- 2. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
- 3. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
- 4. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its sole discretion to suspend Electric Service to the Customer or terminate this Agreement.

H. Adjustment of Charges

1. Distribution Losses

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

I. Conflicts

The Authority's Rules shall apply to the Electric Service provided under this Service Tariff. 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.

J. Customer Resales Prohibited

The Customer may not resell any quantity of Expansion Power and/or Replacement Power.

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 ±5.0% ("±5% Collar"). Amounts outside the ±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 ±5% Collar, as described below.
 - a) When the AAF falls outside the ±5% Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the ±5% Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the ±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 ±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 by the Parties to reflect, the Customer and the Authority shall mutually select a substitute Index. The Parties agree to mutually select substitute indices within 90 days, once notified by the other party that the indices are no longer available or no longer reflect the relevant factors or changes with the indices were intended by the Parties 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 unable to reach agreement on substitute indices within the 90-day period, the Parties 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 and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2014 implementation):

STEP 1

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

• Index 1 - Producer Price Index, Industrial Power

| | Measuring | Measuring |
|------------------|-----------|---------------|
| | Year | Year - 1 |
| | (2013) | <u>(2012)</u> |
| | | |
| January | 171.2 | 167.8 |
| February | 172.8 | 167.6 |
| March | 171.6 | 168.2 |
| April | 173.8 | 168.6 |
| May | 175.1 | 171.6 |
| June | 185.7 | 180.1 |
| July | 186.4 | 182.7 |
| August | 184.7 | 179.2 |
| September | 185.5 | 181.8 |
| October | 175.5 | 170.2 |
| November | 172.2 | 168.8 |
| December | 171.8 | 166.6 |
| Average | 177.2 | 172.8 |
| Ratio of MY/MY-1 | | 1.03 |

| • Index 2 – EIA I | ndustrial Rate | | | |
|-------------------|-------------------|----------------|----------------------|------|
| <u>State</u> | Revenues (\$000s) | Sales (MWh) | Avg. Rate (cents/kWh |) |
| Measuring Y | Year (2012) | | | |
| СТ | 590,972 | 6,8 | 14,757 | |
| MA | 1,109,723 | 13,0 | 53,806 | |
| ME | 328,594 | 4,8 | 96,176 | |
| NH | 304,363 | 2,8 | 74,495 | |
| NJ | 1,412,665 | 15,6 | 87,873 | |
| NY | 2,001,588 | 26,3 | 79,314 | |
| ОН | 3,695,978 | 78,4 | 96,166 | |
| PA | 3,682,192 | 63,4 | 13,968 | |
| RI | 152,533 | 1,6 | 52,593 | |
| VT | 155,903 | 2,17 | <u>3,679</u> | |
| TOTAL | 13,434,511 | 215,4 | 42,827 | 6.24 |
| Measuring Y | Year -1 (2011) | | | |
| СТ | 579,153 | 6,6 | 578,462 | |
| MA | 1,076,431 | 12,6 | 62,192 | |
| ME | 310,521 | 4,6 | 26,886 | |
| NH | 298,276 | 2,8 | 17,005 | |
| NJ | 1,370,285 | 15,2 | 17,237 | |
| NY | 1,891,501 | 24,9 | 28,452 | |
| ОН | 3,622,058 | 76,9 | 26,243 | |
| PA | 3,571,726 | 61,5 | 11,549 | |
| RI | 144,144 | 1,5 | 61,700 | |
| VT | 152,785 | 2,13 | 0,205 | |
| TOTAL | 13,016,880 | 209,0 | 59,931 | 6.23 |
| | Ratio of MY/MY-1 | | | 1.00 |

| • | Index $3 - I$ | Producer | Price | Index, | Industrial | Commodities | Less Fuel |
|---|---------------|----------|-------|--------|------------|-------------|-----------|
|---|---------------|----------|-------|--------|------------|-------------|-----------|

| | Measuring Year (2013) | Measuring Year -1 (2012) |
|-----------|-----------------------------|--------------------------------|
| | | |
| January | 190.1 | 187.2 |
| February | 190.9 | 188.0 |
| March | 191.6 | 188.7 |
| April | 192.8 | 189.9 |
| May | 194.7 | 191.8 |
| June | 195.2 | 192.3 |
| July | 195.5 | 192.3 |
| August | 196.0 | 193.1 |
| September | 196.1 | 193.2 |
| October | 196.2 | 193.8 |
| November | 196.6 | 193.7 |
| December | 196.7 | 194.0 |
| Average | 194.4 | 191.5 |
| | | |

Ratio of MY/MY-1 **1.02**

STEP 2

Determine AAF by Summing the Weighted Indices

| Index | Ratio of MY to MY-1 | Weight | Weighted Factors |
|--------------------------------------|------------------------|--------|---------------------|
| PPI Industrial Power | 1.03 | 0.35 | 0.361 |
| EIA Industrial Rate | 1.00 | 0.40 | 0.400 |
| PPI Industrial Commodities less fuel | 1.02 | 0.25 | 0.255 |
| AAF | | | 1.016 |

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. | Energy \$/MWh |
|---|----------------------------|------------------|
| Current Rate Year Base Rate New Rate Year Base Rate | 7.56 7.68 | 12.91 13.12 |

POWER AUTHORITY

OF THE

STATE OF NEW YORK

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

AGREEMENT FOR THE SALE
OF EXPANSION POWER AND/OR REPLACEMENT POWER
to
ROYAL PLASTIX USA LLC

The POWER AUTHORITY OF THE STATE OF NEW YORK ("Authority"), created pursuant to Chapter 772 of the New York Laws of 1931 and existing under Title I of Article V of the New York Public Authorities Law ("PAL"), having its office and principal place of business at 30 South Pearl Street, 10th Floor, Albany, New York 12207-3425, hereby enters into this Agreement for the Sale of Expansion Power and/or Replacement Power ("Agreement") with Royal Plastix USA LLC ("Customer"), with offices at 930 Bailey Avenue, Buffalo, NY, 14206. The Authority and the Customer are from time to time referred to in this Agreement as "Party" or collectively as "Parties" and agree follows:

RECITALS

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the Niagara Power Project, Federal Energy Regulatory Commission ("FERC") Project No. 2216, known as "Expansion Power" (or "EP"), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, the Authority is authorized to sell hydroelectric power produced by the Niagara Power Project, FERC Project No. 2216, known as "Replacement Power" (or "RP"), as further defined in this Agreement, to qualified businesses in New York State in accordance with PAL § 1005(5) and (13);

WHEREAS, EP consists of 250 megawatts ("MW") of firm hydroelectric power and associated firm energy produced by the Niagara Power Project;

WHEREAS, RP consists of 445 MW of firm hydroelectric power and associated firm energy produced by the Niagara Power Project;

WHEREAS, the Authority is authorized pursuant to PAL § 1005(13)(a) to award EP and/or RP based on, among other things, the criteria listed in the PAL, including but not limited to an applicant's long-term commitment to the region as evidenced by the current and planned capital investment; the type and number of jobs supported or created by the allocation; and the state, regional and local economic development strategies and priorities supported by local units of governments in the area in which the recipient's facilities are located;

WHEREAS, the Customer applied to the Authority for an allocation of hydropower to support operations at a new and/or expanded facility to be constructed and operated by the Customer (defined in Section I of this Agreement as the "Facility");

WHEREAS, on July 29, 2014, the Authority's Board of Trustees ("Trustees") approved a 600 kilowatt ("kW") allocation of RP to the Customer for a seven (7) year term (defined in Section I of this Agreement as the "Allocation") in connection with the construction and operation of the Facility as further described in this Agreement;

WHEREAS, on July 29, 2014, the Trustees authorized the Authority to, among other things, take any and all actions and execute and deliver any and all agreements and other documents necessary to effectuate its approval of the Allocation;

WHEREAS, the provision of Electric Service associated with the Allocation is an

unbundled service separate from the transmission and delivery of power and energy to the Customer, and delivery service will be performed by the Customer's local electric utility in accordance with the Utility Tariff;

WHEREAS, the Parties have reached an agreement on the sale of the Allocation to the Customer on the terms and conditions provided for in this Agreement;

WHEREAS, the Authority has complied with requirements of PAL § 1009 which specifies the approval process for certain contracts negotiated by the Authority; and

WHEREAS, the Governor of the State of New York has approved the terms of this Agreement pursuant to PAL § 1009(3).

NOW THEREFORE, in consideration of the mutual covenants herein, the Authority and the Customer agree as follows:

NOW THEREFORE, the Parties hereto agree as follows:

I. Definitions

- A. **Agreement** means this Agreement.
- B. **Allocation** refers to the allocation of EP and/or RP awarded to the Customer as specified in Schedule A.
- C. **Contract Demand** is as defined in Service Tariff No. WNY-1.
- D. **Electric Service** is the Firm Power and Firm Energy associated with the Allocation and sold by the Authority to the Customer in accordance with this Agreement, Service Tariff No. WNY-1 and the Rules.
- E. **Expansion Power** (or **EP**) is 250 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(5) and (13).
- F. **Facility** means the Customer's facilities as described in Schedule A to this Agreement.
- G. **Firm Power** is as defined in Service Tariff No. WNY-1.
- H. **Firm Energy** is as defined in Service Tariff No. WNY-1.
- I. **FERC** means the Federal Energy Regulatory Commission (or any successor organization).
- J. **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.

- K. **Hydro Projects** is a collective reference to the Project and the Authority's St. Lawrence-FDR Project, FERC Project No. 2000.
- L. **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.
- M. **NYISO** means the New York Independent System Operator or any successor organization.
- N. **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.
- O. **Project** means the Niagara Power Project, FERC Project No. 2216.
- P. **Replacement Power** (or **RP**) is 445 MW of Firm Power and associated Firm Energy from the Project eligible to be allocated by the Authority for sale to businesses pursuant to PAL § 1005(5) and (13).
- Q. **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.
- R. **Service Tariff No. WNY-1** means the Authority's Service Tariff No. WNY-1, as may be modified from time to time by the Authority, which contains, among other things, the rate schedule establishing rates and other commercial terms for sale of Electric Service to Customer under this Agreement.
- S. **Schedule A** refers to the Schedule A entitled "Expansion Power and/or Replacement Power Allocations" which is attached to and made part of this Agreement.
- T. **Schedule B** refers to the Schedule B entitled "Expansion Power and/or Replacement Power Commitments" which is attached to and made part of this Agreement.
- U. **Schedule C** refers to the Schedule C entitled "Takedown Schedule" which is attached to and made part of this Agreement.
- V. **Substitute Energy** means energy that the Authority provides at the request of the Customer to replace hydroelectricity that would otherwise have been supplied to the Customer under this Agreement. Unless otherwise agreed upon by the Parties, Substitute Energy refers to energy purchased by the Authority for the Customer from markets administered by the NYISO.
- W. **Taxes** is as defined in Service Tariff No. WNY-1

- X. **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.
- Y. **Utility Tariff** means the retail tariff(s) of the Customer's local electric utility filed and approved by the PSC applicable to the delivery of EP and/or RP.

II. Electric Service

- A. The Authority shall make available Electric Service to enable the Customer to receive the Allocation in accordance with this Agreement, Service Tariff No. WNY-1 and the Rules. The Customer shall not be entitled to receive Electric Service under this Agreement for any EP and/or RP allocation unless such EP and/or RP allocation is identified on Schedule A.
- B. The Authority will provide, and the Customer shall pay for, Electric Service with respect to the Allocation specified on Schedule A. If Schedule C specifies a Takedown Schedule for the Allocation, the Authority will provide, and the Customer shall take and pay for, Electric Service with respect to the Allocation in accordance with such Takedown Schedule.
- C. The Authority shall provide UCAP in amounts necessary to meet the Customer's NYISO UCAP requirements associated with the Allocation in accordance with the NYISO Tariffs. The Customer shall be responsible to pay the Authority for such UCAP in accordance with Service Tariff No. WNY-1.
- D. The Customer acknowledges and agrees that Customer's local electric utility shall be responsible for delivering the Allocation to the Facility specified in Schedule A, and that the Authority has no responsibility for delivering the Allocation to the Customer.
- E. The Contract Demand for the Customer's Allocation may be modified by the Authority if the amount of Firm Power and Firm Energy available for sale as EP or RP from the Project is modified as required to comply with any ruling, order, or decision of any regulatory or judicial body having jurisdiction, including but not limited to FERC. Any such modification will be made on a pro rata basis to all EP and RP customers, as applicable, based on the terms of such ruling, order, or decision.
- F. The Contract Demand may not exceed the Allocation.

III. Rates, Terms and Conditions

- A. Electric Service shall be sold to the Customer based on the rates, terms and conditions provided for in this Agreement, Service Tariff No. WNY-1 and the Rules.
- B. 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. Any rate increase to Customer under this subsection shall be on a nondiscriminatory basis as compared to other Authority customers after giving consideration to the factors set forth in the first sentence of this subsection. With respect to any such increase, Authority shall forward to Customer with the notice of increase, an explanation of all reasons for the increase, and shall also identify the sources from which Authority will obtain the total of increased revenues and the bases upon which Authority will allocate the increased revenue requirements among its customers. Any such increase in rates shall remain in effect only so long as Authority determines such increase is necessary to provide revenues for the purposes stated in the preceding sentences.

IV. Expansion Power and/or Replacement Power Commitments

- A. Schedule B sets forth the Customer's specific "Expansion Power and/or Replacement Power Commitments." The commitments agreed to in Schedule B are in addition to any other rights and obligations of the Parties provided for in the Agreement.
- B. The Authority's obligation to provide Electric Service under this Agreement, and the Customer's obligation to take and pay for such Electric Service, are expressly conditioned upon the Customer's timely completion of the commitments described in Schedule B.
- C. In the event of partial completion of the Facility which has resulted in such Facility being partly operational and the partial attainment of the Base Employment Level, the Authority may, upon the Customer's request, provide Electric Service to the Customer in an amount determined by the Authority to fairly correspond to the completed portion of the Facility, provided that the Customer demonstrates that the amount of requested Electric Service is needed to support the operations of the partially completed Facility.
- D. The Customer shall give the Authority not less than ninety (90) days' advance notice in writing of the anticipated date of partial or full completion of the Facility. The Authority will inspect the Facility for the purpose of verifying the completion status of the Facility and notify Customer of the results of the inspection. The Authority will thereafter commence Electric Service within a reasonable time after verification based on applicable operating procedures of the Authority, the Customer's local electric utility and the NYISO.
- E. In the event the Customer fails to complete the Facility by July 29, 2017 (*i.e.*, within three (3) years of the Authority's award of the Allocation), the Allocation, at the option and discretion of the Authority, may be canceled or reduced by the total amount of kilowatts determined by the Authority to fairly correspond to the uncompleted portion of the Facility, provided that in such event, and upon request of the Customer, such date may be extended by the Authority in its sole discretion.

V. Rules and Service Tariff

Service Tariff No. WNY-1, as may be modified or superseded from time to time by the Authority, is hereby incorporated into this Agreement with the same force and effect as if set forth herein at length. In the event of any inconsistencies, conflicts, or differences between the provisions of Service Tariff No.WNY-1 and the Rules, the provisions of Service Tariff No. WNY-1 shall govern. In the event of any inconsistencies, conflicts or differences between the provisions of this Agreement and Service Tariff No. WNY-1, the provisions of this Agreement shall govern.

VI. Transmission and Delivery of Firm Power and Firm Energy; Responsibility for Charges

- A. The Customer shall be responsible complying with all requirements of its local electric utility 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. The Customer shall be solely responsible for paying its local electric utility for delivery service associated with the Allocation in accordance with the Utility Tariff. Should the Authority incur any charges associated with such delivery service, the Customer shall reimburse the Authority for all such charges.
- C. The Customer understands and acknowledges that delivery of the Allocation will be made over transmission facilities under the control of the NYISO. The Authority will act as the LSE with respect to the NYISO, or arrange for another entity to do so on the Authority's behalf. The Customer agrees and understands that it shall be responsible to the Authority for all costs incurred by the Authority with respect to the Allocation for the services established in the NYISO Tariff, or other applicable tariff ("NYISO Charges"), as set forth in Service Tariff No. WNY-1 or any successor service tariff, regardless of whether such NYISO Charges are transmission-related. Such NYISO Charges shall be in addition to the charges for power and energy.
- D. By entering into this Agreement, the Customer consents to the exchange of information between the Authority and the Customer's local electric utility pertaining to the Customer that the Authority and the local electric utility determine is necessary to provide for the Allocation, sale and delivery of EP and/or RP to the Customer, the proper and efficient implementation of the EP and/or RP programs, billing related to EP and/or RP, and/or the performance of such parties' obligations under any contracts or other arrangements between them relating to such matters.
- E. The provision of Electric Service by the Authority shall be dependent upon the existence of a written agreement or other form of understanding between the Authority and the Customer's local electric utility on terms and conditions that are acceptable to the Authority.
- F. The Customer understands and acknowledges that the Authority may from time to time require the Customer to complete forms, provide documentation, execute consents and provide other information (collectively, "Information") which the Authority determines is necessary for the provision of Electric Service, the delivery of EP and/or RP, billing

related to the EP and/or RP program, the effective and proper administration of the EP and/or RP 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 such Information shall be grounds for the Authority in its sole discretion to withhold or suspend Electric Service to the Customer.

VII. Billing and Billing Methodology

- A. 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.
- B. The Authority will render bills by the 10th business day of the month for charges due for the previous month. 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 other applicable charges.
- C. The Authority may render bills to the Customer electronically.
- D. The Authority and the Customer may agree in writing to an alternative method for the rendering of bills and for the payment of bills, including but not limited to the use of an Authority-established customer self-service web portal.
- E. 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.
- F. Unless otherwise agreed to by the Authority and the Customer in writing, if the Customer fails to pay any bill when due, an interest charge of two percent (2%) of the amount unpaid shall be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent (1 1/2%) of the sum unpaid shall be added on the first day of each succeeding billing period until the amount due, including interest, is paid in full.
- G. 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. If at any time after commencement of Electric Service the Customer fails to make complete and timely payment of any two (2) bills for Electric Service, the Authority shall

have the right to require the Customer to deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit shall be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. If the Customer fails or refuses to provide the deposit within thirty (30) days of a request for such deposit, the Authority may, in its sole discretion, suspend Electric Service to the Customer or terminate this Agreement.

- I. All other provisions with respect to billing are set forth in Service Tariff No. WNY-1 and the Rules.
- J. 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.

VIII. Hydropower Curtailments and Substitute Energy

- A. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of the Authority's firm power customers served by the Authority from the Hydro Projects, curtailments (*i.e.* reductions) in the amount of Firm Power and Firm Energy associated with the Allocation to which the Customer is entitled shall be applied on a *pro rata* basis to all firm power and energy customers served from the Hydro Projects, consistent with Service Tariff No. WNY-1 as applicable.
- B. The Authority shall provide reasonable notice to Customer of any curtailments referenced in Section VIII.A of this Agreement that could impact Customer's Electric Service under this Agreement. Upon written request by the Customer, the Authority will provide Substitute Energy to the Customer to replace the Firm Power and Firm Energy that would otherwise have been supplied pursuant to this Agreement.
- C. For each kilowatt-hour of Substitute Energy supplied by the Authority, the Customer will 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. Billing and payment for Substitute Energy shall be governed by the Billing and Payments provision of the Authority's Rules (Section 454.6) and shall apply directly to the Substitute Energy service supplied to the Customer.
- D. The Parties may enter into a separate agreement to facilitate the provision of Substitute Energy, provided, however, that the provisions of this Agreement shall remain in effect notwithstanding any such separate agreement. The provision of Substitute Energy may be terminated by the Authority or the Customer on fifteen (15) days' prior written notice.

IX. Effectiveness, Term and Termination

- A. This Agreement shall become effective and legally binding on the Parties upon execution of this Agreement by the Authority and the Customer.
- B. Once commenced, Electric Service under the Agreement shall continue until the earliest of: (1) termination by the Customer with respect to its Allocation upon ninety (90) days prior written notice to the Authority; (2) termination by the Authority pursuant to this Agreement, Service Tariff No. WNY-1, or the Rules; or (3) expiration of the Allocation by its own term as specified in Schedule A.
- C. The Customer may exercise a partial termination of the Allocation upon at least thirty (30) days' notice prior written notice to the Authority. The termination shall be effective commencing with the first billing period as defined in Service Tariff No. WNY-1.
- D. 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 relicensing order or orders of the FERC or its successor agency); or (2) as otherwise provided in this Agreement, Service Tariff No. WNY-1, or the Rules.

X. Additional Allocations

- A. Upon proper application by the Customer, the Authority may in its discretion award additional allocations of EP or RP to the Customer at such rates and on such terms and conditions as the Authority establishes. If the Customer agrees to purchase Electric Service associated with any such additional allocation, the Authority will (i) incorporate any such additional allocations into Schedule A, or in its discretion will produce a supplemental schedule, to reflect any such additional allocations, and (ii) 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.
 - B. 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 additional allocations and consider the terms and conditions that should be applicable of any additional allocations.

XI. Notification

A. Correspondence involving the administration of this Agreement shall be addressed 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 |

Royal Plastix USA LLC 930 Bailey Avenue Buffalo, NY 14206 Email:

Email: Facsimile: Attention:

The foregoing notice/notification information pertaining to either Party may be changed by such Party upon notification to the other Party pursuant to Section XI.B of this Agreement.

B. 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: (1) if sent by U.S. First Class mail addressed to the Party at the address set forth above; (2) 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; (3) if delivered by hand, with written confirmation of receipt; (4) if sent by facsimile to the appropriate fax number as set forth above, with written confirmation of receipt; or (5) if sent by electronic mail to the appropriate address as set forth above, with written confirmation of receipt. Either Party may change the addressee and/or address for correspondence sent to it by giving written notice in accordance with the foregoing.

XII. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York to the extent that such laws are not inconsistent with the FERC License and the Niagara Redevelopment Act (16 USC §§836, 836a).

XIII. Venue

Each Party consents to the exclusive jurisdiction and venue of any state or federal court within or for Albany County, New York, with subject matter jurisdiction for adjudication of any claim, suit, action or any other proceeding in law or equity arising under, or in any way relating to this Agreement.

XIV. Successors and Assigns; Resale of Hydropower

A. The Customer may not assign or otherwise transfer an interest in this Agreement.

- B. The Customer may not resell or allow any other person to use any quantity of EP and/or RP it has purchased from the Authority under this Agreement.
- C. Electric Service sold to the Customer pursuant to this Agreement may only be used by the Customer at the Facility specified in Schedule A.

XV. Previous Agreements and Communications

- A. This Agreement shall constitute the sole and complete agreement of the Parties hereto with respect to the subject matter hereof, and supersedes all prior negotiations, representations, warranties, commitments, offers, contracts and writings, written or oral, with respect to the subject matter hereof.
- B. Except as otherwise provided in this Agreement, no modification 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.

XVI. Severability and Voidability

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

XVII. Waiver

- A. 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.
- B. 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.

XVIII. Execution

To facilitate execution, this Agreement may be executed in as many counterparts as may be required, and it shall not be necessary that the signatures of, or on behalf of, each Party, or that the signatures of all persons required to bind any Party, appear on each counterpart; but it shall be sufficient that the signature of, or on behalf of, each Party, or that the signatures of the persons required to bind any Party, appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement. It shall

not be necessary in making proof of this Agreement to produce or account for more than a number of counterparts containing the respective signatures of, or on behalf of, all of the Parties hereto. The delivery of an executed counterpart of this Agreement by email as a PDF file 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: |
|--|
| ROYAL PLASTIX USA LLC |
| By: |
| Title: |
| Date: |
| |
| AGREED: |
| POWER AUTHORITY OF THE STATE OF NEW YORK |
| By: John R. Koelmel, Chairman |

SCHEDULE A TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/OR REPLACEMENT POWER TO CUSTOMER

EXPANSION POWER AND/OR REPLACEMENT POWER ALLOCATIONS

Customer: Royal Plastix USA LLC

| | Allocation | | Trustee | Expiration Date |
|--------------------|-------------|-------------------|---------------|----------------------|
| Type of Allocation | Amount (kW) | Facility | Approval Date | |
| | | | | Seven (7) years from |
| | | | | commencement of |
| | | | | Electric Service of |
| | | 930 Bailey Avenue | | any portion of this |
| Replacement Power | 600 kW | Buffalo, NY 14206 | July 29, 2014 | Allocation. |
| | | | | |

SCHEDULE B TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/ OR REPLACEMENT POWER TO CUSTOMER

EXPANSION POWER AND/OR REPLACEMENT POWER COMMITMENTS

I. <u>Employment Commitments</u>

A. Employment Levels

The provision of EP and/or RP to the Customer hereunder is in consideration of, among other things, the Customer's creation and/or maintenance of the employment level set forth in the Appendix of this Schedule (the "Base Employment Level"). Such Base Employment Level shall be the total number of full-time positions held by: (1) individuals who are employed by the Customer at Customer's Facility identified in the Appendix to this Schedule, and (2) 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.

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.

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 sole discretion.

B. Employment Records and Reports

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.

II. Reductions of Contract Demand

A. Employment Levels

If the year-end monthly average number of employees is less than 90% of the Base Employment Level set forth in this Schedule B, for the subject calendar year, the Authority may reduce the Contract Demand subject to Article II.D of this Schedule. The maximum amount of reduction will be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average monthly employment during the subject calendar year divided by the Base Employment Level. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, the Agreement shall automatically terminate.

B. Power Utilization Levels

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. If the average of the Customer's six (6) highest Billing Demands (as such term is described in Service Tariff No. WNY-1) for Expansion Power and/or Replacement Power is less than 90% of the Customer's Contract Demand in such calendar year the Authority may reduce the Contract Demand subject to Article II.D of this Schedule. The maximum amount by which the Authority may reduce the Contract Demand shall be determined by multiplying the Contract Demand by the quantity one minus the quotient of the average of the six (6) highest Billing Demands for in such calendar year divided by the Contract Demand. Any such reduction shall be rounded to the nearest fifty (50) kW. In the event of a reduction of the Contract Demand to zero, this Agreement shall automatically terminate.

C. Capital Investment

The Customer agrees to undertake the capital investment set forth in the Appendix to this Schedule.

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 obligations provided for in this Schedule B.

D. 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 this Schedule, the Authority shall provide the Customer with at least thirty (30) days prior written notice of such reduction, specifying the amount of the reduction of Contract Demand and the reason for the reduction, provided, however, that before making the reduction, the Authority may consider the Customer's scheduled or unscheduled maintenance or Facility upgrading periods when such events temporarily reduce plant employment levels or electrical demand as well as business cycle.

III. Energy Efficiency Audits; Information Requests

Unless otherwise agreed to by the Authority in writing, the Customer shall undergo an energy efficiency audit of its Facility and equipment at which the Allocation is consumed at the Customer's expense at least once during the term of this Agreement but in any event not less than once every five years. The Customer will provide the Authority with a copy of the audit or, at the Authority's option, a report describing the results of the audit, and provide documentation requested by the Authority to verify the implementation of any efficiency measures implemented at the Facility.

The Customer agrees to cooperate to make its Facility available at reasonable times and intervals for energy audits and related assessments that the Authority desires to perform, if any, at the Authority's own expense.

The Customer shall provide information requested by the Authority or its designee in surveys, questionnaires and other information requests relating to energy efficiency and energy-related projects, programs and services.

The Customer may, after consultation with the Authority, exclude from written copies of audits, reports and other information provided to the Authority under this Article trade secrets and other information which if disclosed would harm the competitive position of the Customer.

APPENDIX TO SCHEDULE B

BASE EMPLOYMENT LEVEL

Within three (3) years of commencement of Electric Service, the Customer shall employ at least fifty-five (55) full-time employees ("Base Employment Level") at the Customer's Facility. The Base Employment Level shall be maintained thereafter for the term of the Allocation in accordance with Article I of Schedule B.

CAPITAL INVESTMENT

The Customer shall make a total capital investment of at least \$3,725,000 to renovate and furnish the Facility (the "Capital Investment"). The Capital Investment for the Facility is expected to consist of the following specific expenditures:

Building Renovations: \$1,225,000 Machinery: \$2,500,000

Total Capital Investment: \$3,725,000

The Capital Investment shall be made, and the Facility shall be completed and fully operational, no later than July 29, 2017 (*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 sole discretion of the Authority.

SCHEDULE C TO AGREEMENT FOR THE SALE OF EXPANSION POWER AND/OR REPLACEMENT POWER TO CUSTOMER

TAKEDOWN SCHEDULE

N/A



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

Schedule of Rates for Sale of Firm Power to Expansion and Replacement Customers located
In Western New York

Service Tariff No. WNY-1

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Schedule of Rates for Firm Power Service

I. Applicability

To sales of Expansion Power and/or Replacement Power (as defined below) directly to a qualified business Customer (as defined below) for firm power service.

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

Agreement: An executed "Agreement for the Sale of Expansion and/or Replacement Power and Energy" between the Authority and the Customer (each as defined below).

<u>Annual Adjustment Factor</u> or <u>AAF</u>: This term shall have the meaning set forth in Section V herein.

<u>Authority</u>: 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."

<u>Customer</u>: A business customer who has received an allocation for Expansion Power and/or Replacement Power from the Authority and who purchases Expansion Power and/or Replacement Power directly from the Authority.

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

Expansion Power and/or **Replacement Power**: 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).

<u>Firm Power</u>: 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.

<u>Load Serving Entity</u> or **<u>LSE</u>**: This term shall have the meaning set forth in the Agreement.

Load Split Methodology or **LSM**: A load split methodology applicable to a Customer's allocation. It is usually provided for in an agreement between the Authority and the Customer's local electric utility, an agreement between the Authority and the Customer, or an agreement between the Authority, the Customer and the Customer's local electric utility, or such local utility's tariff, regarding the delivery of WNY Firm Power. The load split methodology is often designated as "Load Factor Sharing" or "LFS", "First through the Meter" or "FTM", "First through the Meter Modified" or "FTM Modified", or "Replacement Power 2" or "RP 2".

Project: The Authority's Niagara Power Project, FERC Project No. 2216.

Rate Year or **RY**: The period from July 1 through June 30 starting July 1, 2013, and for any year thereafter.

<u>Rules</u>: 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. WNY-1.

Target Rate: This term shall have the meaning set forth in Section III herein.

All other capitalized terms and abbreviations used but not defined herein shall have the same meaning as set forth in the Agreement.

III. Monthly Rates and Charges

A. Expansion Power (EP) and Replacement Power (RP) Base Rates

Beginning on July 1, 2013, there will be a 3-year phase-in to new base rates. The phase-in will be determined by the rate differential between the 2012 EP/RP rates and a "Target Rate." The Target Rate, specified in Section III.A.1. below, is based on the rates determined by the Authority to be applicable in RY 2013 for sales of "preservation power" as that term is defined in PAL § 1005(13). The following Sections III.A.1-4 describe the calculation and implementation of the phase-in.

- 1. The initial rate point will be established by the EP/RP rates (\$/kW and \$/MWh), determined by mid-April 2012 and made effective on May 1, 2012 in accordance with the Authority's then-applicable EP and RP tariffs. The Target Rate (*i.e.* demand and energy rates) for RY 2013 shall be \$7.99/kW and \$13.66/MWh.
- 2. The difference between the two rate points is calculated and divided by 3 to correspond with the number of Rate Years over which the phase-in will occur. The resulting quotients (in \$/kW and \$/MWh) are referred to as the "annual increment."
- 3. The annual increment will be applied to the base rates for the 3-year period of the 2013, 2014 and 2015 Rate Years, which shall be as follows:

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RY 2013: July 1, 2013 to June 30, 2014
RY 2014: July 1, 2014 to June 30, 2015
RY 2015: July 1, 2015 to June 30, 2016
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The annual rate adjustments normally made effective on May 1, 2013 under then-applicable EP and RP tariffs will be suspended, such that demand and energy rates established in 2012 shall be extended through June 30, 2013.

- 4. Effective commencing in RY 2013, the Annual Adjustment Factor ("AAF") described in Section V herein, shall be applied as follows:
 - A. For the RY 2013 only, the AAF will be suspended, and the RY 2013 rate increase will be subject only to the annual increment.
 - B. For the RYs 2014 and 2015, the AAF will be applied to the demand and energy rates after the addition of the annual increment to the rates of the previous RY rates. Such AAF will be subject to the terms and limits stated in Section V herein.
 - C. Beginning in RY 2016, the AAF will be applied to the previous RY rates, and the annual increment is no longer applicable.

B. EP and RP Rates no Lower than Rural/Domestic Rate

At all times the applicable 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) and PAL § 1005(5) (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 EP and RP 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 charge 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.

E. Estimated Billing

If the Authority, in its sole 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 the Customer's Load Split Methodology as following:

- For Customers whose allocation is subject to a Load Factor Sharing/LFS LSM, the estimated demand (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 (kW) value for the Estimated Bill will equal the Customer's Takedown (kW) amount.
- For Customers whose allocation is subject to a First through the Meter/FTM, FTM
 Modified, or RP 2 LSM, the estimated demand (kW) value 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 the Customer's Load Split Methodology as following:

• For Customers whose allocation is subject to a Load Factor Sharing/LFS LSM, 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 value (kWh) will be equal to the Takedown (kW) amount at 70 percent load factor for that Billing Period.

• For Customers whose allocation is subject to a First through the Meter/FTM, FTM Modified, or RP 2 LSM, the estimated energy (kWh) will be equal to the Takedown (kW) amount at 100 percent load factor for that Billing Period.

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 B.D. shall apply to Estimated Bills.

The Authority's discretion to render Estimated Bills is not intended 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, the receipt of actual, additional, or corrected data concerning Customer energy or demand usage.

G. Billing Period

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

H. Billing Demand

The billing demand shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

I. Billing Energy

The billing energy shall be determined by applying the applicable billing methodology to total meter readings during the billing period. See Section IV.E, below.

J. Contract Demand

The contract demand of each Customer will be the amount of Expansion Power and/or Replacement Power, not to exceed their Allocation, provided to such Customer by the Authority 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. If, as a result of reduced water flows caused by hydrologic conditions, there is insufficient energy from the Hydro Projects to supply the full power and energy requirements of NYPA's Firm Power customers served from the Hydro Projects, hydropower curtailments (*i.e.* reductions) in the amount of Firm Power and Energy to which the Customer is entitled shall be applied on a *pro rata* basis to all Firm Power and Energy customers served from the Hydro Projects. Reductions as a percentage of the otherwise required Firm Power and Energy sales will be the same for all Firm Power and Energy customers served from the Hydro Projects. The Authority shall be under no obligation to deliver and will not deliver any such curtailed energy to the Customer in later billing periods. The Customer will receive appropriate bill credits as provided under the Rules.

C. <u>Delivery</u>

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.

D. Adjustment of Rates

To the extent not inconsistent with the Agreement, the 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 and Billing

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

1. The billing methodology to be used to render bills to the Customer related to its Allocation shall be determined in accordance with the Agreement and delivery agreement between the Authority and, as applicable, the Customer or local electric utility or both.

- 2. Billing Demand –The Billing Demand charged by the Authority to each Customer will be the highest 15 or 30-minute integrated demand, as determined by the local utility, during each Billing Period recorded on the Customer's meter multiplied by a percentage based on the Load Split Methodology provided for in any contract between the Authority and the Customer's local electric utility, any contract between the Authority and the Customer, or any contract between the Authority, the Customer and the Customer's local electric utility for delivery of WNY Power. Billing Demand may not exceed the amount of the Contract Demand.
- 3. Billing Energy –The kilowatt-hours charged by the Authority to each Customer will be the total number of kilowatt-hours recorded on the Customer's meter for the Billing Period multiplied by a percentage based on the methodology provided for in any contract between the Authority and the Customer's local electric utility for delivery of WNY Power.

F. Payment by Customer to Authority

1. Demand and Energy Charges, Taxes

The Customer shall pay the Authority for Firm Power and Energy during any billing period the higher of either (i) the sum of (a), (b) and (c) below or (ii) the monthly minimum charge as defined herein:

- a. The demand charge 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 charge 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 Expansion Power and/or Replacement 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 ("NYISO Charges")

The Customer shall compensate the Authority for the following NYISO Charges assessed on the Authority for services provided by the NYISO pursuant to 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, less any associated grandfathered Transmission Congestion Contracts ("TCCs") 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 third 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. 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. 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. Bills will reflect the amounts due and owing, and are subject to adjustment as provided for in the Agreement, Service Tariff No. WNY-1 and the Rules. Unless otherwise agreed to by the Authority and the Customer in writing, the Authority shall render bills to the Customer electronically.
- 2. Payment of bills by the Customer shall be due and payable by the Customer within twenty (20) days of the date the Authority renders the bill.
- 3. Except as otherwise agreed by the Authority in writing, if the Customer fails to pay any bill when due an interest charge of two percent of the amount unpaid will be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one and one-half percent of the sum unpaid shall be added on the first day of each succeeding Billing Period until the amount due, including interest, is paid in full.
- 4. If at any time after commencement of Electric Service the Customer fails to make complete payment of any two (2) bills for Electric Service when such bills become due pursuant to Agreement, the Authority shall have the right to require that the Customer deposit with the Authority a sum of money in an amount equal to all charges that would be due under this Agreement for Electric Service for two (2) consecutive calendar months as estimated by the Authority. Such deposit will be deemed security for the payment of unpaid bills and/or other claims of the Authority against the Customer upon termination of Electric Service. The failure or refusal of the Customer to provide the deposit within thirty (30) days of a request for such deposit will be grounds for the Authority in its sole discretion to suspend Electric Service to the Customer or terminate this Agreement.

H. Adjustment of Charges

1. Distribution Losses

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

I. Conflicts

The Authority's Rules shall apply to the Electric Service provided under this Service Tariff. 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.

J. Customer Resales Prohibited

The Customer may not resell any quantity of Expansion Power and/or Replacement Power.

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 ±5.0% ("±5% Collar"). Amounts outside the ±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 ±5% Collar, as described below.
 - a) When the AAF falls outside the ±5% Collar, the Excess will be carried over to the subsequent RY. If the AAF in the subsequent RY is within the ±5% Collar, the current RY Excess will be added to/subtracted from the subsequent Rate Year's AAF, up to the ±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 ±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 by the Parties to reflect, the Customer and the Authority shall mutually select a substitute Index. The Parties agree to mutually select substitute indices within 90 days, once notified by the other party that the indices are no longer available or no longer reflect the relevant factors or changes with the indices were intended by the Parties 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 unable to reach agreement on substitute indices within the 90-day period, the Parties 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 and shall assume the percentage weighting(s) of the one or more discontinued indices as indicated in Section V.A.1.

B. Sample Computation of the AAF (hypothetical values for July 1, 2014 implementation):

STEP 1

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

• Index 1 - Producer Price Index, Industrial Power

| | Measuring | Measuring |
|------------------|-----------|---------------|
| | Year | Year - 1 |
| | (2013) | <u>(2012)</u> |
| | | |
| January | 171.2 | 167.8 |
| February | 172.8 | 167.6 |
| March | 171.6 | 168.2 |
| April | 173.8 | 168.6 |
| May | 175.1 | 171.6 |
| June | 185.7 | 180.1 |
| July | 186.4 | 182.7 |
| August | 184.7 | 179.2 |
| September | 185.5 | 181.8 |
| October | 175.5 | 170.2 |
| November | 172.2 | 168.8 |
| December | 171.8 | 166.6 |
| Average | 177.2 | 172.8 |
| Ratio of MY/MY-1 | | 1.03 |

| • Index 2 – EIA | Industrial Rate | | | |
|-----------------|-------------------|----------|----------------------|-------|
| <u>State</u> | Revenues (\$000s) | | Avg. Rate cents/kWh) | |
| Measuring | Year (2012) | | | |
| CT | 590,972 | 6,814, | 757 | |
| MA | 1,109,723 | 13,053, | 806 | |
| ME | 328,594 | 4,896, | 176 | |
| NH | 304,363 | 2,874, | 495 | |
| NJ | 1,412,665 | 15,687, | 873 | |
| NY | 2,001,588 | 26,379, | 314 | |
| ОН | 3,695,978 | 78,496, | 166 | |
| PA | 3,682,192 | 63,413, | 968 | |
| RI | 152,533 | 1,652, | 593 | |
| VT | 155,903 | 2,173,6 | <u>79</u> | |
| TOTAL | 13,434,511 | 215,442, | 827 | 6.24 |
| Measuring | Year -1 (2011) | | | |
| CT | 570 152 | ((79 | 462 | |
| CT | 579,153 | 6,678, | | |
| MA | 1,076,431 | 12,662, | | |
| ME | 310,521 | 4,626, | | |
| NH | 298,276 | 2,817, | | |
| NJ | 1,370,285 | 15,217, | | |
| NY | 1,891,501 | 24,928, | | |
| ОН | 3,622,058 | 76,926, | | |
| PA | 3,571,726 | 61,511, | | |
| RI | 144,144 | 1,561, | | |
| VT | <u>152,785</u> | 2,130,2 | | ()) |
| TOTAL | 13,016,880 | 209,059, | 931 | 6.23 |
| | Ratio of MY/MY-1 | | | 1.00 |

| • | Index $3 - I$ | Producer | Price | Index, | Industrial | Commodities | Less Fuel |
|---|---------------|----------|-------|--------|------------|-------------|-----------|
|---|---------------|----------|-------|--------|------------|-------------|-----------|

| | Measuring Year (2013) | Measuring Year -1 (2012) |
|-----------|-----------------------------|--------------------------------|
| | | |
| January | 190.1 | 187.2 |
| February | 190.9 | 188.0 |
| March | 191.6 | 188.7 |
| April | 192.8 | 189.9 |
| May | 194.7 | 191.8 |
| June | 195.2 | 192.3 |
| July | 195.5 | 192.3 |
| August | 196.0 | 193.1 |
| September | 196.1 | 193.2 |
| October | 196.2 | 193.8 |
| November | 196.6 | 193.7 |
| December | 196.7 | 194.0 |
| Average | 194.4 | 191.5 |
| | | |

Ratio of MY/MY-1 **1.02**

STEP 2

Determine AAF by Summing the Weighted Indices

| Index | Ratio of MY to MY-1 | Weight | Weighted Factors |
|--------------------------------------|------------------------|--------|---------------------|
| PPI Industrial Power | 1.03 | 0.35 | 0.361 |
| EIA Industrial Rate | 1.00 | 0.40 | 0.400 |
| PPI Industrial Commodities less fuel | 1.02 | 0.25 | <u>0.255</u> |
| AAF | | | 1.016 |

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. | Energy \$/MWh |
|---|----------------------------|------------------|
| Current Rate Year Base Rate New Rate Year Base Rate | 7.56 7.68 | 12.91 13.12 |

| Line | Company | City | County | Economic Development Region | IOU | Description | kW Request | kW Recommendation | Jobs Retained | Jobs Created | Total Job Commitment | Capital Investment (\$) | Contract Term (years) |
|------|--|----------------|------------|-----------------------------------|-------|--|---------------|----------------------|------------------|-----------------|-------------------------|----------------------------|-----------------------------|
| 1 | Holland USA Inc a subsidiary of Taylor Corporation dba Web Graphics | Queensbury | Warren | Capital District | NGRID | Provides printed products and services | 381 | 186 | 100 | 0 | 100 | \$0 | 7 |
| 2 | Morcon, Inc. | Cambridge | Washington | Capital District | NGRID | Produces bath tissue, towels & napkin products | 272 | 136 | 81 | 0 | 81 | \$25,000 | 7 |
| | Capital District Region Sub-totals: | | | | | | 653 | 322 | 181 | 0 | 181 | \$25,000 | |
| | | | | | | | | | | | | | |
| 3 | G. A. Braun, Inc. | North Syracuse | Onondaga | Central New York | NGRID | Manufacturer of laundry and textile machinery | 450 | 220 | 155 | 0 | 155 | \$4,000,000 | 7 |
| 4 | General Super Plating | East Syracuse | Onondaga | Central New York | | High quality plating for plastics Provides advanced technology for educational | 513 | 256 | 90 | 0 | 90 | \$500,000 | 7 |
| 5 | NYSERNet.org, Inc. Central New York Region Sub-totals: | Syracuse | Onondaga | Central New York | NGRID | institutions | 250 1,213 | 56 532 | 13 258 | 0 | 13 258 | \$1,200,000 \$5,700,000 | 7 |
| | | | | | | | | | | | | 4-) , | |
| 6 | Hammer Packaging Corp | W. Henrietta | Monroe | Finger Lakes | RGE | Produces printed packaging labels for various industries | 2,129 | 1,060 | 183 | 12 | 195 | \$20,000,000 | 7 |
| 7 | OLEDWorks LLC | Rochester | Monroe | Finger Lakes | RGE | Manufacturer of lighting panels | 190 | 96 | 25 | 0 | 25 | \$3,000,000 (2) | 7 |
| 8 | United States Gypsum Company | Oakfield | Genesee | Finger Lakes | NGRID | Paper Mill, Building Materials Business | 3,729 | 1,860 | 98 | 0 | 98 | \$2,500,000 | 7 |
| | Finger Lakes Region Sub-totals: | | | | | | 6,048 | 3,016 | 306 | 12 | 318 | \$25,500,000 | |
| 9 | Contract Pharmacal Corporation | Hauppauge | Suffolk | Long Island | LIPA | Manufacturer of contract pharmaceuticals | 88 | 30 | 11 | 0 | 11 | \$0 | 7 |
| 10 | Contract Pharmacal Corporation | Hauppauge | Suffolk | Long Island | LIPA | Manufacturer of contract pharmaceuticals | 823 | 386 | 270 | 25 | 295 | \$3,000,000 | 7 |
| 11 | Contract Pharmacal Corporation | Hauppauge | Suffolk | Long Island | LIPA | Manufacturer of contract pharmaceuticals | 350 | 156 | 125 | 8 | 133 | \$1,000,000 | 7 |
| 12 | EB Industries LLC | Farmingdale | Suffolk | Long Island | LIPA | Provides laser and electron beam welding services | 96 | 46 | 21 | 0 | 21 | \$900,000 | 7 |
| 13 | Haig Press, Inc. | Hauppauge | Suffolk | Long Island | LIPA | Commercial sheetfed and web printing facility | 441 | 220 | 45 | 0 | 45 | \$100,000 | 7 |
| 14 | Highstreet IT Solutions,LLC | Islandia | Suffolk | Long Island | LIPA | Provider of cloud services and IT infrastructure management | 416 | 170 | 80 | 0 | 80 | \$1,000,000 | 7 |
| 15 | Nassau Health Care Corporation - A. Holly Patterson | Uniondale | Nassau | Long Island | LIPA | Extended care facility | 747 | 246 | 505 | 0 | 505 | \$91,515,823 | 7 |
| 16 | Rising Sun Woodworking, Inc | Mattituck | Suffolk | Long Island | LIPA | Produces custom architectural cabinetry and millwork | 50 | 20 | 18 | 0 | 18 | \$500,000 | 7 |
| | Long Island Region Sub-totals: | | | | | | 3,011 | 1,274 | 1,075 | 33 | 1,108 | \$98,015,823 | |

| Line | Company | City | County | Economic Development Region | IOU | Description | kW Request | kW Recommendation | Jobs Retained | Jobs Created | Total Job Commitment | Capital Investment (\$) | Contract Term (years) |
|------|---|-----------------|--------------|-----------------------------------|-------|---|---------------|----------------------|------------------|-----------------|-------------------------|----------------------------|-----------------------------|
| | | | | | | | | | | | | | |
| 17 | Xylem, Inc. | Rye Brook | Westchester | Mid-Hudson | CONED | Water Technology Provider | 239 | 116 | 106 | 15 | 121 | \$11,600,000 | 7 |
| | Mid-Hudson Region Sub-totals: | | | | | | 239 | 116 | 106 | 15 | 121 | \$11,600,000 | |
| | | | | | | | | | | | | | |
| 18 | Amsterdam Printing and Litho, Inc. | Amsterdam | Montgomery | Mohawk Valley | NGRID | Promotional, apparel and form production | 495 | 246 | 350 | 0 | 350 | \$5,000,000 | 7 |
| | Mohawk Valley Region Sub-totals: | | | | | | 495 | 246 | 350 | 0 | 350 | \$5,000,000 | |
| | | | | | | | | | | | | | |
| 19 | New York Law School | New York | New York | New York City | CONED | Law School | 1,296 | 430 | 210 | 0 | 210 | \$500,000 | 7 |
| | New York City Region Sub-totals: | | | | | | 1,296 | 430 | 210 | 0 | 210 | \$500,000 | |
| | | | | | | | | | | | | | |
| 20 | Potsdam Specialty Paper, Inc. | Potsdam | St. Lawrence | North Country | NGRID | Paper manufacturing | 4,237 | 2,116 | 67 | 0 | 67 | \$14,000,000 | 7 |
| | North Country Region Sub-totals: | | | | | | 4,237 | 2,116 | 67 | 0 | 67 | \$14,000,000 | |
| | | | | | | | | | | | | | |
| 21 | Bear Metal Works, Inc 144 Milton Street | Buffalo | Erie | Western New York | NGRID | Provides custom sheet metal fabrication services | 75 | 26 | 17 | 0 | 17 | \$500,000 | 7 |
| 22 | Confer Plastics, Inc. | North Tonawanda | Niagara | Western New York | NGRID | Produces pool ladders, steps, lawn, & patio furniture | 1,800 | 420 | 150 | 0 | 150 | \$200,000 | 7 |
| 23 | Durez Corporation | Niagara Falls | Niagara | Western New York | NGRID | Manufacturer of phenolic resin | 1,152 | 286 | 56 | 0 | 56 | \$10,000,000 | 7 |
| 24 | Electro Abrasives, LLC | Buffalo | Erie | Western New York | NGRID | Manufactures silicon and boron carbide grains | 700 | 336 | 15 | 0 | 15 | \$500,000 | 7 |
| | Western New York Region Sub-totals: | | | | | | 3,727 | 1,068 | 238 | 0 | 238 | \$11,200,000 | |
| | Totals | | | | | | | 9,120 | 2,791 | 60 | 2,851 | \$171,540,823 | |

⁽¹⁾ These companies are also recommended for expansion-related allocations of RNY for separate and distinct job creation and capital investment commitments associated with proposed business expansions.

⁽²⁾ Allocation is recommended to be up to the amount indicated based on the companies' fulfillment of new electric load consistent with the ratio of recommended to requested amount.

| Line | Company | City | County | Economic Development Region | IOU | Description | kW Request | kW Recommendation (1) | Base Employment (3) | Job Creation Commitment | Project Capital Investment (\$) | Contract Term (years) |
|------|---|-------------------|--------------|-----------------------------------|-------|---|---------------|--------------------------|------------------------|----------------------------|------------------------------------|-----------------------------|
| 1 | Morcon, Inc. | Cambridge | Washington | Capital District | NGRID | Produces bath tissue, towels & napkin products | 500 | 350 | 81 | 50 | \$6,100,000 (2) | 7 |
| | Capital District Region Sub-totals: | | | | | | | 350 | 81 | 50 | \$6,100,000 | |
| | | | | | | | | | | | | |
| 2 | G. A. Braun, Inc. | North Syracuse | Onondaga | Central New York | NGRID | Manufacturer of laundry and textile machinery | 150 | 106 | 155 | 20 | \$6,879,000 (2) | 7 |
| 3 | HP Hood LLC | Oneida | Madison | Central New York | NGRID | Dairy food production facility | 400 | 280 | 198 | 25 | \$36,000,000 | 7 |
| 4 | Tessy Plastics Corp. | Skaneateles Falls | Onondaga | Central New York | NGRID | Manufactures medical and electronics products | 300 | 210 | 0 | 100 | \$8,036,000 | 7 |
| | Central New York Region Sub-totals: | | | | | | | 596 | 353 | 145 | \$50,915,000 | |
| | | | | | | | | | | | | |
| 5 | United States Gypsum Company | Oakfield | Genesee | Finger Lakes | NGRID | Paper Mill, Building Materials Business | 2,800 | 1,200 | 98 | 12 | \$23,697,000 (2) | 7 |
| 6 | Wayne County Eggs, LLC | Wolcott | Wayne | Finger Lakes | RGE | Egg production | 555 | 386 | 78 | 14 | \$14,000,000 | 7 |
| | Finger Lakes Region Sub-totals: | | | | | | | 1,586 | 176 | 26 | \$37,697,000 | |
| | | | | | | | | | | | | |
| 7 | Highstreet IT Solutions,LLC | Islandia | Suffolk | Long Island | LIPA | Provider of cloud services and IT infrastructure management | 40 | 26 | 80 | 8 | \$1,700,000 | 7 |
| | Long Island Region Sub-totals: | | | | | | | 26 | 80 | 8 | \$1,700,000 | |
| | | | | | | | | | | | | |
| 8 | Riverside Iron, LLC | Gouverneur | St. Lawrence | North Country | NGRID | Produces miscellaneous metals and structural steel | 68 | 46 | 0 | 12 | \$350,000 | 7 |
| | North Country Region Sub-totals: | | | | | | | 46 | 0 | 12 | \$350,000 | |
| | | | | | | | | | | | | |
| 9 | Bear Metal Works, Inc39 Scoville Street | Buffalo | Erie | Western New York | NGRID | Provides custom sheet metal fabrication services | 100 | 70 | 0 | 15 | \$2,000,000 | 7 |
| | Western New York Region Sub-totals: | | | | | | | 70 | 0 | 15 | \$2,000,000 | |

Totals 2,674 256 \$98,762,000

⁽¹⁾ All Allocations are recommended to be up to the amount indicated based on the companies' fulfillment of capital spending, job creation, and new electric load consistent with the ratio of recommended to requested amount.

⁽²⁾ These companies are also recommended for retention-related allocations of RNY for separate and distinct job retention and capital investment commitments associated with retaining their existing businesses.

⁽³⁾ New jobs committed must be above the base employment level; the base employment values should not be included when aggregating retained jobs because they are already accounted for elsewhere

| | | | | Economic Development | | | |
|------|--|--------------|------------|-------------------------|-------|---|----------------|
| Line | Company | City | | Region | IOU | Description | Classification |
| 1 | Kateri's | Amsterdam | Montgomery | Capital District | TBD | Packaging and retailing herbal supplements and products | Retail |
| 2 | Long Island Aquarium & Exhibition Center | Riverhead | Suffolk | Long Island | LIPA | Aquarium | Retail |
| 3 | Maxbilt Theatre | Fleischmanns | Delaware | Southern Tier | NYSEG | Theatre | Retail |
| | NYS Office of Children & Family Services (Industry Residential Center) | Rush | Monroe | Finger Lakes | NGRID | State owned youth correctional facility | Not eligible |
| 5 | Safe Harbors of the Hudson, Inc. | Newburgh | Orange | Mid-Hudson | CHUD | Commercial retail development project | Retail |

Applications Not Considered

| | | | | Economic | | | |
|------|--|-----------|---------|-----------------------|-------|--|-----------------|
| Line | Company | City | County | Development Region | IOU | Description | Reason |
| | | - | | | | | |
| 1 | 2 Twisted Farmers | Pulaski | Oswego | North Country | NGRID | Farm (hops) | No Demand Meter |
| 2 | 26 Cooper Ave., LLC | Tonawanda | Erie | Western New York | NGRID | Shop Painting | No Demand Meter |
| 3 | Bajan Yankee Pictures Inc. | Brooklyn | Kings | New York City | CONED | Movie production company | Withdrew |
| 4 | Brooklyn Friends School | Brooklyn | Kings | New York City | CONED | Private school for grades K-12 | No Demand Meter |
| 5 | Contract Pharmacal Corporation | Hauppauge | Suffolk | Long Island | LIPA | Manufacturer of contract pharmaceuticals | Withdrew |
| 6 | Ferguson Enterprises, Inc. | Coxsackie | Greene | Capital District | CHUD | Wholesale distribution warehouse | Unresponsive |
| 7 | RevCrest, Inc. | Warsaw | Wyoming | Finger Lakes | NYSEG | Debt collection business | Unresponsive |
| 8 | Sons of Italy, Constantino Brumidi Lodge #2211 | Deer Park | Suffolk | Long Island | LIPA | Sons of Italy Lodge | Unresponsive |

|] | Line | Company | City | | Economic Development Region | IOU | Description |
|---|------|------------------------------------|---------------|--------|--------------------------------|-------|---------------|
| | 1 | Pepsi Cola Bottling Co. of NY Inc. | College Point | Queens | New York City | CONED | Bottling firm |

Western NY Power Proceeds Allocation Board Exhibit "A" 7/29/2014

Applicants Recommended for an Award of Fund Benefits

| FI | Approxime Recommended for an Award of Fund Benefits | | | | | | | | | |
|-----|---|-----------|---------|-------------|-----------------------------------|-------------------------|--------------|---------------|----------|---------|
| | | | | Economic | | | | | | |
| | | | | Development | | | Recommended | Total Project | Jobs | Jobs |
| Lin | Business | City | County | Region | Project Description | Project Type | Award Amount | Cost | Retained | Created |
| | | | | | Upgrade of the technology and R&D | | | | | |
| 1 | Praxair, Inc. | Tonawanda | Erie | Western NY | center | Business Investment | \$500,000 | \$38,775,000 | 1,354 | 22 |
| | | Niagara | | | | Infrastructure/Downtown | | | | |
| 2 | NFIA Stakeholders Group, Inc. | Falls | Niagara | Western NY | Fiber optics assessment | Investment | \$125,000 | \$250,000 | - | - |

Total: \$625,000 \$39,025,000 1,354 22

Total Jobs Created & Retained: 1,376

Exhibit "B" July 29, 2014

Applications Deferred for Further Analysis

| Line | Business | Classification | |
|------|---|-------------------------------|--|
| 1 | City Labs, Inc., | Deferred for further analysis | |
| 2 | Riviera Theatre and Organ Preservation Society Inc. | Deferred for further analysis | |
| | WNY Science & Technology Advanced | Deferred for further analysis | |
| 3 | Manufacturing Park | | |

<u>Criteria adapted from the Western NY Power Proceeds Allocation Board's</u> "Procedures for the Review of Applications for Fund Benefits"

- 1. The extent to which an award of Fund Benefits would be consistent with the strategies and priorities of the Regional Economic Development Council ("REDC") having responsibility for the region in which an Eligible Project is located.¹ The Western New York Regional Economic Development Council which is responsible for Eligible Projects in Erie and Niagara Counties Strategies & Priorities are:
 - Promote "Smart Growth" by investing in areas that infrastructure already exists and achieves certain goals, such as: preserving historic buildings; reviving downtowns; reviving main streets; investing in existing neighborhoods; and investing in former industrial sites. A project consistent with Smart Growth will also focus on: enhancing walkability; enhancing multiple modes of transportation; connecting disadvantaged communities to employment clusters; spurring mixed-use private investment in existing communities and preserving/enhancing natural lands and or resources.
 - Promote workforce development by increasing diversity in the labor force, developing and cultivating that includes workers with advancement potential, underemployed, unemployed and special population; align education and skills training to job market for current and future industry needs.
 - Foster entrepreneurship and new business formation and growth. Designing a plan that brings new technologies and/or products to the marketplace, increases new start ups in strategic industries and facilitates the commercialization of products that can lead to job growth in the Region.
 - Increase the industry profile of agriculture in WNY by: creating better access to markets; creating new products; creating new more efficient processes; creating strong regional brands; creating programs that promote careers in agriculture.
 - Utilize Western New York's proximity to Canadian and U.S. population centers to advance economic development in WNY. Bi-national projects will: utilize crossborder planning to create transportation and logistical infrastructure; improve

¹ As provided for in EDL § 189-c(4), criteria 2-15 are adapted from the criteria for eligibility for Expansion Power, Replacement Power and Preservation Power under Public Authorities Law § 1005. The specific criteria identified in PAL § 1005(13)(b)(4)-(5) are relevant to power allocations under these programs but do not have any logical application to allocations of Fund Benefits. Therefore, the Board does not expect to use these criteria to evaluate applications for Fund Benefits. Additionally, in accordance with PAL § 1005(13), criteria 13-15 listed herein will only be used in the case of Eligible Projects which are proposed by Applicants as, and determined by the Board to be, "revitalization" projects.

operational relationships; promote the attractiveness of WNY as a hub for global trade.

- Position the WNY region as a global energy hub through new sources of clean energy, energy efficiency and energy efficient transportation.
- Support growth of advanced manufacturing by making research more available to manufacturers to help them innovate.
- Spur growth in the health and life sciences industry through improved commercialization, recruit high profile research talent and reducing the cost burden of healthcare while improving health outcomes.
- Expand the scope of higher education by increasing accessibility to Higher Education for communities that currently have limited access to educational opportunities; better aligning education with the industry needs and creating support structures for start-ups which will assist start-ups with commercialization, business planning, workforce preparation, facilities, etc.
- Grow visitors and visitor spending by raising the profile of WNY as a national and international destination; connect multiple tourist destinations in WNY; improve the profile of the WNY Gateway to the United States.

For more information on the Western New York Regional Economic Development Council please go to http://regionalcouncils.ny.gov/content/western-new-york.

- 2. The extent to which an award of Fund Benefits would be consistent with the strategies and priorities of the Regional Economic Development Council ("REDC") having responsibility for the region in which an Eligible Project is located.² The Finger Lakes Regional Economic Development Council which is responsible for Eligible Projects in Orleans and Genesee Counties Strategies & Priorities can be found at: http://regionalcouncils.ny.gov/content/finger-lakes.
- 3. The number of jobs that would be created as a result of an award of Fund Benefits.
- 4. The applicant's long term commitment to the region as evidenced the current and/or planned capital investment in applicant's facilities in the region.
- 5. The ratio of the number of jobs to be created to the amount of Fund Benefits requested.
- 6. The types of jobs that would be created, as measured by wage and benefit levels, security and stability of employment.
- 7. The amount of capital investment, including the type and cost of buildings, equipment and facilities, proposed to be constructed, enlarged or installed.
- 8. The extent to which an award of Fund Benefits would affect the overall productivity or competitiveness of the applicant and its existing employment.

² As provided for in EDL § 189-c(4), criteria 2-15 are adapted from the criteria for eligibility for Expansion Power, Replacement Power and Preservation Power under Public Authorities Law § 1005. The specific criteria identified in PAL § 1005(13)(b)(4)-(5) are relevant to power allocations under these programs but do not have any logical application to allocations of Fund Benefits. Therefore, the Board does not expect to use these criteria to evaluate applications for Fund Benefits. Additionally, in accordance with PAL § 1005(13), criteria 13-15 listed herein will only be used in the case of Eligible Projects which are proposed by Applicants as, and determined by the Board to be, "revitalization" projects.

- 9. The extent to which an award of Fund Benefits may result in a competitive disadvantage for other business in the State.
- 10. The growth potential of the applicant's facilities and the contribution of economic strength to the area in which the applicant's facilities are or would be located.
- 11. The extent of the applicant's willingness to satisfy affirmative action goals.
- 12. The extent to which an award of Fund Benefits is consistent with state, regional and local economic development strategies and priorities and supported by local units of government in the area in which the business is located.
- 13. The impact of an award of Fund Benefits on the operation of any other facilities of the applicant, and on other businesses within the region.
- 14. That the business is likely to close, partially close or relocate resulting in the loss of a substantial number of jobs.
- 15. That the applicant is an important employer in the community and efforts to revitalize the business are in long-term interests of both employers and the community.
- 16. That a reasonable prospect exists that the proposed award of Fund Benefits will enable the applicant to remain competitive and become profitable and preserve jobs for a substantial period of time.



Power Proceeds Allocation Board Western New York Economic Development Fund **Recommendation Memo**

Recommended Award: Exhibit "D"

| Applicant Name: NFIA Stakeholders Grou | | p, Inc. | REDC | WNY | |
|--|-------------------------------------|--------------|------------|---------------|--|
| | | Region: | | | |
| Project Type: | Project Type: Dark Fiber Assessment | | | Niagara | |
| Industry: | ndustry: Multiple Industry Sector | | | Niagara Falls | |
| Amount | Amount \$125,000 | | | 7/1/2014 | |
| Requested: | | Finish Date: | 12/31/2014 | | |
| RECOMMENDED OFFER | | | | | |
| Recommended Total | \$125,000 | | | | |
| Total Project Cost: | \$250,000 | | | | |
| % of Project Cost Red | 50% | | | | |
| REGIONAL IMPACT MEASUREMENTS | | | | | |
| Number of Jobs Reta | N/A | | | | |
| Number of Jobs Crea | N/A | | | | |
| Average Salary of Jol | N/A | | | | |
| Indirect Jobs Created | N/A | | | | |
| Other Impact | | | | | |
| PROJECT RECORDED And Andread Comment of the Comment | | | | | |

PROJECT DESCRIPTION (adapted from application)

The NFIA (Niagara Falls International Airport) Stakeholders Group is made up of different members of the Buffalo Niagara Region that share an interest in the expansion of air services in Niagara Falls and the long-term economic success of the greater Niagara Region. The purpose of this project is to perform a study of the existing dark fiber infrastructure that feeds into the Niagara Falls Air Reserve Station, the Niagara Falls International Airport, the former Army Reserve Center site, the Niagara Airport Commercial Park, the Wheatfield Business Park and the Calspan site. The Stakeholders Group has identified dark fiber capacity as being a key feature for the long-term economic development of the above stated sites. The results of this study will provide guidance to the Stakeholders on what, if any, gaps in coverage exist and allow them to add capacity to ensure that all of the named sites remain stable and are able to accommodate future growth.

BASIS FOR RECOMMENDATION

The sites involved in this study make up the largest employment base in Niagara County. Securing the future of each of these sites is paramount to the long-term economic success of the entire Buffalo Niagara Region.

The Niagara Falls Air Reserve Center currently employs over 3,000 people in Niagara County and, due to the changing nature of military missions, the base must constantly upgrade its own technological infrastructure to attract more advanced missions. This study will provide a much needed assessment to the airbase and give them an understanding of where upgrades are needed to secure its future.

The Niagara Falls International Airport is very important to regional efforts surrounding tourism. This study of dark fiber capacity will also lend itself to the future success of the airport. As the airport



Power Proceeds Allocation Board Western New York Economic Development Fund **Recommendation Memo**

markets itself to prospective carriers the capabilities of the existing fiber infrastructure will be considered. This study will give the Airport a clear sense of what the current capability is and it will identify places where improvements must be made to accommodate a targeted customer base.

As technology has evolved so has the need to meet certain thresholds when it comes to fiber infrastructure. The above named sites are of the highest priority to Niagara County and the Greater Buffalo Niagara Region. To ensure the future of all of these sites and the economic future of the WNY Region this study must be done in the near term.

It is the recommendation to this Board that it recommend a grant of \$125,000 to the NFIA Stakeholders Group, Inc. to provide one half of the financing needed to successfully perform this study. Due to the nature of the project it is recommended that the grant be paid to the Stakeholders group in advance of the start of the study but only upon confirmation that (1) another funding entity has committed to a matching grant for the completion of the study and (2) the data sought by the study is not otherwise available from New York State or other publicly available resources.



Power Proceeds Allocation Board Western New York Economic Development Fund **Recommendation Memo**

Recommended Award: Exhibit "D"

| Applicant Name: Praxair, Inc. | | | REDC | WNY | |
|---|------------------------|--|--------------|-----------|--|
| | | | Region: | | |
| Project Type: | Update of R&D Facility | | County: | Erie | |
| Industry: | Industrial Gas | | Locality: | Tonawanda | |
| Amount | \$2,500,000 | | Start Date: | 7/01/2014 | |
| Requested: | | | Finish Date: | 7/01/2016 | |
| RECOMMENDED OFFER | | | | | |
| Recommended Tota | \$500,000 | | | | |
| Total Project Cost: | \$38,775,000 | | | | |
| % of Project Cost Re | 1% | | | | |
| REGIONAL IMPACT MEASUREMENTS | | | | | |
| Number of Jobs Reta | 1354 | | | | |
| Number of Jobs Crea | 22 | | | | |
| Average Salary of Jol | \$82,000 | | | | |
| Indirect Jobs Created | | | | | |
| Other Impact | | | | | |
| PROJECT PECCENTION (a de et al frança d'institut) | | | | | |

PROJECT DESCRIPTION (adapted from application)

Praxair is one of the largest employers in the Town of Tonawanda where the company operates a facility responsible for: Global Plant Engineering; Research and Development; North American Operations Communications; Global Plant Monitoring; Customer Demand Monitoring; and Fleet Dispatch and Back Office Support Functions. To continue the success of the Tonawanda facility and maintain the current growth trajectory, Praxair must complete a major facility upgrade. These upgrades are estimated to cost \$38,775,000, and will allow Praxair to keep pace with technological advancement while at the same time maintaining and growing the workforce in Tonawanda. This project is confirmation of Praxair's willingness to make a long term commitment to the WNY Region but other geographical locations continue to be considered.

BASIS FOR RECOMMENDATION

As stated in the project description, Praxair has long been one of the largest employers in WNY, including in Tonawanda. The value of Praxair to the WNY community is significant. This project represents an opportunity for New York State to work with a major U.S. corporation to ensure a long-term commitment to the WNY Region.

The Praxair facility in the Town of Tonawanda plays a central role in several aspects of the company's global operations. It would be a sound use of Fund Benefits to support the upgrade of this facility and maintain its status as a state of the art research center.

It is the recommendation to the Board that it recommend a grant of Fund Benefits in the amount of \$500,000 to complete a comprehensive NYS incentive package that will secure the long-term future of Praxair in WNY. Due to the nature of this project and the incentives being offered by Empire State



Recommendation Memo

| Development, it is recommended that this grant be paid out in 3 milestone payments (50%/25%) coinciding with the milestone payments proposed by ESD for other project | | | | | |
|---|--|--|--|--|--|
| incentives. | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

MEMORANDUM OF UNDERSTANDING

By and Between

THE STATE OF NEW YORK, Acting by and through the Director of the Budget of the State of New York

POWER AUTHORITY OF THE STATE OF NEW YORK, A corporate municipal instrumentality and political subdivision of the State of New York

Dated as of February 23, 2009

THIS MEMORANDUM OF UNDERSTANDING (the "MOU"), dated as of February 23, 2009, by and among the STATE OF NEW YORK, acting by and through the Director of the Budget of the State of New York (the "State") and the POWER AUTHORITY OF THE STATE OF NEW YORK, a corporate municipal instrumentality and political subdivision of the State ("NYPA"), is intended to provide a formal framework for the mutual understandings of the parties set forth herein.

WITNESETH:

WHEREAS, the nation is facing an economic downturn that is severe and widespread as evidenced by the recent wave of unprecedented financial sector shocks that began in September 2008 and are continuing through today; and

WHEREAS, the financial and liquidity crisis has materially weakened the State's economy and in particular the financial services industry that is key to the State's tax revenue base; and

WHEREAS, as a result of the financial and liquidity crisis, the State is facing unprecedented budgetary challenges including significant projected reductions in State tax receipts that have resulted in projected budget gaps as of January 2009 of \$1.5 billion in Fiscal Year 2008-09, \$12.5 billion in Fiscal Year 2009-10, \$15.7 billion in Fiscal Year 2010-11, and \$17.2 billion in Fiscal Year 2011-12; and

WHEREAS, the State finds it necessary to explore a broad range of financial initiatives to close projected budget gaps for its 2008-09 and 2009-10 Fiscal Years; and

WHEREAS, NYPA has determined that it has certain funds described herein which it may transfer to the State as contemplated by this MOU; and

WHEREAS, NYPA, as a corporate municipal instrumentality and political subdivision of the State has indicated its desire to assist the State in addressing the current fiscal crisis;

NOW THEREFORE, and in recognition of the foregoing, the parties state their mutual understanding as follows:

ARTICLE I DEFINITIONS

"Asset Transfer" means the temporary transfer by NYPA of the Available Monies to the State as described in this MOU.

"Available Monies" means collectively (a) \$103,000,000 of cash determined by NYPA to not be required for the purposes specified by Sections 503(1)(a)-(c) of NYPA's general bond resolution securing its outstanding bonds ("Asset A"), and (b) \$215,000,000 of cash presently on

deposit in NYPA's Spent Fuel Account which NYPA, pending the establishment by the federal government of a federal repository for nuclear waste and an operative, legal requirement to pay the funds in such Account, has reserved for such purpose. ("Asset B").

"Executive Budget" means the constitutionally mandated annual submission of the Governor of the State of New York to the New York State Legislature containing the Governor's recommended program, expressed in dollar terms, for a forthcoming Fiscal Year.

"Fiscal Year" means the fiscal year of the State of New York commencing on April 1 of each year, or such other period of time hereafter adopted by the State of New York as its fiscal year.

"MOU" means this Memorandum of Understanding dated as of February 23, 2009.

"NYPA" means the Power Authority of the State of New York, a corporate municipal instrumentality and political subdivision of the State with its principal office located at 30 South Pearl Street, Albany, New York 12207.

"State" means the State of New York.

ARTICLE II

AVAILABLE NYPA ASSETS

Section 2.1. NYPA Resources. As a result of NYPA's operations, NYPA has established reserves and designated cash and investment accounts. NYPA has determined that it may transfer the Available Monies to the State as contemplated by this MOU. From time to time NYPA has made voluntary contributions to the State for use by the State for various purposes.

To assist the State in closing its budget gaps for the 2008-09 and 2009-10 Fiscal Years, NYPA hereby agrees to make an Asset Transfer to the State (i) of an amount equal to Asset A within 180 days of the enactment of the 2009-10 State budget, and (ii) of an amount equal to Asset B by March 27, 2009.

The implementation of the Asset Transfers by NYPA is being undertaken pursuant to the legislation attached as Appendix A and in reliance upon the action contemplated to be taken by the State set forth in Section 3.1 hereof.

ARTICLE III

SPECIAL COVENANT

Section 3.1. <u>Appropriation Covenant</u>. The State hereby agrees to include in the Executive Budget for each Fiscal Year commencing with the 2009-10 Fiscal Year and continuing, in the case of Asset A, through the 2014-15 Fiscal Year, and in the case of Asset B, through the 2017-18 Fiscal Year, as requested appropriations substantially in the form attached

hereto as Appendix B, an amount equal to any portion of either Asset Transfer that has not been returned to NYPA.

Subject to appropriation by the New York State Legislature, the State hereby agrees to return Asset A to NYPA not later than September 30, 2014, and agrees to return Asset B to NYPA not later than September 30, 2017. Any appropriation of monies for the return of an amount equal to or less than Asset A or Asset B to NYPA prior to September 30, 2014 and September 30, 2017, respectively, shall be made only upon a certification by the Director of the Budget, following a certification by NYPA to the Director of the Budget, that monies available to NYPA are not sufficient to meet NYPA's obligations with respect, (i) in the case of Asset A, to its operating or capital programs or to pay debt service on its debt obligations, provided that in no event shall such certification by NYPA exceed in the aggregate an amount equal to \$103,000,000, and (ii) in the case of Asset B, compliance with the Authority's payment obligations related to the transfer and disposal of nuclear spent fuel as required by federal or state statute, provided that in no event shall such certification by NYPA exceed in the aggregate an amount equal to \$215,000,000.

Notwithstanding the foregoing, prior to the return to NYPA of amounts equal to Asset B, the State will seek additional appropriations of monies for transfer to NYPA and may take other actions, which together will be sufficient, as determined by the Director of the Budget in consultation with NYPA, to enable NYPA to maintain the asset value on its financial statements at the current value of Asset B or at a higher amount.

ARTICLE IV

NOT A BORROWING

Section 4.1. Nature of Asset Transfer. In recognition of the fact that NYPA is a corporate municipal instrumentality and political subdivision of the State and a component unit of the State in the Comprehensive Annual Financial Report of the State prepared each year by the Office of the State Comptroller, the parties hereby agree that (A) the Asset Transfer contemplated by this MOU shall, to the maximum extent possible, be treated for accounting purposes as a temporary intra-governmental transfer of assets, and (B) the obligation of the State to return all or a portion of an amount equal to the Asset Transfer (i) shall be subject to annual appropriation by the State Legislature, (ii) shall not constitute a debt of the State within the meaning of any constitutional or statutory provision, and (iii) shall be deemed executory only to the extent of monies available to the State and no liability shall be incurred by the State beyond monies available for such purpose.

Section 4.2. <u>No Payments of Interest</u>. In accordance with the understandings set forth in Section 4.1 hereof, no payment of interest or other charges or consideration shall be due or payable by the State with respect to the Asset Transfer.

Section 4.3. No Service Contract. The Asset Transfer by NYPA, and any return to NYPA by the State of any amount representing all or a portion of the Asset Transfer, shall not be deemed to be a payment for services rendered by either the State or NYPA.

Section 4.4. <u>Legislative Authorization</u>. Nothing in this MOU shall preclude either party hereto from having legislation introduced in the New York Legislature relating to the Asset Transfer that is not inconsistent with the mutual understandings contained in this MOU.

ARTICLE V

MISCELLANEOUS

- Section 5.1. <u>Exculpatory Provisions</u>. (A) No provision contained in this MOU shall constitute or give rise to or impose on any party hereto a pecuniary liability or a charge upon its general credit.
- (B) Any agreements contained in this MOU of either the State or NYPA shall be deemed to be agreements of the State or NYPA and not of any member, director, officer, employee, or agent in his or her individual capacity, and no recourse shall be had for any claim hereunder against any member, director, officer, employee, or agent of the State or NYPA.
- (C) The parties to this MOU have executed this document as indicated below as evidence of approval of the mutual understandings set forth herein.
- Section 5.2. <u>No Third Party Beneficiaries</u>. Nothing in this MOU shall be construed to confer upon or to give notice to any person or corporation other than the State and NYPA, of any right, remedy or claim under or by reason of this MOU.
- Section 5.3. <u>Section Headings</u>. All section headings contained in this MOU are for convenience of reference only and are not intended to define or limit the scope of any provision of this MOU.

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Section 5.4. Governing Law. This MOU shall be construed and interpreted in accordance with, and shall be governed by, the laws of the State of New York.

STATE OF NEW YORK, acting by and through the Director of the Budget of the State of New York

Director of the Budget

POWER AUTHORITY OF THE STATE OF NEW YORK

Jonathan F. Foster, Trustee

Appendix A

S 13-5. Section 11-a of part RE of chapter 57 of the laws of 2008, relating to providing for the administration of certain funds and accounts related to the 2008-2009 budget, is amended to read as follows:

\$ 11-a. Notwithstanding any provision of law to the contrary, the power authority of the state of New York, as deemed feasible and advisable by its trustees; is authorized to make contributions to the state treasury to the credit of the general fund as follows: for the fiscal year commencing April 1, 2008, a total of [\$60,003.000] \$351,000,000.

not less than \$50,000,000 of which will be paid within thirty days of the enactment of the state budget for such fiscal year, not less than \$119,000,000 shall be paid by January 30, 2009 and \$182,000,000 shall be paid by March 27, 2009; for the fiscal year commencing April 1, 2009, a

total of [\$35,000,000] \$210,008,000, not less than [\$25,000,000]

^{2 \$103,000,000} of which will be paid within [thirty] one hundred eighty

³ days of the enactment of the state budget for such fiscal year; and for

⁴ the fiscal year commencing April 1, 2010, a total of \$35,000,000, not

⁵ less than \$25,000,000 of which will be paid within thirty days of the

⁵ enactment of the state budget for such fiscal year and \$107,000,000

⁷ shall be paid prior to March 26, 2010.

12/09/08

7

73053-01-9

DRAFT · LBDC

A BUDGET BILL submitted by the Governor in accordance with Article VII of the Constitution

AN ACT to require appropriations in the executive budget to the New York Power Authority

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

- Section 1. Notwithstanding any other provision of law, the Governor
- 2 shall include an appropriation in a budget bill for each state fiscal
- 3 year that reflects the value of the assets transferred from the power
- 4 authority of the state of New York to the state of New York pursuant to
- 5 a memorandum of understanding between the power authority of the state
- 6 of New York and the state of New York relating to the transfer to the
- 7 state of New York of assets aggregating \$318,000,000 presently held in
- 8 certain accounts of the power authority of the state of New York. The
- 9 state comptroller shall encumber the amount so appropriated before the
- 10 end of the fiscal year for which such appropriation is made. If for any
- 11 of the fiscal years commencing during the period from April 1, 2009
- 12 until such time as the assets have been returned by the state of New
- 13 York to the power authority of the state of New York the Governor fails
- 14 to submit a budget bill containing an appropriation of such amount, such
- 15 amount appropriated to and encumbered during the preceding fiscal year
- 16. shall be payable to the authority on the last day of June of such year.
- 17 § 2. This act shall take effect immediately.

CONTINGENT AND OTHER APPROPRIATIONS

NEW YORK POWER AUTHORITY ASSET TRANSFER

STATE OPERATIONS AND AID TO LOCALITIES 2009-10

General Fund / State Operations State Purposes Account - 003

For deposit to the appropriate account or accounts of the New York power authority pursuant to a plan submitted by the New York power authority and approved by the director of the budget. Notwithstanding section 40 of the state finance law, this appropriation shall remain in place until a subsequent appropriation is made available. The sum of \$103,009,000 is hereby appropriated to the New York power authority for deposit to the appropriation shall only be made available upon certification of the director of the budget, at the request of the New York power authority when and to the extent that the authority certifies to the director that the monies available to the authority are not sufficient to meet the authority's obligations with respect to its debt service or operating or capital programs.....

accounts of the New York power authority pursuant to a plan submitted by the New York power authority and approved by the director of the budget. Notwithstanding section 40 of the state finance law, this appropriation shall remain in place until a subsequent appropriation is made available. The sum of \$215,000,000 is hereby appropriated to the New York power authority for deposit to the appropriate account or accounts. Such appropriation shall only be made available upon certification of the director of the budget, at the request of the New York power authority when and to the extent that the authority certifies to the director that such monies are necessary to comply with the authority's expenses related to the transfer and disposal of

nuclear spent fuel as required by federal

or state statute

103,000,000

215,000,000

46 .

This AMENDMENT TO MEMORANDUM OF UNDERSTANDING, dated as of April 24, 2014 ("Amendment"), by and among the STATE OF NEW YORK, acting by and through the Director of the Budget of the State of New York (the "State") and the POWER AUTHORITY OF THE STATE OF NEW YORK ("NYPA"), a corporate municipal instrumentality and political subdivision of the State (collectively, the "Parties").

WHEREAS, on February 23, 2009, NYPA and the State entered into a Memorandum of Understanding (the "2009 MOU"), providing the framework for a temporary intra-governmental transfer of assets from NYPA to the State;

WHEREAS, as set forth in the 2009 MOU, NYPA had certain Available Monies referred to in the MOU as "Asset A" in the amount of \$103 million, and "Asset B" in the amount of \$215 million, and NYPA agreed to provide temporary asset transfers in amounts equal to Asset A, with such Asset A transfer rendered to the State in September, 2009 and Asset B, with such Asset B transfer rendered to the State in February 2009, in accordance with authorizing legislation the form of which is attached to the 2009 MOU as the first page of Appendix A;

WHEREAS, as further specified in the 2009 MOU, the State (1) agreed to include in the Executive Budget for each Fiscal Year commencing with the 2009-10 Fiscal Year an appropriation in the amount of Asset A through the 2014-15 Fiscal Year, and an appropriation in the amount of Asset B through the 2017-18 Fiscal Year, substantially in the form attached to the 2009 MOU as Appendix B (entitled in pertinent part "CONTINGENT AND OTHER APPROPRIATIONS NEW YORK POWER AUTHORITY ASSET TRANSFER"), and (2) included legislation in the Enacted Budget for the 2009-10 Fiscal Year, entitled "A BUDGET BILL submitted by the Governor in accordance with Article VII of the Constitution" the form of which is attached to the 2009 MOU as the second page of Appendix A (the "Article VII Bill");

WHEREAS, commencing with the 2009-10 Fiscal Year and each year thereafter, the State has included in the Executive Budget the appropriation previously mentioned;

WHEREAS, the State agreed, subject to appropriation by the New York State Legislature, to return Asset A to NYPA no later than September 30, 2014 and to return Asset B to NYPA no later than September 30, 2017, provided however that the State agreed to return such assets to NYPA sooner under certain conditions as specified in the 2009 MOU; and

WHEREAS, the Parties now desire to modify the 2009 MOU to specify revised terms as provided for herein.

NOW, THEREFORE, and in recognition of the foregoing, the Parties state their mutual understandings as follows:

- 1. The text appearing under "ARTICLE III, SPECIAL COVENANT" of the 2009 MOU is deleted and replaced with the following text:
 - **Section 3.1.** Appropriation Covenant. The State hereby agrees to include in the Executive Budget for each Fiscal Year commencing with the 2014-

15 Fiscal Year and continuing, in the case of Asset A, through the 2018-19 Fiscal Year, and in the case of Asset B, through the 2017-18 Fiscal Year as requested appropriations substantially in the form attached hereto as Appendix B, an amount equal to any portion of either Asset Transfer that has not been returned to NYPA.

Subject to appropriation by the New York State Legislature, the State hereby agrees to return Asset A to NYPA in five (5) annual installments, which shall be made no later than September 30th of each of the following five State fiscal years (2014-15 through 2018-19) and in such amounts as set forth below:

| State Fiscal Year 2014-15: | \$18,000,000 |
|----------------------------|--------------|
| State Fiscal Year 2015-16: | \$21,000,000 |
| State Fiscal Year 2016-17: | \$21,000,000 |
| State Fiscal Year 2017-18: | \$21,000,000 |
| State Fiscal Year 2018-19: | \$22,000,000 |

Subject to appropriation by the New York State Legislature, the State hereby agrees to return Asset B to NYPA not later than September 30, 2017.

Any appropriation of monies for the return of any portion of Asset A prior to the installments provided for in this Article III, or Asset B prior to September 30, 2017, shall be made only upon a certification by the Director of the Budget, following a certification by NYPA to the Director of the Budget that monies available to NYPA are insufficient to meet NYPA's obligations with respect to, (i) in the case of Asset A, NYPA's operating or capital programs or to pay debt service on its debt obligations, provided that in no event shall such certification by NYPA exceed the unrepaid balance of Asset A, and (ii) in the case of Asset B, compliance with the Authority's payment obligations related to the transfer and disposal of nuclear spent fuel as required by federal or state statute or regulation, provided that in no event shall such certification by NYPA exceed in the aggregate an amount equal to \$215,000,000.

Notwithstanding the foregoing, prior to the return to NYPA of amounts equal to Asset B, the State will seek additional appropriations of monies for transfer to NYPA and may take other actions, which together will be sufficient, as determined by the Director of the Budget in consultation with NYPA, to enable NYPA to maintain the asset value on its financial statements at the current value of Asset B or at a higher amount.

- 2. The text appearing under "Appendix B" of the 2009 MOU is deleted and replaced with text substantially in the form attached hereto as Exhibit A.
- 3. Unless otherwise defined herein, all capitalized terms used herein shall have the meanings given to them in the 2009 MOU.

- 4. Except as expressly modified by or set forth in this MOU, the 2009 MOU shall remain unmodified and in full force and effect.
- 5. This Amendment shall be effective as of the date the fully executed Amendment is approved/ratified by NYPA's Board of Trustees.

STATE OF NEW YORK, acting by and through

the Director of the Budget of the State of New York

By:

Director of the Budget

Dated:

4/21/14

POWER AUTHORITY OF THE STATE OF NEW YORK

By:

Executive Vice President Ethief Financia officer

Dated:

April 24, 2014

Exhibit A

Appendix B

MISCELLANEOUS -- ALL STATE DEPARTMENTS AND AGENCIES

NEW YORK POWER AUTHORITY ASSET TRANSFER

STATE OPERATIONS 20__-_

For payment according to the following schedule:

APPROPRIATIONS REAPPROPRIATIONS

| General Fund | 318,000,000 | 0 |
|--------------|-------------|---|
| All Funds | 318,000,000 | 0 |
| | | |

SCHEDULE

NEW YORK POWER AUTHORITY ASSET TRANSFER PROGRAM 318,000,000

General Fund State Purposes Account - 10050

For deposit to the appropriate account or accounts of the New York power authority pursuant to a plan submitted by the New York power authority and approved by the director of the budget. Notwithstanding section 40 of the state finance law, this appropriation shall remain in place until a subsequent appropriation is made available. The sum of \$103,000,000 is hereby appropriated to the New York power authority for deposit to the appropriate account or accounts. Such appropriation shall be made available either: (i) pursuant to a repayment agreement submitted by the New York power authority and approved by the director of the budget, or (ii) upon certification of the director of the budget at the request of the New York power authority when and to the extent that the

authority certifies to the director that the monies available to the authority are not sufficient to meet the authority's obligations with respect to its debt service or operating or capital programs ... 103,000,000 For deposit to the appropriate account or accounts of the New York power authority pursuant to a plan submitted by the New York power authority and approved by the director of the budget. Notwithstanding section 40 of the state finance law, this appropriation shall remain in place until a subsequent appropriation is made available. The sum of \$215,000,000 is hereby appropriated to the New York power authority for deposit to the appropriate account or accounts. Such appropriation shall only be made available upon certification of the director of the budget, at the request of the New York power authority when and to the extent that the authority certifies to the director that such monies are necessary to comply with the authority's expenses related to the transfer and disposal of nuclear spent fuel as required by federal or state statute 215,000,000



STRATEGIC INITIATIVE BUSINESS PLAN for

Process Excellence

Executive Sponsor Jill Anderson Responsible Executive Janis Archer

Project Manager Maria He / Lisa Cole

Initiative Team Stephen Bosco, Christopher Carey,

Earl Faunlagui, Kerry-Jane King, Christine Lally, Brian Wilkie

Initiative Start 5/20/14 Initiative End 12/31/15

TABLE OF CONTENTS

3 EXECUTIVE SUMMARY

A one-page overview containing key information about the initiative, including strategic rationale, marketing strategy, financial summary and high-level timeline

5 STRATEGIC RATIONALE

A high-level summary of the strategic rationale of the initiative and how it aligns to the strategic goals and key values of NYPA.

7 INITIATIVE OVERVIEW

A range of background and scene-setting information pertaining to the initiative, including why the initiative is being suggested and what it aims to achieve.

8 SOLUTION

Key information around the proposed solution, including suggested business model and governance structure.

11 BENEFITS AND REVENUE

Quantitative information around annual benefits expected as a result of the initiative. These benefits include cost savings and increased revenue. The section also includes a benefit realization overview.

13 FUNDING FOR THE INITIATIVE

High-level specification of the intended funding sources that will be used to fund the implementation.

14 COSTS AND RESOURCES

Quantitative information around annual cost and resources required to implement the initiative, as well as any permanent on-going costs that will be incurred as a result of implementing the initiative.

16 IMPACT TO MARKET

A high-level market analysis, followed by details around how the initiative is expected to impact customers segments and NYPA's products and service offerings.

16 ORGANIZATIONAL IMPACT

Overview of how the initiative is expected to impact NYPA's business units, including an overview of the skills required and whether those skills currently exist in the organization.

18 EXTERNAL STAKEHOLDER IMPACT AND MARKETING PLAN

Overview of how the initiative is expected to impact NYPA's external stakeholders.

18 RISKS

A high-level risk overview, specifying key risk information such as the probability and severity of key risks, risk owners and action plans.

EXECUTIVE SUMMARY

Strategic rationale and drivers of the initiative

The process excellence initiative will establish streamlined, sustainable processes that balance cost efficiencies alongside risk, and realign internal resources to support the transformation of NYPA described in the 2014-2019 Strategic Vision. These efficient and optimized processes will provide a foundation for the other strategic initiatives introduced as part of the 2014-2019 Strategic Vision.

NYPA, like any business, has evolved significantly over time. In some cases, these changes in business focus can lead to redundant and anachronistic processes which contribute to a reduction in overall efficiency. The process excellence initiative will provide structure to the identification of inefficient processes and apply a holistic approach to their redesign in order to deliver benefits in three areas: cost optimization, environmental improvement and risk assessment and balancing.

Process redesign could, for example, automate a manual process by establishing an electronic approval workflow and audit trail that is consistent across several business units. This improvement would streamline and standardize the process, reduce time between hand-offs, eliminate paper use, and provide increased controls through electronic logging and reporting. It would provide benefit in all three targeted areas identified above. In cases where the three benefit areas may be in conflict, an approach will be taken to strike a balance amongst them to ensure that the costs are appropriate, the environmental impact is positive or neutral, the risk is evaluated and mitigated wherever possible, and that sufficient controls are in place.

Business model

The business model is simple: the cost of dedicated staff to identify and implement business process improvements across NYPA will be funded, over time, through the realized savings from successfully executed projects. Based on preliminary research of peer utilities and an initial evaluation of opportunities at NYPA, it is anticipated that process efficiency efforts will result in reduced operating costs and facilitate the reallocation of resources to areas in the organization with growing need, thereby maximizing organizational efficiency. Benefits realized as a result of the process excellence function will be tracked to ensure the anticipated outcomes are achieved, with the results effectively communicated across NYPA.

Thoughtful and effective internal engagement is a crucial component in implementing a culture of process excellence. Employees must understand that the intent of the initiative is to make their work more manageable and rewarding; this understanding will allow employees to embrace and own the positive changes resulting from process improvement. Key to the success of the process excellence initiative will be a steadfast adherence to its three drivers and guiding principles: cost optimization and environmental sustainability, balanced alongside an assessment of risk.

Continuous improvement efforts will also reinforce, with our stakeholders, NYPA's commitment to be an efficient and streamlined business.

An initial high level review with senior management identified over 40 processes are candidates for review and this will be the starting point for the process excellence initiative. Costs of the initiative include the salaries of the process excellence team, training, software, and trade organization membership; these will be funded via internal operating expenditure and capital expenditures as appropriate.

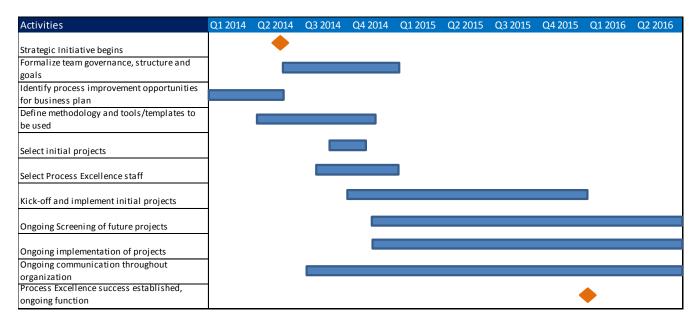
Financial Summary

The table below illustrates the anticipated net cash flow once anticipated costs are deducted from the total anticipated cost savings and increases in revenue.

| Category | 2014 | 2015 | 2016 | 2017 | | 2018 | | 2019 | 2020 | Pos | t-2020 |
|----------------------------------|-------------|-------------|-------------|-------------|-----|---------|----|-----------|--------------|-----|--------|
| Total cost reduction and revenue | \$ - | \$ 1,346 | \$ 2,691 | \$ 4,037 | \$ | 5,383 | \$ | 6,729 | \$ 6,729 | \$ | 6,729 |
| Site O&M expenses | \$ - | \$ - | \$ - | \$ - | \$ | - | \$ | - | \$ - | \$ | - |
| HQ/Overhead/Other expenses | \$ 358 | \$ 743 | \$ 672 | \$ 672 | \$ | 672 | \$ | 672 | \$ 672 | \$ | 672 |
| Capital expenses | \$ - | \$ 200 | \$ - | \$ - | \$ | - | \$ | - | \$ - | \$ | - |
| Total expenses | \$ 358 | \$ 943 | \$ 672 | \$ 672 | \$ | 672 | \$ | 672 | \$ 672 | \$ | 672 |
| Third-party funds | \$ - | \$ - | \$ - | \$ - | \$ | - | \$ | - | \$ - | \$ | - |
| Total funding | \$ - | \$ - | \$ - | \$ - | \$ | - | \$ | - | \$ - | \$ | - |
| Net cashflow | \$ (358) | \$ 403 | \$ 2,020 | \$ 3,365 | \$ | 4,711 | \$ | 6,057 | \$ 6,057 | \$ | 6,057 |
| Accumulated net | \$ (358) | \$ 45 | \$ 2,065 | \$ 5,430 | \$ | 10,141 | \$ | 16,198 | \$ 22,254 | \$ | 28,311 |
| | | | | | | | | | | | |
| Discounted net | \$ (358) | \$ 380 | \$ 1,797 | \$ 2,826 | \$ | 3,732 | \$ | 4,526 | \$ 4,270 | \$ | 17,986 |
| | | | | | All | numbers | ar | e \$ '000 | | | |
| Initiative NPV | | \$ | 35,158 | | | | | | | | |

The financial summary reflects the total costs and saving/benefits associated with this initiative. Net savings (time and money) will provide necessary resources to support NYPA's vision and initiatives, in addition to mitigating potential costs and/or rate increases in the future.

High Level Timeline



Risk of the initiative

The risks associated with the initiative can be grouped into the following key areas:

- 1. Resistance from employees: Without effective staff engagement, there is a potential for some process changes to be perceived as efficiency measures aimed at staff reduction. If employees feel uninvolved in process improvements, they may be less cooperative and the success of improvements could be in jeopardy. Understanding and addressing this potential employee concern before changes are implemented will help the initiative succeed.
- 2. Benefits not sustained: Measurement and control are key aspects to ensure the success of this initiative. There is a risk that processes will revert to the previous inefficient state without effective benefit measures and controls to ensure improvements are sustained.
- 3. Opportunity Cost: Most departments and groups tend to have multiple tasks, assignments and processes as part of their job responsibilities and deliverables. A process excellence initiative in one area may temporarily impact other processes as a result of time and resources devoted to the specific process improvement area.

STRATEGIC RATIONALE

Business strategy and rationale

The evolution of NYPA has led to inefficiencies in some areas due to silo-ed, outdated and overlapping processes. There have been one-time efforts to deliver process improvements that have resulted in increased efficiency. These include: Project Summit, which led to the reorganization of scheduling and settlement in February 2014; the ReCharge NY process definition project that allowed the new program to launch smoothly and without

issue; and the S3-Forecast Energy Revenue process improvement project that increased overall process throughput by more than 200% as a result of an overall reduction in both cycle time and the resources needed to execute the process.

There are also several process improvement efforts currently underway. For example, Project PI in Operations which has the objective of clarifying and streamlining processes associated with non-recurring Operations projects for the engineering and project management departments. These one-off improvement projects demonstrate that there are both opportunity and capability to embed process excellence within NYPA culture.

Establishing a Process Excellence function will deliver significant benefits by providing structure to the identification of inefficient processes and a holistic approach to their subsequent optimization. It will deliver improvements through cost and/or risk reductions while a specific focus on sustainability will also ensure environmental benefits. In addition, it will increase the efficiency of internal business operations and provide a strong foundation for the implementation of the 2014-2019 Strategic Plan. It is likely that once a comprehensive assessment of the potential for process improvement is carried out and there is greater clarity about the exact processes that will be assessed under the initiative, the ultimate benefits of the process excellence function will be found to be higher than estimated in this business plan.

In line with the new Strategic Plan and Mission, NYPA must continue to measure its performance. Part of the initial work of the Process Excellence team will be a more thorough study of best in class utilities that will result in the establishment of benchmarks and metrics to assess performance.

Alignment with strategic goals

| Strategic goal | Type and Degree of impact | Description of impact |
|---|---------------------------|---|
| Financial Effectiveness: Maximizing the financial capacity of NYPA to make capital investments that help achieve our goals | Positive - Medium | Potential projects have an anticipated financial benefit equal to multiples of the initialinvestment. |
| Operational Effectiveness: Maximize the efficiency, reliability and flexibility of our assets and organization | Positive - Medium | Effective processes, with clarity around tasks and roles, are repeatable and reliable, with minimum defects. This increases NYPA's ability to transmit and generate power reliably. |
| Value From Energy: Maximizing the benefit / minimizing the negative impact of each unit of energy delivered to the state / customer | Positive - Low | The launch of low cost power programs will benefit from efforts to define program processes at the start. Clarity around steps and roles reduces issues and risks associated with new processes, and will increase their efficiency. Streamlined processes will better suppport the implementation of Energy Efficiency projects. |

Alignment with key values

| Values | Degree of impact | Description of impact |
|------------------------------|-------------------|---|
| Sustainability | Positive - High | The framework includes a specific focus on sustainability efforts |
| Safety | Positive - Low | Clear, well understood processes will improve safety |
| Compliance | Positive - Low | Clear, well understood processes will improve compliance |
| Environmental Responsibility | Positive - Medium | The framework includes a specific focus on sustainability efforts |
| Employee Development | Positive - Medium | NYPA employees will have enhanced process excellence capabilities |

INITIATIVE OVERVIEW

Description of the opportunity

Research into process efficiency programs at peer utilities demonstrated organizational benefits from investing in improving the efficiency of internal business processes. The success of such initiatives depends on the current condition of organizational processes, the suitability of the methodology used to assess and address the issues identified, and the effectiveness of implementation. While the success of individual process improvement projects may vary, evidence suggests that benefits from process improvement can be significant.

For example, the Jacksonville Electric Authority (JEA) implemented a similar program with eight dedicated staff members and has realized \$579 million in hard and soft cost savings since 2000. The dedicated staff was supported by a larger group of trained and certified employees from different business sectors, allowing JEA to complete over 580 projects since 2000. For one process project, JEA conducted an assessment of the equipment needed on service trucks, including how equipment was used and where it was stored. JEA was able to eliminate unnecessary items on the trucks and improve access to those items used most frequently. Eliminating unnecessary items translated to a reduction in truck weight and fuel savings which became significant when totaled for the entire fleet. Changing the layout of items on the trucks translated to less time spent looking for equipment needed for each task, and allowed workers to identify missing equipment before traveling to a job site. It also improved safety, as this was one of the criteria used to determine the location of equipment on the truck.

Within NYPA there is clear support for process improvement. Discussions with the Executive Management Committee (EMC) have led to the recommendation of more than 40 processes for review, indicating that there is a strong opportunity for such a function.

Anticipated financial benefits from improving these 40 identified potential processes are estimated to be \$6.7M (±30%) annually after year 5, based on high-level estimates provided by process owners and participants. In addition, these processes do not represent the entire portfolio of processes that are

candidates for improvement; thus the total potential benefit is likely to exceed these estimates.

Initiative aim (desired outcome)

This initiative will result in the ongoing optimization of processes at NYPA and in doing so will provide value in the form of reduced costs and environmental impact, balanced against an assessment of risk. In addition, it will provide opportunities for resource allocation to support evolving priorities and facilitate a more streamlined business model that will be evident to NYPA staff, customers, and stakeholders.

The initiative will establish a new team responsible for instituting process excellence across NYPA. The team will identify candidate processes that will benefit from in-depth process maturity and efficiency analysis; the current state will be assessed and the future desired state defined; with clear steps to get from current to future state identified. This approach will be repeated in areas where process concerns are identified. The team's comprehensive understanding of process excellence and best practices will be shared with staff across NYPA where process excellence projects are implemented.

Initiative Scope

All NYPA processes – including, for example, how we bill our customers and how we procure goods and services, could potentially fall within the scope of the process excellence initiative. Through interviews with EMC and other senior staff, more than 40 candidate processes were identified as having the potential to benefit from this initiative. A targeted survey was subsequently circulated to the owners of these processes to capture the suitability of each candidate process for assessment under the initiative and the potential benefits that could be achieved.

Consequence of maintaining status quo

In the absence of any action, process deficiencies will remain and NYPA will operate at a sub-optimal level. In that case, a greater number of staff members may be needed to support on-going operations and the work required to successfully implement the transformative initiatives contained in the 2014 strategic plan, both of which will lead to

a higher overall cost.

Without a specific focus on process excellence, we will miss an opportunity to streamline operational practices and improve resource efficiency, which could compromise the implementation of the new strategic initiatives. In addition, without a specific focus on sustainability within NYPA processes, it will be difficult to further advance internal green goals and demonstrate leadership to customers and stakeholders in this area. The process excellence strategic initiative is vital to create the effective and efficient base upon which the other strategic initiatives will be built.

Considered alternatives

The team considered two variations on the proposed solution presented in this business plan. Both also involved the development of a Process Excellence function. Under the first option, the team would be formed with external consultants. Under the second, the team would not comprise dedicated staff but would instead be comprised of internal staff loaned to the initiative on a part-time basis.

The major disadvantage of using consultants is that it would not promote development of process excellence expertise within NYPA. While we anticipate using some level of initial consulting support to institute best practices into our methodology, a key aim of the initiative is to enhance internal process excellence capabilities. The concern associated with the second option is that a team comprised of part-time NYPA staff might have competing priorities, and that insufficient time might be devoted to process excellence work.

SOLUTION

Proposed solution

The Process Excellence function defined in this business plan will provide the structure for NYPA to define, analyze, improve, measure, and control internal processes within, and across, business unit boundaries. By optimizing cost, facilitating environmental improvements, and assessing risk, the Process Excellence function will enable NYPA to pursue its new mission, better serve its customers, and evolve with an energy industry that is in the

midst of significant change.

The team will initially be comprised of three full-time staff members who will execute projects in parallel and perform a range of ongoing activities focused on process excellence. Preferably, at least two of the three positions will be filled by qualified internal staff to capitalize on institutional knowledge and allow the team to commence its first project expeditiously.

For each project, the team will work with subject matter experts (SMEs) from the business units involved in the target process who will act as "change agents" for the new process. The role of these change agents will be to collaborate with the Process Excellence staff and provide subject matter expertise. Their knowledge of the business will ensure that new processes are designed effectively. The involvement of change agents from the beginning of the project will ensure they are engaged and vested in the process, and will increase the likelihood of adoption of change, including potentially new processes. During the projects, change agents will gain knowledge of Process Excellence that will allow the them to continuously improve processes even after the Process Excellence team has moved on to other projects.

The Process Excellence team will also collaborate with various NYPA departments, including the Office of Strategy Management, Risk Management, Sustainability, Audits, and the Controller group, to ensure process excellence efforts are aligned with NYPA's strategic direction, positively or neutrally impact the environment, appropriately assess risk, and strengthen controls where possible.

It will be of critical importance to monitor the performance of the process excellence function in terms of costs efficiencies attained, risks mitigated and environmental improvements delivered. The governance framework set up by the process excellence team will include explicit reference to performance monitoring over time and the establishment of metrics to support this. At the outset of each new project, an assessment of potential metrics will be completed, with these metrics refined over time as the team obtains a clearer understanding of the areas that should be part of this ongoing assessment. At the end of each project, the team will finalize the metrics and begin

capturing relevant data to support effective performance measurement. The metrics should be reviewed periodically to ensure that they continue to capture the required information and provide transparency on the improvements being delivered.

Roll-out plan

Following Trustee approval, the Process Excellence function will be staffed and trained, the function's charter refined, and governance established with methodology, metrics, and tools. The goal is to have the function fully staffed from the start. This will allow the team members to initiate process improvement projects quickly, while the manager can dedicate attention to establishing governance, methodology, tools, communication, process identification, project screening, and building the project pipeline. Fully staffing the function also establishes its credibility and demonstrates NYPA's support of the function by providing the necessary resources for success. Once the team is in place, the most appropriate approach to secure process efficiencies will be identified.

Lean and Six Sigma are the two most commonly referenced methodologies used to support organizational process excellence. The goal of both methodologies is to eliminate waste, but they differ in their focus and approach. While the Lean approach involves an assessment of the entire value chain and focuses on removing steps from the process that do not directly add value, the Six Sigma approach strives to reduce waste by removing variation in organizational processes. Each methodology has its strengths, and in some cases the best approach is to combine aspects of each and develop a toolkit tailored to the organization's needs. It is likely the staff will adopt this hybrid approach and use a combined Lean Six Sigma methodology. This will allow NYPA to pick the parts of each methodology that best suit its needs.

Once staff is in place and trained, one to two processes will be selected for further evaluation by the team and the initial projects will begin. The staff will work with consultants who will provide expert guidance during the initial projects and support the staff in establishing governance. It is important that all three positions are staffed so that they all benefit from the expert guidance of the consultants. At this point, NYPA leadership and key business unit members participating in the projects will be trained

in process excellence. Once the initial projects are complete, the team will measure and monitor benefits, while identifying the next projects that should be assessed using the process excellence methodology. The team will also work to establish a project pipeline and communications plan. The strategic initiative will be considered complete once the final step of the roll-out plan - establishment of the communication plan – is complete. At that point, the Process Excellence function will become an ongoing function, rather than a strategic initiative.

Suggested business model

The proposed business model is for three dedicated staff to identify and implement business process improvements across NYPA, and for this cost to be funded through the realized savings from executed projects. Process efficiency efforts will result in reduced operating expenses in the targeted area, and will facilitate the reallocation of resources to other areas of need in the organization, thereby avoiding future costs and maximizing overall efficiency.

A key objective of this strategic initiative is to develop process expertise within NYPA. The Process Excellence function will work with business units to facilitate improvement. Business unit members who work on process excellence projects will become "change agents" and after project completion, they will continue to utilize their process excellence knowledge to improve processes over time. This is a professional development opportunity for the change agents, who will receive training in process improvement, with potential for certification.

The team will continue to leverage information from comparable organizations to grow their understanding of best practices and apply these principles across NYPA. To do this, the team will develop effective working relationships with other utilities that have process improvement functions in place to better understand the approaches they have adopted and the subsequent benefits attained. Where possible, the team will take advantage of existing networking opportunities to engage in these discussions but will also set up dedicated meetings to share experiences. If necessary, the team will secure consultancy support to attain a more holistic understanding of best practices emerging across both utilities and other industries.

Effective sharing of this information across NYPA will help to secure optimal process excellence benefits. This will be achieved when the process excellence team becomes embedded in the organization and effectively trains change agents on relevant tools, methodologies and best practices. In addition, as set out in the marketing section, the team will develop a website and quarterly newsletter to share information regarding progress of the initiative, lessons learned and best practices.

Suggested governance structure

Several options for the organizational structure of the Process Excellence function have been considered. At this time, we recommend that the function be incubated in Business Services' Office of Strategy Management group, the aim being to locate the group in a business unit that will allow independence in selection and analysis of processes, as well as the ability to act across the enterprise. The core Process Excellence function, comprised of three full time employees, will be responsible for day-to-day operation and roll-out of the initiative.

The team will be led by a manager with two business process improvement analysts as staff. We have developed examples of job descriptions and suggested several skillsets for the three staff; they are available for review. The success of the Process Excellence function will require significant interactions with SMEs from across business units, as well as the incorporation of metrics and controls to ensure estimated savings and benefits are realized and sustained. The involvement of SMEs will ensure changes are effective and a partnership is established with the business units. This collaboration will also ensure that process improvement becomes embedded in day-to-day work, and that NYPA adopts process excellence as part of its culture.

Potential initiative scenarios and selection / prioritization criteria

Processes to be considered for improvement will be identified and evaluated according to a set of weighted criteria. As a public utility focused on reliability, economic development, environmental sustainability, innovation, and technology development, monetary savings are not always a primary driver. The selection criteria include:

- Cost reduction
- Environmental impact
- Impact on employee retention
- Time savings (including: staff hours, number of work hand offs, and cycle time or time for the process to transpire)
- Time necessary to implement and realize results/savings, documentation and knowledge retention capability
- Alignment with best practice
- Alignment with NYPA's Vision, Mission and Goals
- Customer satisfaction, where applicable

BENEFITS AND REVENUE

High-level benefit description

The objective of the initiative is to reduce costs and environmental impact while assessing and balancing risk. Costs will be reduced via:

- increased productivity due to more efficient use of resources as well as the elimination of duplication and unnecessary process steps;
- the adoption of a consistent process evaluation methodology that will reduce errors and potentially avoid fines;
- the implementation of standardized software;
 and
- internal process expertise that will eliminate the need for on-going consulting expenditures.

A focus on sustainability, more efficient use of resources and reducing waste will ensure improvements in environmental performance. In addition, safety will increase due to clarity around and continual improvement of processes; staff morale will improve as a result of process understanding and expectation management; and customer satisfaction will rise due to higher quality services and interactions.

Benefits were estimated using the following process:

- Surveys were distributed to process owners/participants identified by the EMC. For each process there were as few as three or as many as seven respondents.
- Respondents were asked to give their best estimate of the level of potential benefit if the process was improved. They were able

- to select ranges of potential dollar savings in multiple categories: time savings, fine reduction, revenue increase, and other.
- All results for each process were averaged; all responses were included.
- The benefits and revenues depicted in the tables, and cited within this business plan, are based solely and entirely on the survey results.
- The survey results for the time savings and fine reduction categories reflect costs avoided if employees can be reallocated to new, higher priority tasks and the risk of incurring fines can be reduced. These estimates have been treated conservatively and reduced by a factor of 50%, thereby acknowledging that: 1) hours saved will not always be achieved by individuals with the precise skills needed for new, priority tasks and 2) reducing risk of fines is a probabilistic rather than absolute saving.
- The surveys were not intended to replace thorough analysis on each potential process. That analysis will occur during the selection and initiation phases of the individual process improvement effort and the Process Excellence team along with the process owner will decide together what savings can be realized. The survey mechanism was used to capture a broadbrush feel for the opportunity embedded in NYPA processes. Since surveys are not an exact science, we have applied a confidence level of "Low" to the benefits estimates put forth here, allowing for a deviation of ±30% in stated benefits.
- The O&M savings may occur for activities at headquarters or the sites depending on the specific processes selected to be addressed.

| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Pos | t 2020 |
|--------------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-----|--------|
| Savings from | | | | | | | | | |
| - Lower O&M (FTE) | \$ - | \$ 249 | \$ 499 | \$ 748 | \$ 997 | \$ 1,247 | \$ 1,247 | \$ | 1,247 |
| Reduction in Fines | \$ - | \$ 2 | \$ 4 | \$ 6 | \$ 8 | \$ 10 | \$ 10 | \$ | 10 |
| Increased Revenue | \$ - | \$ 656 | \$ 1,312 | \$ 1,968 | \$ 2,624 | \$ 3,280 | \$ 3,280 | \$ | 3,280 |
| Other Cost Savings | \$ - | \$ 438 | \$ 877 | \$ 1,315 | \$ 1,753 | \$ 2,192 | \$ 2,192 | \$ | 2,192 |
| Total (\$ '000) | \$ - | \$ 1,346 | \$ 2,691 | \$ 4,037 | \$ 5,383 | \$ 6,729 | \$ 6,729 | \$ | 6,729 |

Benefit assumptions

The benefits represent a high level indication of the scale and type that could be achieved and are a range based on a survey of over 40 processes that was completed in the second quarter of 2014. We engaged executive management to identify candidate processes and completed a subsequent survey with process owners to assess the scope of potential benefits. This represents a top-down approach to identifying the pool of opportunity.

Under a bottom-up approach, we would engage working level staff across NYPA. We anticipate that discussions with staff that use these processes on a day-to-day basis would reveal more opportunities for process improvement. For this reason, we believe that the benefits cited within this business

plan are understated. We will conduct this bottomup analysis during the initiative roll-out.

We estimated a flat annual benefit based on the 40+ potential projects identified by senior management, the total benefit, and number of projects that will be completed per year. We also anticipated that the benefit for each project would be sustained for a period of five years, as over time, changes in regulation, technology, and NYPA's organizational structure, as well as the dynamic nature of the energy business, will reduce the efficiency of redesigned processes.

Anticipated increases in revenue could result from projects such as investments in plant infrastructure.

Confidence level of benefit realization

The following table represents the overall confidence that the specified revenue and benefits will be realized, using the scale that follows.

| Confidence level | Benefit/revenue realiz | | | | | | | | |
|----------------------------|---------------------------------------|------------------------------|----------------|--|--|--|--|--|--|
| Very high | +/- 5% of expected be | | | | | | | | |
| High | +/- 10% of expected b | | | | | | | | |
| Medium | +/- 20% of expected b | +/- 20% of expected benefits | | | | | | | |
| Low | +/- 30% of expected b | +/- 30% of expected benefits | | | | | | | |
| Very low | +/- 50% of expected b | | | | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| Benefits to NYS | Low | | <u>-</u> | | | | | | |
| Benefits to NYS Revenue | Low | | _ | | | | | | |
| | | Low | _ High | | | | | | |
| | Low | Low \$ 42,390 | High \$ 78,725 | | | | | | |

Risks to benefit realization

| Benefit risk overview | | | |
|---|---|-------------|--------|
| Risk driver | Description of impact on benefit realization | Probability | Impact |
| Employees have a negative perception that the initiative will reduce headcount | Some employees are unwilling to make the changes proposed and this reduces benefits attained | Significant | High |
| Employees resist change under the initiative as they don't appreciate benefits | Some employees are unwilling to make the changes proposed and this reduces benefits attained | High | High |
| The processes selected do not offer the most significant & immediate results | Processes that would deliver greater benefits are not assessed and benefits are not optimized | Medium | High |
| The changes made negatively impact quality of service | The negative impact on service could undermine the benefits attained from the initiative | Medium | High |
| The weighting applied to assess relative cost / environmental benefits is not optimal | Decisions to amend processes may detrimentally impact cost / environmental measures | Medium | Medium |
| Inclusion of processes involving sensitive info. may create vulnerability | If the information was recovered by external parties under FOIL this may outweigh the associated benefits | Low | High |
| The changes made do not represent industry best practice | The benefits attained under the initiative would not be the optimum benefits that could be achieved | High | Low |
| Benefits are not sustained. | Processes revert back to the previous state and operational practices are not optimized. | Medium | Medium |

FUNDING FOR THE INITIATIVE

Intended sources of funding

The Process Excellence initiative will be funded via NYPA's O&M budget, with a software capital expense expected in 2015. In the long-term, this initiative will be self-funded through savings realized by the Process Excellence projects that are undertaken.

| Intended total funding sources | | | | | | | | | |
|--------------------------------|----------|----|-----------------|---------------------|--|--|--|--|--|
| Source | Selected | | Value (\$ '000) | Percentage of funds | | | | | |
| Bond issuance | No | \$ | - | 0% | | | | | |
| Cash reserves | Yes | \$ | 1,301 | 100% | | | | | |
| Third-party funds | No | \$ | - | 0% | | | | | |
| Other | No | \$ | - | 0% | | | | | |
| Total | | \$ | 1,301 | 100% | | | | | |

| Expected annual funding profile | | | | | | | | | |
|---------------------------------|-----------|-----------|---------|---------|---------|---------|---------|--------|------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2 | 2020 |
| Bond proceeds | | | | | | | | | |
| Third-party funds | | | | | | | | | |
| Total external funds | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Interest payments | | | | | | | | | |
| Debt retirement | | | | | | | | | |
| Other | | | | | | | | | |
| Net external funds impact | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| NYPA cash | \$ 358 | \$ 943 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Total annual cost | \$ 358 | \$ 943 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |

| Total external funding (\$ '000) | \$ - |
|----------------------------------|-------------|
| Total NYPA cash (\$ '000) | \$ 1,301 |

COSTS AND RESOURCES

Initiative cost and resources (i.e. costs and resources associated with implementing the initiative)

| 0&M Costs HQ, Overhead, & Other costs (\$ '000) | | | | | | | | | | | | | | |
|---|----|------|----|------|----|------|----|------|----|------|---------|---------|--------|------|
| Category | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | 2019 | 2020 | Post 2 | 2020 |
| Internal labor | \$ | 153 | \$ | 589 | \$ | - | \$ | - | \$ | - | \$ - | \$ - | \$ | - |
| Training / Consulting | \$ | 172 | \$ | 120 | \$ | - | \$ | - | \$ | - | \$ - | \$ - | \$ | - |
| APQC Membership and Other | \$ | 33 | \$ | 34 | \$ | - | \$ | - | \$ | - | \$ - | \$ - | \$ | - |
| Total annual HQ/OH/Other costs | \$ | 358 | \$ | 743 | \$ | - | \$ | - | \$ | - | \$ - | \$ - | \$ | - |

| Total HQ/OH/Other initiative costs (\$ '000) | ς . | 1.101 |
|--|-----|-------|
| Total ng/on/other illitiative tosts is oool | J | 1.101 |

| Capital expenses (\$ '000) | | | | | | | | | |
|----------------------------|---------|-----------|---------|---------|---------|---------|---------|------|------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post | 2020 |
| Physical assets | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| IT - BPM Software Suite | \$ - | \$ 200 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Other | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Other | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Other | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Total annual Capex | \$ - | \$ 200 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |

| Total initiative Capital expenses (\$ '000) | \$ 200 |
|---|-------------|
| | |
| Total initiative costs (\$ '000) | \$ 1,301 |

| Resources (FTE) | | | | | | | | |
|----------------------|------|------|------|------|------|------|------|-----------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| IT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Business | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Technical/(Engineer) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total annual FTE | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |

Initiative cost assumptions

(i.e. cost associated with implementing the initiative)

- Implementation of the initiative will be complete by the end of 2015
- Three staff will support full roll-out; one manager and two process analysts
- Lean/Six-sigma training will be needed for the Process Excellence function (classroom) and first four change agents (online) (\$20,000 in 2014, \$15,000 in 2015)
- Temporary consulting services will be needed to provide guidance during initial projects and when the team is establishing its governance structure (\$150,000 in 2014, \$100,000 in 2015)
- Travel to sites and incidental expenses (\$3,000 in 2014, \$5,000 in 2015)

- Continued annual membership to the American Productivity and Quality Center (APQC) is recommended (\$20,000 per year as of 2015), other IT costs (\$28,600 in 2014 and \$6,100 in 2015), and miscellaneous costs (\$3,500 in 2014 and \$7,500 in 2015)
- There is a \$200,000 estimated capital expense in 2015 to purchase a BPM (Business Process Management) software suite which will provide the Process Excellence team with an efficient, interconnected system that consolidates data and supports the project management effort including modeling, analysis, process optimization and reporting.
- Costs associated with improving individual processes, are not included in this Business Plan as they will be specific to the process under assessment (e.g. purchasing a new piece of software in order to automate a

process). A cost benefit analysis will be undertaken for each project as part of its implementation.

Post-implementation costs and resources (i.e. incremental costs and resources associated with running/maintaining the solution post-implementation)

| O&M Costs HQ, Overhead, & Other costs (\$ '000) | | | | | | | | | | | | | |
|---|----|------|----|------|----|------|----|------|-----------|-----------|-----------|--------|------|
| Category | | 2014 | | 2015 | | 2016 | | 2017 | 2018 | 2019 | 2020 | Post 2 | 2020 |
| Internal labor | \$ | - | \$ | - | \$ | 589 | \$ | 589 | \$ 589 | \$ 589 | \$ 589 | \$ | 589 |
| Training / Consulting | \$ | - | \$ | - | \$ | 50 | \$ | 50 | \$ 50 | \$ 50 | \$ 50 | \$ | 50 |
| APQC Membership / Other | \$ | - | \$ | - | \$ | 33 | \$ | 33 | \$ 33 | \$ 33 | \$ 33 | \$ | 33 |
| Total annual HQ/OH/Other costs | \$ | - | \$ | - | \$ | 672 | \$ | 672 | \$ 672 | \$ 672 | \$ 672 | \$ | 672 |

| Resources (FTE) | | | | | | | | |
|----------------------|------|------|------|------|------|------|------|-----------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| IT | - | - | - | - | - | - | - | - |
| Business | - | - | 3 | 3 | 3 | 3 | 3 | 3 |
| Technical/(Engineer) | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| Total annual FTE | - | - | 3 | 3 | 3 | 3 | 3 | 3 |

Post-implementation cost assumptions (i.e. cost associated with running/maintaining the solution post-implementation)

To maintain focus on process excellence following completion of the initiative, staffing and support costs will continue, but are expected to be below 2015 levels. Consideration will also be given to the

need for refresher training for the members of the Process Excellence function recognizing the potential for evolution in process efficiency approaches and best practice.

Confidence level of initiative and post-implementation costs

The following table represents the overall confidence that the cost levels will be met.

| Cost range | | | | | | |
|--|--|---|---|--|---|--|
| +/- 5% of ex | spected costs | | | | | |
| +/- 10% of 6 | expected costs | | | | | |
| +/- 20% of 6 | expected costs | | | | | |
| +/- 30% of 6 | | | | | | |
| +/- 50% of 6 | +/- 50% of expected costs | | | | | |
| | High | | | | | |
| s | Medium | | | | | |
| | | | | | | |
| Total initiative costs (\$ '000) | | | | | | |
| Total annual post-implementation costs (\$ '000) | | | | | | |
| | +/- 5% of ex +/- 10% of 6 +/- 20% of 6 +/- 30% of 6 +/- 50% of 6 | +/- 5% of expected costs +/- 10% of expected costs +/- 20% of expected costs +/- 30% of expected costs +/- 50% of expected costs High Medium | +/- 5% of expected costs +/- 10% of expected costs +/- 20% of expected costs +/- 30% of expected costs +/- 50% of expected costs High Medium Low | +/- 5% of expected costs +/- 10% of expected costs +/- 20% of expected costs +/- 30% of expected costs +/- 50% of expected costs High Medium Low 1,171 | +/- 5% of expected costs +/- 10% of expected costs +/- 20% of expected costs +/- 30% of expected costs +/- 50% of expected costs High Medium Low High \$ 1,171 \$ | |

Comments

There is a reasonable level of confidence in the quoted figures. The number of staff allocated is based on the assumption that two to three significant processes (and several smaller processes) will be addressed annually. If greater throughput of

processes is desired, additional staff will be required. A cost benefit analysis will be performed to determine the appropriate balance of staffing and throughput.

IMPACT TO MARKET

Overview of marketing approach

Because this initiative is internally focused, there are likely to be limited market impacts. Depending on the type of projects the Process Excellence function implements, customers may see improved customer service. Customer facing processes will be evaluated and assessed to ensure that any changes result in an improved customer experience.

Overview of market trends

Many other public power and investor owned utilities have long-standing process efficiency and process excellence business groups or functions. During the research and development phase of this initiative the team spoke with process excellence experts from McKinsey Consulting, Hess Corporation, and JEA who confirmed the widespread and established trend that process improvement/process excellence functions result in tangible and intangible value for those entities that adopt them. JEA (a public power company similar to

NYPA) noted time savings, cost savings, and improved public image that are directly attributable to their process excellence initiative. JEA established their process efficiency group approximately 14 years ago, and it continues to provide benefit to the company. In total, JEA has a staff of approximately 2000 employees, of which 1750 are unionized. They have eight staff dedicated to process efficiency in their organization. JEA uses the Six Sigma methodology which has a colored belt system indicating the level mastery of the Six Sigma methods. JEA has nearly 100 black belt trained employees (not all are certified) and 200-300 green belt trained employees. All salaried employees are mandatory yellow belt trained, and union personnel are yellow belt trained on a voluntary basis.

NYPA's role in the market

While there are many consulting firms that can help develop or provide process efficiency or

improvement functions, the long-term success of the Process Excellence function depends on developing in-house capabilities. Based on the initiative team's research, the success or failure of the Process Excellence function will depend on the ability of the group to gain the trust of NYPA staff. Should the essential functions of the group be outsourced or left to consultants, its success will be limited and the timeframe in which success might be achieved elongated.

Expected impact on customer segments

The Process Excellence initiative is anticipated to have a moderate and positive impact on NYPA's customer segments. This initiative could lead to improved cycle times for billing, as well as improved resolution of customer concerns.

ORGANIZATIONAL IMPACT

Overall degree of change

To secure maximum benefits from the initiative, effective communication regarding the role of the Process Excellence team will need to accompany the establishment of the function at NYPA. The effort will focus on optimizing efficiency and supporting environmental improvement, emphasizing management support for the initiative and providing routes for two-way dialogue to embed the changes needed. The combination of these messages will help to reduce resistance to change by providing clarity about the rationale for the initiative and opportunities for employees to influence the scope of the initiative.

Comments

As specific processes are targeted for optimization, the group will assess the impact of change to the business unit(s) across several categories including process, technology, organization, and others.

| Internal impact overview | |
|--------------------------------------|--|
| Business Unit | Description of impact |
| Internal Audits | Upon initially establishing the Process Excellence function, the group will reach out to Audits for audit information as needed. Upon completion of process improvement, it is expected that Audit findings will reflect improved process. |
| Business Services | As processes are evaluated for potential improvement, Business Services will likely be asked to assist with pertinent financial estimates as cost and cost savings estimates are calculated. The Office of Strategy Management will work with the Process Excellence function to establish meaningful metrics to help measure the success of the initiative. |
| Enterprise Shared Services | Dependent upon the initiative, the process selected for improvement could require support from ESS regarding potential HR impact or changes. |
| Law | As processes are evaluated, some could require legal advice prior to implementation. |
| Economic Dev. & Energy Efficiency | Impact in this area is expected, but the extent will be determined as specific process excellence projects are scoped. |
| Operations/ Transmission | Impact in this area is expected, but the extent will be determined as specific process excellence projects are scoped. |
| Governmental & Communications | As the Process Excellence function is embedded across the organization, we will ask the Communications group to help in sharing information regarding successes and impact on NYPA. |

Required skills

The Process Excellence function will be comprised of three full-time staff, preferably including at least two qualified internal transfers. Each will have experience in improving processes and/or managing projects. The initiative budget includes costs for Lean and/or Six Sigma training. Also required are strong interpersonal and communication skills, as well as negotiation, facilitation, problem-solving, and analytic skills and experience. The process

excellence staff must have the ability to motivate team members, drive change, and facilitate problem-solving discussions. For each of the processes addressed by the process excellence approach, the team will receive support from SMEs working in the relevant business unit(s) who will bring project-specific expertise as well as acting as agents of change.

| Skills overview | | | |
|-------------------|---|----------------|------------------|
| Business Unit | Skills required | Current status | Suggested action |
| Business Services | Experience in process excellence approaches; excellent communication, facilitation, problem solving, analytic skills. | Existing | Train |
| IT | Experience in process excellence approaches; excellent communication, facilitation, problem solving, analytic skills. | Existing | Train |
| Change Agents | Process owners that can provide process-specific expertise and act as change agents | Existing | Train |

Comments

Labor costs included in this business plan are based on compensation estimates provided by HR for the described skillset.

EXTERNAL STAKEHOLDER IMPACT AND MARKETING PLAN

| External impact overview | | |
|--------------------------|---|-------------------|
| Stakeholder | Description of impact | Impact |
| Customer | Enhanced quality of services and interaction from/adopting NYPA's improved processes | Positive - Medium |
| Distribution Utilities | Ease of conducting business with NYPA | Positive - Medium |
| NYISO | Ease of executing bids, payment, scheduling | Positive - Medium |
| Transmission Operators | Ease of conducting business with NYPA, ease of integration with other TO's corporate processes, i.e. Transco | Positive - Medium |
| State Agencies | Aligns NYPA with the SAGE (Spending and Government Efficiency) program established by Governor Andrew Cuomo | Positive - Medium |
| Third Party Agencies | Vendors: negotiate process changes; neighboring community – positive impact of reduced environmental footprint | Positive - Medium |

Description of marketing strategy

Because this initiative is internal, an external marketing strategy is unnecessary, but the following internal marketing/communication efforts will be undertaken:

- Kick-off event for the new business function.
 The event could feature a combination of presentations and workshops that would educate and engage staff around the Process Excellence initiative.
- Process Excellence function website with a process suggestion form, process excellence basics, training registration and research material. Success stories will be shared as the function matures.
- Quarterly newsletter, which details current projects, photos of process owners, and lessons learned

RISKS

Risks to NYPA as a result of implementing the initiative

| Risk overview | | | | | | |
|---------------|--|-------------|--------|---|---------------------|---------|
| Category | Description | Probability | Impact | Suggested actions | Owner | Liaison |
| Financial | The benefits envisaged are not realized longer term | Low | Medium | Comprehensive analysis and ongoing monitoring | PE group Manager | TBD |
| Operational | Best practice process excellence is not maintained | Medium | Medium | Develop KPIs, monitor and revisit. Use best practice | PE group Manager | TBD |
| Operational | More processes are identified than are manageable by the Process Excellence function | High | Medium | Regular review to identify further candidate programs | PE group Manager | TBD |



STRATEGIC INITIATIVE BUSINESS PLAN for

Knowledge Management

Executive Sponsor SVP Enterprise Shared Services

Responsible Executive Paul Tartaglia Project Manager Ed Fisher

Initiative Team Jasmine Long, Gerald McGill, Dennis Willette

Initiative Start September 2014

Initiative End

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A one-page overview containing key information about the initiative, including strategic rationale, marketing strategy, financial summary and high-level timeline

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A high-level summary of the strategic rationale of the initiative and how it aligns to the strategic goals and key values of NYPA.

6 INITIATIVE OVERVIEW

A range of background and scene-setting information pertaining to the initiative, including why the initiative is being suggested and what it aims to achieve.

8 SOLUTION

Key information around the proposed solution, including suggested business model and governance structure.

14 BENEFITS AND REVENUE

Quantitative information around annual benefits expected as a result of the initiative. These benefits include cost savings and increased revenue. The section also includes a benefit realization overview.

16 FUNDING FOR THE INITIATIVE

High-level specification of the intended funding sources that will be used to fund the implementation.

16 COSTS AND RESOURCES

Quantitative information around annual cost and resources required to implement the initiative, as well as any permanent on-going costs that will be incurred as a result of implementing the initiative.

18 MARKET TRENDS

A high-level market analysis, followed by details around how the initiative is expected to impact customers segments and NYPA's products and service offerings.

19 ORGANIZATIONAL IMPACT

Overview of how the initiative is expected to impact NYPA's business units, including an overview of the skills required and whether those skills currently exist in the organization.

21 RISKS

A high-level risk overview, specifying key risk information such as the probability and severity of key risks, risk owners and action plans.

22 REFERENCES

Resources used during the development of the business plan, or sources of information cited.

EXECUTIVE SUMMARY

Strategic rationale and drivers of the initiative

Knowledge at any organization is a vital asset and NYPA has always demonstrated the strength of a knowledgeable work force.

For NYPA, however, effective and timely use of information is becoming hindered by the existence of multiple, disintegrated data repositories and extensive undocumented knowledge. Compounding the risk associated with this fragmented management of information is the growing staff turnover resulting from retirements, greater worker mobility, and the energy industry talent shortage. Currently, the Authority has 27% of employees eligible for retirement within the next five years and of that group 48% can retire within one year. The trend of increased turnover of early career employees exacerbates the problem that critical knowledge is leaving the organization at an increasing rate, and those employees who fill these gaps are going to have less time to get up to speed and be productive.

When knowledge is not managed on the enterprise level, the result is often redundancy of effort, delayed decision-making, inefficient processes, and lack of clarity on data validity. NYPA cannot afford these results if it is to realize its far-reaching 2014-2019 strategic plan. Responding to the dramatic changes occurring in the energy industry, the plan calls for NYPA to provide customers with innovative services and New York State with leadership in developing a sophisticated energy infrastructure. That can only be accomplished with a flexible,

creative and empowered workforce that has access to the resources, including information and knowledge that it needs to deliver on NYPA's bold vision.

Financial/Benefits Summary

The table below provides the anticipated net cash flow once anticipated costs are deducted from the total anticipated cost savings and any increases in revenue. The benefits of implementing the knowledge management initiative were estimated using the results of a survey on knowledge and information accessibility completed by 63 employees who were designated by executive management as owners of key information systems. The difficulties and time lost to information searches cited by these individuals were extrapolated across the organization to identify the level of benefit to be expected from an effective, enterprise-wide knowledge management program. This feedback was further supplemented by the experience of other organizations that have implemented similar knowledge management programs.

The initiative is anticipated to expend \$124,000 start-up costs in 2014 and an additional \$4.7 million through 2017. The initiative will also begin realizing modest cost savings in 2015 of \$392,000, which will escalate each year until reaching a steady state of \$3.1 million in 2019. An overall initiative breakeven point will be reached in 2018 at which time the initiative costs will be fully recovered and the initiative will generate a positive cash flow.

| Table 1 – Financial Summary | | | | | | | | | | |
|-----------------------------|------|-------|---------------|-----------|-----------|----------|----------|----------|----|---------|
| Category | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Ро | st-2020 |
| Total Benefits | \$ | - | \$ 392 | \$ 1,097 | \$ 2,038 | \$ 2,508 | \$ 3,136 | \$ 3,136 | \$ | 3,136 |
| HQ/Overhead/Other expenses | \$ | 124 | \$ 2,372 | \$ 1,103 | \$ 1,248 | \$ 1,415 | \$ 1,409 | \$ 1,416 | \$ | 1,410 |
| Capital expenses | \$ | - | \$ 40 | \$ - | \$ 40 | \$ - | \$ 40 | \$ - | \$ | 20 |
| Total expenses | \$ | 124 | \$ 2,412 | \$ 1,103 | \$ 1,288 | \$ 1,415 | \$ 1,449 | \$ 1,416 | \$ | 1,430 |
| | | | | | | | | | | |
| Net cash flow | \$ (| (124) | \$ (2,020) | \$ (6) | \$ 750 | \$ 1,094 | \$ 1,687 | \$ 1,720 | \$ | 1,706 |
| Accumulated net | \$ (| (124) | \$ (2,144) | \$(2,150) | \$(1,400) | \$ (306) | \$ 1,381 | \$ 3,100 | \$ | 4,806 |
| | | | | | | | | | | |
| Discounted net | \$(| 124) | \$ (1,905) | \$ (5) | \$ 630 | \$ 866 | \$ 1,260 | \$ 1,212 | \$ | 5,065 |

High Level Timeline

This initiative proposes to address NYPA's knowledge issues and opportunities through the following actions and the timeline is illustrated in Figure 1 below:

- Establishing an overarching mechanism to enable enterprise-wide searches of electronic content;
- Cataloguing and providing access to the location of individuals with unique knowledge in key areas;
- Capturing and providing access to organizational relationship diagrams that go beyond a hierarchical depiction of how organizations interact and share information; and
- Facilitating the sharing of vital information and knowledge through the development of a knowledge exchange mechanism known as Communities of Practice (CoP) and through the use of formal knowledge capture tools and processes.

Risk of the initiative

There are several key risk areas associated with the initiative. Success is highly dependent on support from executive management and a dedicated staff for implementation and administration of the

program. Employees will need to see the value of the initiative and participate within their business units to derive benefit from Knowledge Management projects. Like any initiative, this initiative has development, implementation, and maintenance costs, which could be negatively perceived by external stakeholders and the public. It will be important to communicate the contributions of this initiative in supporting other, external facing initiatives such as Customer Solutions and Smart Generation and Transmission.

STRATEGIC RATIONALE

Business strategy and rationale

Knowledge at any organization is a vital asset. However, at many organizations, including NYPA, lack of integrated knowledge management practices can make it difficult to locate and access key knowledge required for completing specified tasks and making timely, well-informed decisions. For NYPA, several factors limit effective knowledge sharing.

First, multiple electronic data repositories have evolved over time without any coordination or overarching guidance. This has led to an enterprise where information is disconnected, held in departmental silos and often only known to the content owners and the departments where the information originated. Without specific awareness



Figure 1 - Initiative Timeline

and permissions, other staff that could benefit from the information may not have access to it or even realize that it exists.

Second, critical areas of organizational knowledge are undocumented and reside only in the intellect of NYPA staff. This represents a growing risk since a significant portion of the workforce is nearing retirement and workers in early and mid-career have become more mobile. If this knowledge is not transferred to other employees or it remains undocumented, the institutional knowledge will simply leave the organization.

These factors contribute to the difficulties that NYPA staff experience in locating critical information to perform their current roles effectively. They lead to:

- Inefficiencies in completing tasks due to the time-consuming nature of finding information;
- Duplication of effort due to a need to reproduce the same outputs multiple times; and
- Risks to the timely and effective delivery of key tasks, outputs, and decisions given the absence of necessary knowledge.

In contrast, if the knowledge needed to perform key tasks is easily accessible and readily shared, NYPA will experience enhanced efficiencies in day-to-day operations. Where the desired information cannot be retrieved electronically, implementing expertise location solutions will enable employees to locate and consult a colleague with access to the right resources.

Focusing on the future, NYPA recently developed its 2014-2019 strategic plan, which envisions a transformed NYPA, well-positioned to take advantage of significant energy industry changes

and emerging opportunities. To realize its ambitious strategic vision, NYPA will need to develop new skills and become increasingly more dynamic and flexible, with staff obtaining, understanding, and responding to information as it becomes available. An enterprise-wide effort will be needed both to identify knowledge that will be required to support future endeavors and to determine how that knowledge will be acquired and maintained.

Effective management of knowledge - and its sharing - will be critical to the delivery of the transformative strategic initiatives that are intended to empower NYPA customers, the realization of a leading-edge NYPA grid, and the facilitation of economic development in New York State.

The improved efficiency of day-to-day operations combined with a NYPA staff that has enhanced knowledge of both internal operations and external industry conditions will foster the development of an agile workforce that is able to respond quickly to changing circumstances, take advantage of emerging opportunities, and deliver energy and services in line with the evolving needs of New York State.

In addition, the Knowledge Management activities will complement and support several other strategic initiatives including the Work Force Planning efforts on developing internal expertise and the Process Excellence initiative's effort to develop the NYPA process framework.

Alignment with strategic goals and values

The following tables depict the alignment of the knowledge management initiatives with NYPA's strategic goals and values:

| Table 2 – Alignment with Strategic Goals | | |
|---|---------------------------|---|
| Strategic goals | Type and Degree of impact | Description of impact |
| Financial Effectiveness: Maximizing the financial capacity of NYPA to make capital investments that help achieve our goals | Positive - Low | Informed decisions based on accurate data will maximize return on investments |
| Operational Effectiveness: Maximize the efficiency, reliability and flexibility of our assets and organization | Positive - Medium | Reduce risk of reliability incidents by securing access to required knowledge |
| Value From Energy: Maximizing the benefit / minimizing the negative impact of each unit of energy delivered to the state / customer | Positive – Low | A more agile workforce will support effective delivery of low-cost power |

| Table 3 – Alignment with Strategic Values | | | | | | | |
|---|---------------------------|--|--|--|--|--|--|
| Values | Type and Degree of impact | Description of impact | | | | | |
| Sustainability | Positive - Low | Sharing of sustainable best practices will be enhanced | | | | | |
| Safety | Positive - Medium | Staff will have access to critical operational information which will improve safety | | | | | |
| Compliance | Positive - Medium | Staff will have access to critical information on regulatory requirements and developments which will improve compliance | | | | | |
| Environmental Responsibility | Positive – Low | Staff will be better able to understand environmenta requirements and obligations and share best practices | | | | | |
| Employee Development | Positive - High | Employees will have better access to required information and will be able to proactively support their own development | | | | | |

INITIATIVE OVERVIEW

Description of the opportunity

Knowledge management is the process of identifying, developing, capturing, storing, sharing and applying expertise and know-how.

Organizations are increasingly realizing how important it is to identify and understand their institutional knowledge and be able to make effective use of it. Where staff have full clarity of the knowledge available to them and are able to effectively utilize this information, there will be greater efficiencies in the performance of key tasks and reduced risk of errors. It is equally important for organizations to understand the critical knowledge they lack so that mechanisms can be found to fill the gaps.

There are opportunities to improve the management of both explicit (documentable) and tacit (difficult to transfer) knowledge at NYPA. Information repositories have evolved over time, often in isolation, meaning that employees have limited clarity regarding if and where information exists. In addition, there is a tendency to rely primarily on the availability of internal experts rather than transfer or formalize their knowledge. With increases in retirements and the mobility of workers, this approach will no longer be effective and vital intellectual property could leave the organization.

Establishing a formalized knowledge management program at NYPA will help to address these issues and support the delivery of efficiencies in the completion of key tasks by ensuring that staff have

ready access to information. These efficiencies will be a foundational element of the agile organization needed to support the 2014-2019 strategic plan.

Numerous business case studies have demonstrated organizational benefits from investing in knowledge management programs. For example, Delphi Group, management consultancy, estimates that, on average, business professionals spend 20% of their time looking for information.

An internal survey of NYPA employees also suggests a similar trend. Respondents indicated that a few hours per week are lost on searching for information needed to perform key tasks. In addition, more than 90% of respondents noted that increased collaboration and knowledge transfer activities would benefit their daily routine. This indicates the value for NYPA of increased sharing of knowledge, information, and know-how through a structured knowledge management program.

Increased visibility about the information that exists within the organization as well as clarity about how to access it will lead to better informed decisions, enabling the staff to be more dynamic and agile. It will also encourage staff to utilize the information available to deepen their understanding of emerging trends and allow NYPA to be more innovative in response to industry changes.

Initiative aim (desired outcome)

The aim of this initiative is to provide appropriate development, management, and sharing of knowledge resources within the Authority. The initiative will deliver two key outcomes:

Improved awareness of and access to critical knowledge resources: Staff will have full clarity about the knowledge that exists within NYPA and the best way to access it. They will be able to use electronic search mechanisms to obtain relevant documented information (explicit knowledge) or identify NYPA colleagues from whom they are able to attain insights and know-how (tacit knowledge). Visibility regarding available knowledge and expertise will increase as the initiative matures and as knowledge management becomes increasingly embedded across the organization.

Improved sharing of knowledge: The formal and informal practices envisioned under this initiative will support enhanced information sharing and knowledge capture. A range of activities, including bringing employees together via Communities of Practice and conducting formal exit debriefings that focus on attaining know-how from separating staff, will support capturing and sharing critical knowledge.

These outcomes will improve NYPA's ability to execute its core processes more effectively as well as support delivery of the vision set forth in NYPA's 2014-2019 strategic plan.

Initiative Scope

There are a number of phases of the knowledge management value chain, ranging from identification of knowledge to its acquisition, capture, storage, sharing, and application. In light of the issues facing NYPA, specifically difficulties experienced in locating information and risks associated with knowledge leaving the organization, this business plan focuses knowledge management efforts, initially, on two key areas of the value chain:

Knowledge capture: The application of techniques to elicit valuable information from key individuals including insights, experiences, professional networks, and lessons learned.

Knowledge sharing: The effective exchange of information, insights, experience and know-how among NYPA staff. Knowledge sharing is facilitated by technology solutions but will also require culture change and the development of trust to ensure that new ways of working are fully embedded within the organization.

Consequence of maintaining status quo

Without comprehensive knowledge management,

there are a number of potential consequences.

NYPA will continue to lack clarity about knowledge resources across the organization. The current means of capturing and sharing knowledge will remain disjointed and inefficient. Each knowledge repository will continue to be used independently and consequently key content will remain unknown to people who would benefit from it.

The Authority will continue to lose valuable information, expertise, and know-how as a result of separation and retirement. This undocumented knowledge can be critical to NYPA's efficient operation. The rediscovery of this information may be time-consuming and incomplete. The potential exists for NYPA to fail to meet regulation or policy requirements. Further, if it does not manage its knowledge resources, it will be difficult for NYPA to respond rapidly to capitalize on opportunities presented by emerging trends within the energy industry.

Considered alternatives

The alternatives considered fall into two main areas:

Develop a central repository: An alternative to the enterprise-wide content search tool is the development of a single, central repository for storing information and documentation. A well-indexed centralized document management system can be a good foundational step towards the capture and documentation of institutional knowledge. However, these systems are often highly complex, technically challenging, and expensive. In addition, significant organizational change is necessary for successful implementation. In contrast, the enterprise-wide content search tool will allow NYPA to leverage its existing repositories with minimal disruptions to their processes, while still allowing access to content across all repositories

Staff with consultants or part-time staff: An alternative to full-time permanent staff for the knowledge management function is to form a team from external consultants or internal employees loaned on a part-time basis. The major disadvantage of using consultants is that it will not promote the development of knowledge management expertise within NYPA. A team composed of part-time NYPA staff may struggle with competing priorities leading to insufficient time being devoted to knowledge management work. Where part-time staff have been used for previous knowledge management

attempts, initial efforts were successful at collecting knowledge; however, the part-time resources were insufficient to build and maintain initial successes.

SOLUTION

Proposed solution

The knowledge management initiative encompasses a number of components that are intended to improve knowledge capture and sharing at NYPA:

- A knowledge management office (KMO) responsible for overseeing and embedding knowledge management practices at NYPA;
- An enterprise-wide search tool that will enable staff to search a range of existing content repositories across NYPA;
- A series of projects that will help NYPA staff to identify colleagues that have required knowhow and support sharing of this knowledge; and
- A focus on completing and documenting exit debriefing with key staff about to separate from NYPA to capture of their insights / expertise.

Each component of the proposed solution is described in more detail below.

The Knowledge Management Office

The foundation of the knowledge management initiative is a strong core team, the Knowledge Management Office (KMO). The KMO will be responsible for the development, implementation and sustainability of knowledge management solutions that support each business unit's objectives. A dedicated KMO will secure the long-term success of the knowledge management initiative by ensuring that all facets of knowledge management have the appropriate resources and governance structures in place. The KMO will provide a number of services to support NYPA and work directly with departments and groups. The key roles of the KMO will be to:

- Develop a knowledge management strategy;
- Coordinate knowledge management activities and project selection;
- Develop, launch, and facilitate communities of practice together with corresponding IT portalenabling tools;
- Provide training and ongoing support to business units on the use of knowledge

- management tools;
- Engage business units and departments through regular communications and outreach events;
 and
- Measure and track knowledge management activities.

A KMO with dedicated staff will be a critical component in the success of the knowledge management initiative. Lessons learned from previous knowledge programs implemented within NYPA indicate that although the programs achieved short-term success, the absence of a formal governance structure meant they were not sustained over the longer term. For example, NYPA's previous *Knowledge Capture* program 'borrowed' staff from various departments on a part-time basis. Once specific, short-term goals were met, the resources were returned and were unavailable to sustain the initial success of those programs.

The Enterprise-wide content search

Knowledge repositories at NYPA have evolved over time with no formal strategy for enterprise adoption. As a result, NYPA has acquired several electronic content repositories that have similar features but also have specific functionalities to support certain business purposes. This has resulted in a collection of disparate repositories which can present obstacles for staff in finding and accessing the most up-to-date and accurate content.

Successful enterprise-wide content search requires two components: information that has been stored in a systematic manner and proper tools for locating and accessing it quickly. This difficulty in locating and accessing captured knowledge is an obstacle faced throughout NYPA. For example, the Corporate Communications department uses a photo management system called Merlin. There are many instances when a specific photo is taken for an event, such as when President John F. Kennedy visited our Niagara facility, but it cannot be retrieved quickly because it was not stored with identifying tags. With a systematic method for identifying information and sources of knowledge, coupled with an intelligent search tool, access to information will improve.

The knowledge management initiative will establish an electronic content search capability that leverages its existing technology investments with minimal impact and disruption to current electronic content storage processes. Staff will continue to use the tools they are familiar with, but will have a powerful mechanism that will allow them to search for content across multiple repositories.

The integrated search tool will connect a suite of enterprise-scale content repositories including: network shared folders, Microsoft SharePoint, OpenText Content Management Server (LiveLink), Microsoft Dynamics (CRM), Microsoft Exchange (email), Oracle Primavera, MerlinOne Digital Asset Management, BlueCielo Meridian Enterprise and IBM Maximo.

To ensure that the electronic content search capability is truly powerful, the KMO will work with business units to establish an enterprise vocabulary for classification, known as taxonomy. Together, the electronic search capability and taxonomy will support the following objectives:

- Enable easier and faster access to information;
- Standardize the process of classification across content repositories and the organization; and
- Simplify the process of knowledge discovery.

The enterprise-wide content search will include:

- A front-end search process that is linked to the taxonomy and allows users to click onto subject areas to be directed to relevant knowledge; and
- A back-end search process that is initiated by entering words into a text box, similar to using Google.

The context-aware enterprise search coupled with a common vocabulary for filtering information will provide an efficient and effective method for discovering and reusing existing knowledge assets.

Informal knowledge sharing

Informal knowledge sharing is a critical component of the proposed knowledge management initiative as it will draw upon previously undocumented information and support the transfer of tacit knowledge among employees. Three discrete but related components make up the informal knowledge sharing aspect of this initiative.

Expertise Location is a tool that will enable employees to easily identify experts within the company on a specific project or regarding a specific

customer. Currently, it can be time consuming to find an individual who has the relevant knowledge needed. Expertise location can pinpoint subject matter experts quickly and is particularly useful when seeking difficult to contextualize and codify experiential knowledge.

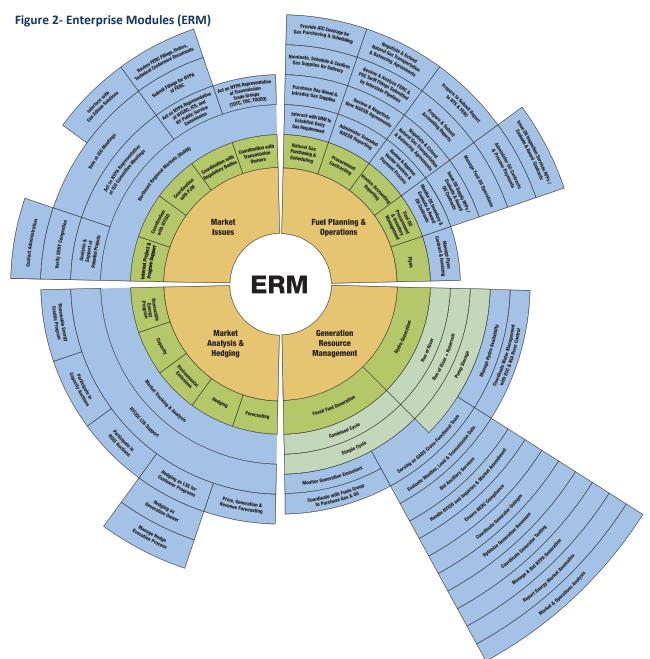
Establishing an effective expertise location tool will require the development of electronic profiles containing information such as: job role, title, contact information, skills, competencies, experience (including previous projects / assignments), education, language, and more. Where possible, the tool should update existing information contained in organization repositories automatically as this feature generally increases adoption and accuracy over time. Additionally, the tool should allow for manually updated content.

The expertise location tool will complement the efforts of the Workforce Planning initiative by maintaining an up-to-date account of current employee skills and competencies. It also can be used as a meaningful component of on-boarding strategies within each department and group.

Expertise location will have many uses across NYPA's departments. Often, what was done in a specific situation is recorded but supporting information about the decision was not captured. The ability to locate an individual with knowledge of the decision and its drivers can provide insight for current and future situations.

Enterprise Modules is an online portal that provides an interactive, diagrammatic representation of NYPA's business functions and the relationship that those functions have with each other. At the highest level, Enterprise Modules depicts NYPA's business units; however, it also allows users to drill down into each unit to view additional information, enabling users to discover new layers of information about group functions and relationships with other groups or business units.

This interactive tool will support employee onboarding and serve as an educational resource for anyone at NYPA to learn more about particular departments or groups as it provides a high level overview of roles and responsibilities. It is important to understand how portions of the organization interrelate in order to support one another effectively.



Enterprise modules allows for more coordinated knowledge capture and knowledge dissemination as pertains to organizational functions. An initial effort is underway to develop and implement an Energy Resource Management (ERM) module. Since ERM has been repositioned within NYPA several times, NYPA's Chief Operating Officer requested a tool that would help other areas within Operations understand how and why they interact with ERM. Figure 2 above depicts the ERM-centred enterprise module.

Communities of Practice (CoP) is the third and final component of informal knowledge sharing. These groups provide a structured environment where employees at all levels of expertise can share

knowledge on areas of shared responsibility. The primary goal of each CoP is to facilitate critical knowledge transfer on a proactive and continual basis rather than as a reaction to retirements or other events.

Implementing a proactive means of knowledge capture is aligned with the growing retirement concerns at NYPA. They will help circumvent inefficiencies due to extra time taken in locating relevant people and information and reveal best practices or mistakes that can be avoided going forward.

Recently, NYPA had to deal with the retirement of a Senior Executive who had been at the authority for over 30 years. After the retirement was announced,

the individual had to create a lengthy handoff document. This illustrates the risk of institutional knowledge becoming lost if a retiring employee is not conscientious or simply cannot recall every important detail that occurred during his or her tenure at NYPA. The importance of knowledge transfer and retaining talent speaks to NYPA's strategic plan and future needs. It demonstrates how the knowledge capture program is critical to NYPA's long term success and how proactive efforts like Communities of Practice can be instrumental to that success.

To ensure the value of these working sessions, the subjects for discussion will be prioritized with the appropriate subject matter experts secured to engage in these discussions. A pipeline of issues to be discussed will be maintained that reflects both emerging issues as well as areas that were particularly of interest at previous CoP sessions.

Communities of practice require rigorous structure and administration to be effective. Ultimate responsibility for the communities of practice will rest with the KMO, from which a representative will facilitate the Community and assist the administrator for each of the groups. The administrator's role and responsibilities will be to:

- Agree on the initial topics for discussion at the community of practice;
- Arrange the agenda and logistics for the face-toface meetings;
- Maintain liaisons between the members of the community of practice;
- Review the activity of the community; and
- Provide progress reports to the community of practice sponsors (NYPA management).

The focal point of the CoP will be determined by the management of the sponsoring Business Unit in concert with the Community Administrator to ensure the relevance and value of the discussions that take place. The sessions themselves will follow a relatively structured format to ensure that the areas of interest are effectively covered during the session. Following each session, it will be important to reflect on lessons learned and apply these to future group meetings.

Bringing together representatives from across NYPA who have interest in similar subject areas but approach the topics from different perspectives will

allow each of the members of the community to attain a more holistic understanding of the issue. In addition, notes from the sessions will facilitate a more formal knowledge capture that can subsequently be shared via the enterprise-wide search tool.

The value of the CoP is not limited to exploring and sharing existing knowledge. It is also a mechanism for groups to explore technologies and knowledge that NYPA will need as it moves forward with the strategic plan.

Sharing of knowledge from staff soon to separate

As previously discussed, one of the key knowledge management concerns within NYPA relates to the potential for a loss of knowledge as a result of retirement or separation. One way to address this is to proactively capture and share knowledge from staff before they separate from the organization.

To support this element of the knowledge management initiative, in addition to CoPs, the KMO will develop a set of structured interview questions that are tailored to the specific roles of each business unit / department. These tailored questions can be further amended to reflect the specific role of the staff member set to separate from the organization. As part of an interview, a member of the KMO will elicit information from the staff member and capture it with formalized documentation. This documentation will then be categorized and stored in a knowledge repository and will be available to access via the enterprise-wide search tool.

As this process evolves, it will be extended to capturing information from members of staff with vital institutional knowledge.

Roll-out plan

A phased roll out of the recommended components of knowledge management makes the intended changes to the organization incremental. The projects targeted first can be completed quickly in order to demonstrate the value of Knowledge Management to the organization.

Phase 1 – Establishing Knowledge Management

This phase will begin by staffing the Knowledge Management Office (KMO). The first task of the KMO will be to re-establish the *Knowledge Capture* effort at NYPA, which had previously conducted structured interviews of key retiring employees.

The KMO will capture information from retiring key personnel and then structure the information for reuse. The re-evaluation and improvement of this program will be a separate project in Phase 3.

An effort will begin to identify appropriate software solutions to meet NYPA requirements for enterprise search since scope of the solution is well understood. This effort is actionable within a short timeframe and will demonstrate the utility of the Knowledge Management Initiative to the organization. This, in turn, will encourage participation in later projects. Once a software solution is identified, an appropriate implementation vendor will begin the engagement to install and integrate the search software across an identified subset of repositories and conduct initial training. The search tool will be in use by the end of Q3 2015, and the remaining identified repositories will be integrated by the end of Q1 2016.

Phase 2 – Leveraging Existing Knowledge Management Efforts

Work on Expertise Location will begin in Q2 2015, given that a potential software solution already licensed to NYPA has been identified (SharePoint -MySites). The KMO will conduct outreach to the business units and determine what information should be captured in the employee profiles and identify potential existing sources of information that may be utilized to pre-populate the profiles by Q4 2015. A list of projects that an employee has been involved with and skills already listed in SAP would be potential sources of information. It is important to note that development and implementation of Expertise Location will be coordinated with the Workforce Management initiative team since their initiative efforts may provide content for the employee profiles.

Enterprise Modules will build upon a project already underway within the Energy Resource Management (ERM) Business Unit. An approach for mapping, graphically representing, and creating content for functions and responsibilities within a business has been developed representing substantial progress toward implementation of this project. During Q2 and Q3 2015, the web-based user interface will be developed and the ERM modules finalized. In Q3 2015, the effort will be expanded to begin mapping and gathering content from the 26 additional departments within NYPA. The large scale of this expanded effort will require a limited number of

additional contract employees. The Enterprise Modules effort is projected to be completed by Q3 2016.

Phase 3 – Addressing the Need for Knowledge Sharing

The projects proposed for Phase 3 require significant effort to facilitate. If successful, these projects will require additional staff as they grow in scale and scope across the organization. Phasing these projects after the first three provide the greatest opportunity to evaluate success of the overall initiative and gauge future projects and staffing needs. The initial projects of the initiative will have discrete deliverables and each will require ongoing maintenance to preserve their relevance to the Authority. The projects in Phase 3 will continue as baseline work and will be a core responsibility of the KMO going forward.

Three initial Communities of Practice (CoP) will be established in the start of Q4 2015. The focus of each will be determined by the leadership of the business unit that receives benefit from the community, such as Power Generation, Energy Resource Management, or Enterprise Shared Services. The KMO will work with the Community Administrator (See Definition: Governance) to create the CoP charter setting the meeting structure, goals, and duration for each community. The benefits and effectiveness of the initial Communities of Practice will be evaluated by the KMO in Q1 2016 in order to inform the creation, direction, and scale of additional communities.

Starting in Q4 2015, the KMO will look to improve the existing NYPA *Knowledge Capture* process, which focuses on structured interviews of key retiring employees. The KMO will develop a more effective interface to intuitively navigate recorded retiree insights, ensuring dissemination and utilization by employees. Additionally, the KMO will standardize the procedure for the development of hand-off documents by the end of Q1 2016.

Suggested business model

The proposed business model is for three dedicated staff to work in the KMO upon inception. The function will not create revenues but will foster efficiencies in ways of working to limit duplication of effort and reduce delivery risk.

A key objective of this initiative is to embed ongoing knowledge management into day-to-day operations

at NYPA. The KMO will be the primary means through which this functionality will become embedded in organizational processes. However, this will be supplemented by the use of knowledge agents within each of the business units that will act as a primary point of contact for the KMO and receive periodic training on the various elements of the knowledge management initiative. The knowledge agents will be expected to disseminate this learning with colleagues in their business unit via various means. The combination of dedicated KMO staff supplemented with knowledge agents will ensure knowledge management has dedicated staff embedded throughout the organization.

Once the initiative has been fully implemented, it will be possible for staff to conduct searches on all relevant repositories across the organization to find the knowledge or documentation they need. In cases where the enterprise search tool does not locate the required information, staff will be able to use Enterprise Modules to understand where in the organization relevant information could be attained. Expertise Location functionality can also be used to locate the employee able to provide knowledge in the areas required. All of these elements will support the process of knowledge sharing. Established communities of practice and exit debriefings for separating staff will also help to ensure that knowledge not captured in an existing repository is documented and effectively shared.

Suggested governance structure

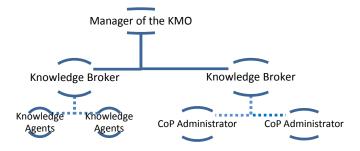
The KMO, initially comprised of three employees, will be responsible for day-to-day operation and the roll out of each of the components of the initiative. The team will be led by a manager with two direct reports who will act as knowledge brokers with direct responsibility for knowledge management in each business unit across NYPA.

The **knowledge brokers** will have constructive working relationships with the knowledge agents that are within each of the business units and will remain in regular and effective contact. This will ensure that the knowledge agents are aware of developments taking place and are able to disseminate this information throughout their business units to ensure the change is embedded.

The role that the **knowledge agents** execute will help to ensure the changes implemented under the knowledge management initiative are effective and that a partnership is effectively established with

each of the business units. It will also represent a professional development opportunity for both the KMO staff and the knowledge agents.

Figure 3- KMO Organizational Chart



Knowledge brokers will play a key role in facilitating the Communities of Practice component of the initiative. However, this component requires significant employee involvement in order to be successful. Each community will be led by a community administrator whom will be a well-respected peer to community of the topic identified. The administrator will be responsible for:

- Approving the draft practice submissions and applying the CoP criteria;
- Maintaining liaisons between the CoP and Process Leadership with regards to enhanced applications;
- Arranging the agenda and logistics for the faceto-face meetings;
- Reviewing the activity of the community; and
- Providing reports to the CoP sponsors (management).

As implementation of the initiative progresses, metrics will be implemented to support effective monitoring of success. Changes to the structure and governance of the team / projects to support the effective delivery of desired outcomes will be evaluated as needed and potential extensions that could build on successes will be considered.

Potential initiative scenarios and selection / prioritization criteria

As outlined previously in the *Initiative Scope* section, the initiative team will conduct a more detailed assessment of existing repositories to determine which should be incorporated within the enterprise-wide search. The decision in this area will be based on the value that NYPA will attain from inclusion of

these repositories.

Priority in selecting and phasing projects was given to those projects that:

- Enable quick successes with low overheard,
- Utilize existing software licenses to limit costs,
- Be actionable on the shortest timeframe, and
- Build on in-flight projects that can be integrated into the initiative reducing implementation time.

To establish the highest priority Communities of Practice, the KMO will conduct an enterprise outreach program involving visits to the various NYPA facilities and discussions with key representatives across business units to better understand where there would be value in future discussions.

BENEFITS AND REVENUE

High-level benefit description

The main objectives of this initiative include the capture of institutional knowledge from critical personnel, the reduction of inefficiencies while searching for information and subject matter experts, ensuring relevancy of information, and creating a culture of knowledge sharing while mitigating risks facing the organization.

By realizing these objectives, the knowledge management initiative will deliver numerous benefits. Business processes will be accelerated through the reduction of redundancies and the reuse of internal knowledge. NYPA staff will realize time savings in routine work and reduce the amount of time spent searching for information or subject matter experts. In addition to time savings, better access to information will also result in additional benefits such as:

 Reduce errors and mitigate risk via improved access to current and accurate information,

- Increase process understanding and efficiency,
- Improve employee competence and skill development,
- Increase innovation, teamwork, and agility through enhanced access to subject matter experts and improved collaboration, and
- Reduce onboarding time.

Consequently, NYPA will benefit from a more engaged, more motivated, and better skilled workforce. Empirical evidence from numerous studies supports the potential for knowledge management programs to deliver these types of benefits. The NYPA knowledge management initiative also targets additional benefits via:

- Proactive sharing of information to avoid institutional knowledge leaving the organization, and
- Efficiency in attaining/finding knowledge and minimizing duplication of effort.

The values in the following benefit tables reflect time savings extrapolated from our internal survey and industry research. Benefits were estimated using the following process:

- Surveys were distributed to knowledge owners and participants identified by members of the EMC. For each business unit there were as few as two or as many as twenty respondents with a median of nine.
- Respondents were asked to estimate time wasted per week searching for relevant information or identifying the appropriate personnel to contact.
- The hour ranges in the survey were weighted against the number of respondents per range and an average was determined; all responses were included.

| Total Benefits (\$ '000) | | | | | | | | | | |
|--------------------------|------|--------|----------|----------|----------|----------|----------|-----------|--|--|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 | | |
| O&M - FTE (\$) | \$ - | \$ 392 | \$ 1,097 | \$ 2,038 | \$ 2,508 | \$ 3,136 | \$ 3,136 | \$ 3,136 | | |
| Total (\$ '000) | \$ - | \$ 392 | \$ 1,097 | \$ 2,038 | \$ 2,508 | \$ 3,136 | \$ 3,136 | \$ 3,136 | | |

| Total Benefits (\$ '000) | \$ | 27,985 |
|--------------------------|----|--------|
|--------------------------|----|--------|

Benefit assumptions

The benefits have been calculated based on an extrapolation of the survey results of 63 NYPA staff including managers, directors, and vice presidents. The weighted average of time lost searching for information noted by the respondents is 1.8 hours per week.

It is likely that this average underestimates the actual time lost to information searching. The American Productivity and Quality Center (APQC), a leading organization in knowledge management assessment, has conducted studies which find that employees spend about nine hours per week searching for information. This is the total amount of time spent searching for information and does not illustrate the portion of time actually lost during search. NYPA's sampling focused on higher levels of the organization; it can be expected analysis across all levels this would reveal even greater opportunity for knowledge efficiencies. For this reason, the initiative team balanced the APQC research with the NYPA survey in calculating the benefits related to times savings in the table below. NYPA will also realize benefits that are difficult to quantify, such as

risk mitigation and reduced duplication of efforts, making the benefits cited within this business plan conservative.

Confidence level of benefit realization

The following table represents the overall confidence that the specified revenue and benefits will be realized. The benefits and revenues enumerated above are based solely on the internal NYPA survey results collected.

Time saved in searching for information and reductions in duplication of intellectual assets will result in costs avoided where employees' time can be reallocated to new, higher priority tasks. The percentage of time in which this reallocation will happen provides for some amount of uncertainty in actual realized cost savings. In addition, there are many potential challenges and risks in regards to implementation and internal adoption associated with a large knowledge management initiative, which further adds to the conservative confidence level in benefit realization.

Table 5 - Benefits Confidence Summary

| | Confidence Level | |
|--------------------------|------------------|-----------|
| Total Benefits | Medium | |
| | | |
| | Low | High |
| Total Benefits (\$ '000) | \$ 22,388 | \$ 33,582 |

| Confidence | Benefit/revenue |
|------------|---------------------|
| level | realization range |
| Very high | +/- 5% of expected |
| High | +/- 10% of expected |
| Medium | +/- 20% of expected |
| Low | +/- 30% of expected |
| Very low | +/- 50% of expected |

| Table 6 - Risk to Benefits Realization | | | | | | | |
|---|---|-------------|-------------|--|--|--|--|
| Risk driver | Description of impact on benefit realization | Probability | Impact | | | | |
| Insufficient Executive Support | Executive support of the initiative is essential to demonstrate the importance and commitment of knowledge management through the organization. | Medium | Critical | | | | |
| Inclusion of content involving sensitive information may create vulnerabilities and the potential threat of external access to sensitive information. | Specific areas of the organization may not realize the benefits described due to security constraints around sensitive information. | Medium | Medium | | | | |
| Staff may not engage in projects (time constraints, concerns about information sharing, system difficulties, not bought into value of projects) | Critical knowledge may not be shared if employees aren't participating and contributing in sharing activities resulting in a greater need for knowledge capture. Information would continue to be time consuming to discover without properly | High | Significant | | | | |

| | classifying assets. | | |
|---------------------------------|---|-----|------|
| Critical knowledge repositories | Critical information would remain difficult to | | |
| not reached by search and | discover and result in no time savings – status | Low | High |
| taxonomy projects. | quo situation. | | |

FUNDING FOR THE INITIATIVE

Intended sources of funding

The Knowledge Management initiative will be funded using NYPA's cash reserves. Details on how the costs increase per year, and what is included, are provided in the Costs and Resources section of this business plan.

| Table 7 - Intended Total Funding Sources | | | | | | | | |
|--|----------|-------|-------------|---------------------|--|--|--|--|
| Source | Selected | Value | e (\$ '000) | Percentage of funds | | | | |
| Bond issuance | No | \$ | - | 0% | | | | |
| Cash reserves | Yes | \$ | 3,639 | 100% | | | | |
| Third-party funds | No | \$ | - | 0% | | | | |
| Other | No | \$ | - | 0% | | | | |
| Total | | \$ | 3,639 | 100% | | | | |

| Table 8 - Expected Annual Funding Profile | | | | | | | | | | | | | | | |
|---|----|------|----|-------|----------|----|------|----|-----|----|-----|----|------|--------|------|
| Category | | 2014 | | 2015 | 2016 | | 2017 | 20 | 018 | 20 | 019 | 2 | 2020 | Post 2 | 2020 |
| NYPA cash | \$ | 124 | \$ | 2,412 | \$ 1,103 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Total annual cost | \$ | 124 | \$ | 2,412 | \$ 1,103 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |

| Total NYPA cash (\$ '000) | \$ | 3,639 |
|---------------------------|----|-------|
|---------------------------|----|-------|

COSTS AND RESOURCES

Initiative cost and resources (i.e. costs and resources associated with implementing the initiative)

| Table 9 - O&M costs HQ, C | verh | ead, & | Othe | er costs (| (\$ '00 | 00) | | | | | |
|----------------------------|------|--------|------|------------|---------|-------|------|------|------|------|-----------|
| Category | | 2014 | | 2015 | | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| Internal labor | \$ | 72 | \$ | 567 | \$ | 916 | | | | | |
| Training, Outreach, | | | | | | | | | | | |
| Advertising | \$ | 10 | \$ | 80 | \$ | 75 | | | | | |
| Search software licensing, | | | | | | | | | | | |
| support, and maintenance | | | \$ | 1,320 | \$ | 112 | | | | | |
| Taxonomy development | | | | | | | | | | | |
| contracting | | | \$ | 81 | | | | | | | |
| Software development | | | | | | | | | | | |
| contracting | | | \$ | 144 | | | | | | | |
| Department | | | | | | | | | | | |
| analysis/knowledge | | | | | | | | | | | |
| capture support | | | | | | | | | | | |
| contracting | \$ | 42 | \$ | 180 | | | | | | | |
| Total annual O&M | \$ | 124 | \$ | 2,372 | \$ | 1,103 | \$ - | \$ - | \$ - | \$ - | \$ - |

| Total O&M costs HQ/OH/Other (\$ '000) | \$ | 3,599 |
|---------------------------------------|----|-------|
|---------------------------------------|----|-------|

| Table 10 - Capital expenses (\$ '000) | | | | | | | | | |
|---------------------------------------|------|----|------|------|------|------|------|------|-----------|
| Category | 2014 | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| Physical assets | | \$ | 40 | | | | | | |
| Total annual Capex | \$ - | \$ | 40 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |

| Total initiative Capital expenses (\$ '000) | \$ 40 |
|---|-------------|
| Total initiative costs (\$ '000) | \$ 3,639 |

| Table 11 - Resources (FTE) | | | | | | | | |
|----------------------------|------|------|------|------|------|------|------|-----------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| IT | | | | | | | | |
| Business | 1 | 3 | 5 | | | | | |
| Technical/(Engineer) | | | | | | | | |
| Other | | | | | | | | |
| Total annual FTE | 1 | 3 | 5 | - | - | - | - | - |

Initiative cost assumptions (i.e. cost associated with implementing the initiative)

In developing the cost estimates presented in this business plan, the following assumptions were made:

First, costs identified are only the costs of the KMO staff and associated systems. The costs do not incorporate the time and resources of the business unit staff that will support implementation of the initiative and engage in the Communities of Practice.

Second, it is assumed the knowledge management initiative will be fully implemented by the end of 2016 and at that time, the KMO and associated

initiatives will be considered business as usual. For these reasons, the implemenation cost tables identify costs for the years 2014 to 2016. The remaining costs will be incurred on an ongoing basis from 2017, and are captured in the postimplementation cost table that follows.

Third, the costs included for the development and implementation of each system envisioned under the knowledge management initiative are based on initial quotes obtained from potential vendors, and will be further clarified when specific products are selected.

Post-implementation costs and resources (i.e. incremental costs and resources associated with running/maintaining the solution post-implementation)

| Table 12 - 08 | Table 12 - O&M costs Headquarters, Overhead and Other | | | | | | | | | | | | |
|----------------|---|------|------|------|----|-------|----|-------|----|-------|-------------|-----|--------|
| Category | Frequency | 2014 | 2015 | 2016 | | 2017 | | 2018 | | 2019 | 2020 | Pos | t 2020 |
| Internal | | | | | | | | | | | | | |
| labor | Annual | | | | \$ | 1,091 | \$ | 1,266 | \$ | 1,266 | \$ 1,266 | \$ | 1,266 |
| Training and | | | | | | | | | | | | | |
| outreach | Annual | | | | \$ | 45 | \$ | 30 | \$ | 30 | \$ 30 | \$ | 30 |
| Software | | | | | | | | | | | | | |
| Maintenance | Annual | | | | \$ | 112 | \$ | 119 | \$ | 113 | \$ 120 | \$ | 114 |
| Total annual S | ite O&M | \$ - | \$ - | \$ - | \$ | 1,248 | \$ | 1,415 | \$ | 1,409 | \$ 1,416 | \$ | 1,410 |

| Table 13 - Ca | Table 13 - Capital expenses (\$ '000) | | | | | | | | | | | | |
|----------------|---------------------------------------|------|------|------|----|------|------|----|------|----|------|------|------|
| Category | Frequency | 2014 | 2015 | 2016 | | 2017 | 2018 | | 2019 | | 2020 | Post | 2020 |
| Physical | | | | | | | | | | | | | |
| assets | 2 years | | | | \$ | 40 | | \$ | 40 | | | \$ | 40 |
| Total annual (| Сарех | \$ - | \$ - | \$ - | \$ | 40 | \$ - | \$ | 40 | \$ | - | \$ | 40 |

| Table 14 - Resources (FTE) | | | | | | | | |
|----------------------------|------|------|------|------|------|------|------|-----------|
| Category | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Post 2020 |
| IT | | | | | | | | |
| Business | | | | 6 | 7 | 7 | 7 | 7 |
| Technical/(Engineer) | | | | | | | | |
| Total annual FTE | - | - | - | 6 | 7 | 7 | 7 | 7 |

Post-implementation cost assumptions (i.e. cost associated with running/maintaining the solution post-implementation)

The following assumptions were made in developing the post implementation cost estimates:

To maintain enterprise support and long-term validation of the solution, training and outreach will be conducted periodically throughout each year.

Annual software maintenance cost is based on the 20% of user license fees.

The staffing levels of the KMO will be evaluated at the end of 2016 to determine if they are adequate

in relation to the numbers of Communities of Practice, Expertise Locations and Enterprise Modules and planned projects for 2017. The cost tables show an increase of two FTEs by 2018 based on increasing Knowledge Management scope and KMO staffing levels at other organizations (IBM and Halliburton). Lastly, bi-yearly server upgrades are scheduled ensuring search hardware maintains optimal performance.

Confidence level of initiative and postimplementation costs

The following table represents the overall confidence that the cost levels will be met.

Table 15 – Costs Confidence Summary

| | Confidence Level |
|---------------------------|------------------|
| Initiative costs | Medium |
| Post-Implementation costs | Medium |
| | |

| | Low | | Hi | gh |
|----------------------------------|-----|-------|----|-------|
| Total initiative costs (\$ '000) | \$ | 2,911 | \$ | 4,367 |
| Total annual post- | | | | |
| implementation costs (\$ '000) | \$ | 1,144 | \$ | 1,716 |

| Confidence level | Benefit/revenue realization range |
|---------------------|-----------------------------------|
| Very high | +/- 5% of expected |
| High | +/- 10% of expected |
| Medium | +/- 20% of expected |
| Low | +/- 30% of expected |
| Very low | +/- 50% of expected |

Comments

The initiative and post-implementation costs include software implementation and annual maintenance for a single, recommended product in enterprise search, as well as ongoing costs for staffing of the KMO. The initiative team has included the costs for the preferred product based on current enterprise needs and breadth of technology. Additional search product vendors were reviewed; however, the products have less desirable licensing models and impose restrictions on quantity of content.

MARKET TRENDS

Overview of market trends

Many businesses are taking steps to optimize and simplify their operations in order to drive efficiency across their organizations. They are targeting the elimination of redundancies and the improvement of processes and technologies across organizations. Enterprise search tools and taxonomies are in rapid deployment throughout many industries. With the dramatic changes in the energy industry, energy

companies are becoming information businesses. The industry is recognizing the threat of lost tacit knowledge from retirements and has begun to take steps to capture and make this content available.

Other industries are also pursuing knowledge management. Accenture challenged itself to create a sustainable competitive advantage by addressing its knowledge management issues. Expecting digital information to rapidly increase and storage requirements to become more even more demanding, Accenture was able to streamline its operations to better meet customer needs. The reduction in manually updated files and number of servers to support Accenture's growing business illustrated the quantitative value of their knowledge management efforts.

Expected impact on customer segments

Better access to knowledge and relevant information by customer-facing representatives, may lead to improvements in customer service in terms of response time to inquiries and the accuracy of information provided. Deeper understanding of customer circumstances will permit NYPA staff to provide guidance to customers and design effective energy solutions for their needs.

A potential extension of the initiative would be to make electronic assets available via customer facing portals. This would complement the Customer Solutions Initiative by providing enhanced access to knowledge for our customers as well as internal NYPA staff.

ORGANIZATIONAL IMPACT

Overall degree of change

The implementation plan for knowledge management is constructed to make optimal use of existing resources and introduce minimal disruption to work processes. A collaborative approach between the KMO and the business units will ensure that the solutions implemented address requirements and effectively deliver in line with needs.

Once implementation begins, the KMO will provide targeted training to knowledge agents across the business units. In addition, the KMO will conduct regular outreach activities to attain feedback on the implementation and potential changes that could be made to improve adoption.

The KMO will provide formal and informal routes of communication including an informational website on knowledge management components that will also showcase success stories illustrating how those components have been effectively applied to support knowledge capture, sharing, and use.

The impact of change will be lessened where business units have already embraced some of the tenets of knowledge management. The Operations Business Unit is working on taxonomy and has knowledge oriented programs such as Asset Management, Asset Investment Planning, Configuration Management, and Process Integration.

| Table 16 - Internal impact | overview | |
|--------------------------------------|---|--------------------------|
| Business Unit | Description of impact | Type and Level of Impact |
| Internal Audits | Improved access institutional knowledge may improve efficiency of investigations. | Positive - Low |
| Business Services | Improved utilization and search of existing content databases. | Positive - Low |
| Enterprise Shared Services | Significant interaction with IT during implementation is expected, but the improved ability for employees to self-identify information is expected to be a net benefit. | Positive - Medium |
| Law | Improved coordination of staff and efficiency of access to institutional knowledge on past legal actions. | Positive - Medium |
| Economic Dev. & Energy Efficiency | Improved coordination and efficiency of Customer Facing staff in obtaining correct information, and contacting informed staff when issues arise. | Positive - Medium |
| Operations/ Transmission | Build on existing efforts to improve access and maintenance of Standard Operating Procedures, and | Positive - Medium |

| | improve access to institutional knowledge. | |
|-------------------------------|--|-------------------|
| Governmental & Communications | Improved utilization and search of existing content databases. (I.e. Merlin) | Positive - Medium |

Required skills

Knowledge Management spans both technical implementation as well as cultural and organization change. To ensure full implementation, a mix of staff will be required including the KMO Manager, Knowledge Brokers, and consultant personnel as necessary.

The nature of the initiative will require these members of staff have a variety of skills including previous NYPA knowledge management related project experience as well as any other knowledge management skills. Internal NYPA knowledge is beneficial, so it is preferable that qualified internal personnel fill some of the positions.

The **Manager** of the KMO will be responsible for ensuring the organization maximizes the value it achieves through knowledge. Responsibilities include managing intellectual capital and Knowledge Management practices in the organization.

- Developing an overall framework that guides knowledge management
- Actively promoting the knowledge agenda within the organization
- Overseeing the development of the knowledge infrastructure
- Facilitating connections, coordination, and communications
- Measuring the impact of knowledge management on the business
- Integration architecture development
- New technology evaluation
- Product and vendor evaluation
- Requirements management
- Risk/return analysis
- Software licensing
- Stakeholder management

The **knowledge broker** is an intermediary that aims to develop relationships and networks between producers and users of knowledge by providing linkages, knowledge sources, and knowledge itself.

They will engage business leaders in the identification and codification of critical business knowledge within their silos, and facilitate knowledge capture through knowledge teams.

- Assessing barriers and establishing access to knowledge
- Learning critical knowledge areas, electronic content management systems (ECM), and business processes (i.e. knowledge capture)
- Facilitating individual and organizational capacity development for knowledge use
- Implementing knowledge in new settings
- Maintaining knowledge through its lifecycle

It would also be beneficial for staff involved in specific components of the initiative to have expertise in the following areas.

Enterprise-wide search and taxonomy: This task primarily requires project management skills as implementation will be guided by consulting services. However, the sub initiative is technology related and business focused which will require personnel with strong interpersonal and communication experience as well as negotiation and facilitation experience. It would also be a plus if these staff members had an IT aptitude to ensure success.

Expertise Location and **Enterprise Modules**: These are software technology solutions that are centered on roles and people within the organization. Both projects will benefit from staff with existing IT skills that can be augmented with developer contractor resources as necessary.

Communities of Practice: These are primarily facilitation projects aimed at sharing knowledge directly via employee engagement. This requires KMO staff to have the ability to motivate community members, drive change, and facilitate experience and best practice discussions. For each of the knowledge areas addressed, the team will receive support from subject matter experts working in the relevant business unit(s) who will bring project-specific expertise as well as acting as agents of knowledge.

| Table 17 - Skills overview | | | | | | | |
|----------------------------|--|----------|-----------|--|--|--|--|
| | | Current | Suggested | | | | |
| Business Unit | Skills required | status | action | | | | |
| All business units | knowledge agents and CoP Administrators with strong communication skills will need to be identified to facilitate implementation | Existing | Train | | | | |

RISKS

Risks to NYPA as a result of implementing the initiative

| Table 18 - Risk overview | | | | | | |
|--------------------------|--|-------------|-------------|---|----------------------|---------------------------------|
| Category | Description | Probability | Impact | Suggested actions | Owner | Liaison |
| Operational | Executive Support | Medium | Critical | Demonstrate benefits of Knowledge Management projects and overall initiative | Executive Sponsor | Strategy Management group |
| Operational | Dedicated KMO | Low | Significant | Ensure hired team members have required skills to embrace and use project tools and are prepared to facilitate organizational changes | Executive Sponsor | Human Resources dept. |
| Operational | Knowledge Management systems and tools not maintained and updated | Medium | High | Illustrate benefits of maintenance support and updated knowledge | KM group manager | IT dept. |
| Operational | Lack of participation in Communities of Practice | Medium | High | Demonstrate benefits of CoPs | KM group manager | TBD |
| Workforce | Knowledge Management initiative and projections not adopted throughout NYPA | Medium | Critical | Advocate executive support, communicate value of knowledge management, demonstrate benefits through outreach programs, and ensure KMO works directly with business units to gain support for the initiative | KM group manager | Executive Sponsor |
| Public | May see costs may outweigh actual benefits achieved in addressing knowledge loss at NYPA | Medium | Medium | Show how Knowledge Management supports other initiatives and, alongside them, supports the strategic vision for NYPA's future; Communicate how KMO is an investment with a demonstrable positive return; Develop metrics to demonstrate how anticipated costs and benefits were actually realized | KM group manager | Strategy Management group |

The risks associated with the initiative can be grouped into the following key areas:

Project implementation: The enterprise wide content search tool will interface with numerous existing content repositories. Making distributed content available for index and search from a single location is a highly complex technological challenge. It will be critical for senior leadership to commit both the time and resources required to successfully deliver and maintain the technology components of the initiative. In addition, the implementation team must have strong capabilities in the use of these tools, and be well versed with the organizational change requirements.

Adoption across NYPA: Employees across NYPA may have a negative perception of the initiative as a means to reduce personnel once knowledge from their role is discoverable, which may contribute to a resistance in storing content in knowledge repositories. Employees may also view the classification steps required by the taxonomy as unnecessary or as additional work without benefit. There is also the risk that employees may not contribute or participate in Communities of Practice or provide updated content and function descriptions for the Enterprise Modules. These risks underscore the importance of executive leadership support, communicating the core values of knowledge management, demonstrating the benefits through outreach programs, and ensuring the initiative team works directly with departments to enable strong support for the initiative at all levels of the organization.

Benefit Realization: There is potential for full scale benefits described herein to not be realized within the organization. It will be important to have the proper metrics in place to measure and understand the value each KM program provides and articulate that back to the organization.

Maintained Engagement: With Expertise Location and the Enterprise modules system, the commitment of the Business units to keep these systems up to date is critical to their success. Should this not occur, these systems can quickly fall into disuse.

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