

Date: July 26, 2016

To: THE TRUSTEES

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: Asset Health Monitoring and Diagnostics Center –
Capital Expenditure Authorization Request and
Contract Award

SUMMARY

The Trustees are requested to approve a Capital Expenditure Authorization Request in the amount of \$7,076,709 for engineering, procurement, installation and support of the Asset Health Monitoring and Diagnostics Center (“M&D Center”) Project.

The Trustees are also requested to approve the award of a three-year personal services contract in the amount of \$2,701,160 to General Electric Intelligent Platforms, Inc. (“GE”) of Charlottesville, VA for software and professional services for design, implementation and transition surrounding the M&D Center Project installed at the White Plains Office that will benefit all facilities.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority’s Guidelines for Procurement Contracts for personal services awarded to non-low bidder exceeding \$500,000 requires the Trustees’ approval. The Trustees’ approval is also required when the term of Personal Services Contracts exceeds one year.

The Authority’s Strategic Vision includes two Infrastructure Modernization Strategic Initiatives (Asset Management and Smart Generation & Transmission); central to both is the development of a M&D Center. The M&D Center will create new decision-making capabilities by aggregating existing and future data streams to monitor, diagnose, and inform asset management decisions. The M&D Center will extend asset capacity, stabilize maintenance and inventory costs, and mitigate the impact of catastrophic events.

An objective of the M&D Center is to provide increased real-time insight into asset health status in order to optimize maintenance spend and deter emergent capital spending. The Authority incurs large annual capital and O&M costs associated with maintaining its core transmission and generation assets. Real-time asset health feedback and increased awareness contributes to decreased catastrophic events, increased asset life, optimized O&M spend, and, generally, reduced risk.

The M&D Center is aligned to target areas of improvement, specifically increased reliability and resiliency, optimized transmission and generation assets, and enhanced situational awareness. Furthermore, the M&D Center will enhance the Authority’s data analytics capabilities.

The Vendor being recommended for the M&D Center Project will complete the following four major tasks and deliverables:

1. Assessment of the Authority's data quality
2. Design, development and configuration of the M&D solution
3. Phased implementation of the M&D solution, beginning with a pilot program completed by the end of 2016 at the 500MW Facility
4. Effective transition of M&D solution and use to Authority

The M&D Center will be the first phase toward implementation of an Integrated Smart Operations Center ("iSOC"). The M&D Center will initially be integrated into the existing Network Operations Center ("NOC") in the White Plains Office. Ultimately, the vision is to construct the iSOC and transition the M&D Center as a subsequent phase. The iSOC will provide enterprise-wide technology and service management capability across operational groups and plays a critical role in identifying, managing, coordinating, and escalating security incidents and events on common devices, infrastructures, networks, and applications.

DISCUSSION

In response to the Authority's request for proposal advertised in the New York State *Contract Reporter* on December 29, 2015 (RFQ No. Q15-6014MH), four companies (Schneider Electric Software LLC, GE Intelligent Platforms Inc., ABB Inc., and IBM Corp.) responded with proposals on February 19, 2016. Subsequently, all four companies presented their proposals and demonstrated software solutions over a two day evaluation period in the White Plains Office on May 19 and 20, 2016.

The proposals and presentations were based on the Authority's original RFQ scope, specifically: functional requirements of the solution, asset class coverage (both generation and transmission), hybrid architecture (combines centralized data management with site-based decision making), onsite deployment and project management methodology and approach to accomplish the four major tasks/deliverables (listed above).

An award (three-year term) to GE is recommended by the Evaluation Committee as GE has the lowest evaluated price than the next lowest evaluated bidder due to their proposal being scored substantially better in product functionality and overall vendor capability. GE has deep technical knowledge of Authority assets, particularly in SENY, plus GE operates centers of excellence that can offer continued support and long-term guidance as needed. GE's bid also included additional services such as shadowing and model development assistance that no other vendor offered. GE's bid included substantial room to grow the fleet of assets without having to purchase additional software license coverage.

The Evaluation Committee does not recommend Schneider Electric as they are not the lowest evaluated bidder. The largest contributor to their higher evaluated price is the large licensing costs associated with adding additional assets and sensors to the PRISM system. The bid Schneider submitted covers all of current assets and data points, however GE's bid included substantial room to grow the fleet of assets without having to purchase additional software license coverage. When detailing out the evaluated price of Schneider Electric's bid compared to GE, additional software licensing costs must be added, making it considerably more expensive than GE.

The following capital expenditures are required to complete the detailed engineering, procurement and construction phases of the Project as summarized below:

- Preliminary Engineering \$1,000,000
- Engineering/ Design \$1,210,000
- Procurement \$357,500
- Construction/ Installation \$3,393,834
- NYPA Direct/Indirect Expense \$1,115,400

The Estimated Total Current Capital Expenditure is \$7,076,709

The Chief Executive Officer previously approved \$2,217,189 for preliminary engineering.

FISCAL INFORMATION

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

RECOMMENDATION

The Senior Vice President – Technology & Innovation, the Senior Vice President – Transmission, the Senior Vice President – Information Technology, the Vice President – Project Management, the Vice President – Engineering, the Vice President – Procurement, and the Director – Strategic Operations recommend that the Trustees approve capital expenditures in the amount of \$7,076,709 for the Asset Health Monitoring and Diagnostics Center (“M&D Center”) Project and the award of a \$2,701,160 contract to General Electric Intelligent Platforms, Inc. of Charlottesville, VA for software and professional services for the M&D Center Project.

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

Gil C. Quiniones
President and Chief Executive Officer

RESOLUTION

RESOLVED, That pursuant to the Authority's Expenditure Authorization Procedures, capital expenditures in the amount of \$7,076,709 are hereby authorized for the Asset Health Monitoring and Diagnostics Center Project ("the Project") as recommended in the foregoing memorandum of the President and Chief Executive Officer; and be it further

<u>Capital</u>	<u>Expenditure Authorization</u>
Asset Health Monitoring and Diagnostics Center	<u>\$7,076,709</u>

RESOLVED, That pursuant to the Guidelines for Procurement Contracts adopted by the Authority, approval is hereby granted to authorize the award of a contract to General Electric Intelligent Platforms, Inc. of Charlottesville, VA, in the amount of \$2,701,160, to provide software and professional services in order to design, implement and transition the Project as recommended in the foregoing memorandum of the President and Chief Executive Officer and as set forth below:

<u>Contractor</u>	<u>Contract Approval</u>
General Electric Intelligent Platforms, Inc. Charlottesville, VA	<u>\$2,701,160</u>
(RFQ No. Q15-6014MH)	

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