

May 21, 2013

**MEMORANDUM TO THE TRUSTEES**

**FROM THE PRESIDENT and CHIEF EXECUTIVE OFFICER**

**SUBJECT: Marcy-South Series Compensation Project –  
Request for Authorization to Proceed**

**SUMMARY**

The Trustees are requested to authorize staff to proceed with engineering and licensing of the Marcy-South Series Compensation Project. The President and Chief Executive Officer has approved \$2.8 million for preliminary engineering and licensing and detailed engineering and design due to the aggressive schedule required for the project's implementation.

**BACKGROUND**

Governor Cuomo announced the Energy Highway Initiative in his January 2012 State of the State address. The Energy Highway Initiative recognized a number of challenges to the State's energy infrastructure including the expanding transmission to move excess power from upstate and the need to address potential retirement of several power plants. The Energy Highway Blueprint, developed by the Governor's Energy Highway Task Force, recommended that the Public Service Commission 1) develop and implement a reliability contingency plan for the closure of the Indian Point Energy Center ("IPEC") and 2) invite developers and transmission owners to propose transmission projects to expand the capacity to move electricity from upstate/central New York to the Hudson Valley and New York City.

On November 30, 2012, the Public Service Commission ("PSC") issued orders that 1) directed Con Edison, with the assistance of NYPA, to develop a contingency plan for the potential closure of IPEC upon the expiration of its existing licenses by the end of 2015 and 2) solicited written public Statements of Intent from developers and transmission owners proposing projects that will increase transfer capacity through the congested transmission corridor described above.

On February 1, 2013, Con Edison and NYPA submitted their Indian Point Contingency Plan. The Contingency Plan included a three-pronged approach including that Con Edison and NYPA begin development of three Transmission Owners Transmission Solutions Projects ("TOTS") including the Marcy-South Series Compensation project (Project). NYPA, as part of the New York Transco, also submitted a Statement of Intent to propose construction of the Project to address congestion.

On April 19, 2013, the PSC issued its order authorizing Con Edison, New York State Electric and Gas, Central Hudson, and NYPA to move forward with the preliminary development activities for the TOTS, including the Project. The TOTS will be compared to other projects that are proposed in response to the Request for Proposals that NYPA issued on

April 3, 2013 at the request of the PSC. In September, it is anticipated that the PSC will select which projects will move forward to address the IPEC issue.

The PSC agreed with NYPA and Con Edison that for the TOTS to meet the June 2016 in-service deadline, the TOTS needed to initiate preliminary development activities in May 2013. The PSC imposed a spending cap of \$10 million for the TOTS projects that may be incurred prior to September 30, 2013. The individual cap applicable to the Project is \$1.2 million for costs incurred by that date. The PSC stated that a State rate recovery mechanism will be required to address the recovery of the preliminary development costs. The PSC found, with respect to cost allocation (i.e., the methodology used to allocate costs between utility customers), that it had the authority to develop a retail rate recovery mechanism that provides for the jurisdictional utilities to collect payments from their ratepayers for reliability-related activities and also to support actions taken by NYPA in conjunction with the Indian Point Contingency Plan. The PSC emphasized that it was not asserting jurisdiction over NYPA, the rates NYPA charges its customers, or wholesale transmission.

## DISCUSSION

The existing Marcy-South 345 kV lines originate in the Marcy Substation in Oneida County approximately 50 miles east of Syracuse. From Marcy, the lines generally traverse in a south and southeastern direction and interconnect the NYPA's Marcy Substation with Edic Substation (Niagara Mohawk Power Corporation), Fraser Substation (New York State Electric & Gas), Rock Tavern (Central Hudson Gas & Electric), Roseton (Central Hudson Gas & Electric), and East Fishkill Substation (Consolidated Edison). The line is a combination of single and double circuits carried on steel poles, steel lattice structures and wood pole structures. At the Hudson River, the line transitions into six submarine pipe type cables.

The Project will add switchable series compensation to increase power transfer by reducing series impedance over the existing 345 kV Marcy-South lines. Specifically, the Project will add 40% compensation to the Marcy-Coopers Corners 345kV line by installing a series capacitor bank near the Marcy Substation. In addition, the Project will add 25% compensation to the Edic-Fraser 345 kV line and the Fraser-Coopers Corners 345kV line through the installation of two series capacitor banks near the Fraser Substation. Finally, the Project will also involve replacing the conductor on approximately 21.8 miles of the NYSEG-owned Fraser-Coopers Corners 345 kV line using existing towers and will involve relay protection and communication upgrades at the Marcy, Fraser, and Coopers Corners 345 kV substations. The Project will increase thermal transfer limits across the Total East interface and the UPNY/SENY interface and will contribute to solving reliability issues should the Indian Point Energy Center be retired. NYPA will be responsible for installing the capacitors and NYSEG will be responsible for reconductoring the Fraser-Coopers Corners 345 kV line.

If preliminary engineering and licensing are completed by the end of 2013 or early 2014, detailed engineering and design begins in June 2013 and there are no delays or complications in procurement or construction, the Project can be in service by summer 2016 as required for the IPEC Contingency Plan. This is an aggressive schedule and to have all regulatory approvals in

place by early next year, NYPA will have to complete several engineering and environmental studies to provide the information necessary for the applications for regulatory approvals.

Based upon discussions with the Department of Public Service staff and previous experience with licensing transmission lines in New York, NYPA staff has developed a work plan for the required studies, environmental assessments and applications for regulatory approvals. This work includes a system impact study, geotechnical investigations and natural resource assessments. This work will form the basis for an application to the PSC for approval to install the series capacitors.

To achieve the schedule, detailed engineering and design will begin in June. This work will be performed by an engineering consultant through an existing general services agreement. The scope-of-work will include preparation of engineering and design packages for installation of the series compensation capacitors and associated equipment at the identified locations. Engineering will also be performed concurrently for modifications of the relay protection and communication systems. The packages will include designs associated with electrical, civil, and mechanical modifications and consist of drawings, equipment specifications, and construction specifications. Services associated with project management and procurement support will also be provided.

It is estimated that Licensing and Detailed Engineering and Design will cost \$ 2.8 million. We currently estimate that by the end of September less than \$1 million will be expended, which is under the cap of \$1.2 million established by the PSC.

The Trustees are requested to authorize staff to proceed with preliminary engineering and licensing and detailed engineering and design for the Project. Staff will provide the Trustees with monthly progress reports on the project starting in June 2013.

### FISCAL INFORMATION

Costs related to the Project will be made from the Authority's Capital Fund and are expected to be recovered under a new cost recovery mechanism to be finalized by the PSC in the summer of 2013.

### RECOMMENDATION

The Senior Vice President and Chief Engineer – Operations Support Services, the Senior Vice President – Strategic Planning, the Vice President – Project Development, Licensing and Compliance, the Director – Project Development and Licensing and the Director – Resource Planning and Project Analysis recommend that the Trustees authorize staff to proceed with the engineering and licensing of the Marcy-South Series Compensation Project.

For the reasons stated, I recommend the approval of the above-requested action by adoption of a resolution in the form of the attached draft resolution.

Gil C. Quiniones  
President and Chief Executive Officer

Att.  
Marcy-South Series Project  
– Authorization

## **RESOLUTION**

RESOLVED, That the Trustees authorize the Authority's staff to proceed with preliminary engineering and licensing and detailed engineering and design for the Marcy-South Series Compensation Project, as recommended in the attached memorandum of the President and Chief Executive Officer; and be it further

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