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TO: NYPA BOARD OF TRUSTEES
FROM: EDWARD WELZ, ACTING CHIEF OPERATING OFFICER
DATE: SEPTEMBER 27, 2011
SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

This report covers performance of the Operations group in July and August. In August, Tropical Storm Irene passed through New York State causing flooding, power outages, and storm-related damage in New York City, Long Island, and the Hudson Valley. NYPA facilities in these areas were threatened, but NYPA Operations and other staff managed these emergency situations with no resulting significant damage.

Power Supply

Plant Performance

Systemwide net generation¹ was 2,710,698 megawatt-hours² (MWh) in July, compared to projected net generation of 2,344,705 MWh. In August, systemwide net generation was 2,566,067 MWh compared to projected net generation of 2,283,576 MWh. Year-to-date net generation is 18,031,656 MWh, compared to the target of 16,918,207 MWh.

The fleet availability factor³ was 99.5 percent in July, 99.3 percent in August, and is 99.4 percent for the year. Generation market readiness factor⁴ was 99.9 percent in July and 99.7 percent in August, compared with monthly targets of 99.4 percent. Year-to-date generation market readiness factor is 99.9 percent.

There was one significant unplanned generation event⁵ in July. At the Brentwood Gas Turbine Facility on Long Island, a gas compressor⁶ tripped due to low lube oil pressure. The resulting outage lasted three days.

There were no significant unplanned generation events in August.

Generation revenue in July was \$247.7 million, with less than \$0.1 million revenue lost from unscheduled outages. Generation revenue in August was \$210.5 million, with less than \$0.3 million revenue lost from unscheduled outages. Year-to-date lost opportunity cost is \$1.91 million, about 0.14 percent of year-to-date generation revenue of \$1,360.0 million.

River flows at the Niagara Power Project were above forecast in July and August, and are forecast to be above average through the beginning of 2012. At the St. Lawrence-FDR Power Project, flows were above forecast in July and August, and are expected to be at historical average levels in 2012.

Transmission Performance

Transmission reliability⁷ in July was 94.99 percent, which was below the target of 99.68 percent. Transmission reliability in August was 96.15 percent, which was below the target of 99.58 percent. Year-to-date transmission reliability is 98.20 percent, below the target of 98.69 percent.

There was one significant unplanned transmission event⁸ in July that continued into August. On July 15, the Long Island Sound Cable⁹ (Y49 Feeder) experienced a fault in a buried section of the cable in Westchester County that resulted in an outage of 335 hours in July and 229 hours in August. Line repairs were completed on August 10.

Life Extension and Modernization Program

Work on Unit 19 at the St. Lawrence-FDR Power Project, the 15th of the 16 units, began on July 25 as part of the Project's Life Extension and Modernization¹⁰ (LEM) program. The unit is expected to return to service on April 18, 2012. The 2013 scheduled completion date for the LEM project remains unchanged.

Environmental

There were three reportable events in July. At the Niagara Power Project, a lawn mower released over one pint of hydraulic fluid to land and approximately one gallon of hydraulic fluid to pavement due to a failed fitting. This incident was reported to the NYS Department of Environmental Conservation (NYSDEC) because it occurred partly on a permeable surface (i.e. grass and dirt). The spill was immediately cleaned up. Also at Niagara, an air conditioning unit leaked approximately 5.8 pounds of R-22 refrigerant¹¹, exceeding the NYS Department of Environmental Conservation (NYSDEC) Reportable Quantity limit (1 pound). At the St. Lawrence-FDR Power Project, approximately two to three gallons of hydraulic oil was released from a ruptured hydraulic line. NYPA General Maintenance responded with oil pads and booms to contain the spill, and approximately two yards of contaminated soil was recovered and stockpiled for future disposal.

There were two reportable events in August. At Niagara, there was an exceedance of the Total Suspended Solids condition of the State Pollution Discharge Elimination System (SPEDS) permit¹², most likely as a result of improper contractor sampling. On the

Transmission system, approximately 2,200 gallons of dielectric fluid was released as a result of pipe corrosion on Feeder Q35L. The leak was discovered by Con Edison, which maintains the line and made regulatory notifications to NYSDEC and the NYC Department of Environmental Protection. Clean up efforts are ongoing.

Year-to-date number of recordable environmental incidents is 25; the 2011 target is 25.

Transmission Initiative

NYPA continues to work with National Grid, Con Edison, and the Long Island Power Authority (LIPA) regarding a proposed transmission line that would deliver power from Canada and upstate renewable energy projects to New York City and Long Island. Staff is developing alternative project configurations that would terminate in either Westchester County or further north of New York City. These configurations could be more cost effective and could address many New York State energy issues.

Technical Compliance – NERC Reliability Standards

In July, the Northeast Power Coordinating Council (NPCC)¹³ completed its on-site Federal Energy Regulatory Commission¹⁴ (FERC) Order 706 audit for Critical Infrastructure Protection¹⁵ (CIP) standards at the Clark Energy Control Center and Niagara Power Project. In its exit briefing, the NPCC audit team stated that they did not discover any findings of potential violations of the CIP standards. They suggested a couple of improvements for NYPA's CIP compliance program, but also identified several examples of reliability compliance excellence.

Also in July, NPCC completed its off-site FERC Order 693 audit (non-CIP standards) of NYPA. In its exit briefing, the NPCC audit team stated that they did not discover any findings of potential violations of the FERC Order 693 standards that were audited, nor did they have any recommendations for improvements.

In August, NPCC provided NYPA with the draft public and non-public audit reports for both the Order 706 and Order 693 audits. The reports defined the audit process, the audit methodology and scope, and summarized the audit results. As stated above, there were no findings of potential violations from either audit – a significant accomplishment. NYPA provided NPCC with minor comments on the FERC Order 693 draft audit reports in late August. Comments on the FERC Order 706 draft audit reports will be submitted to NPCC in mid-September. The final reports for both audits are expected to be completed and filed with the North American Electric Reliability Corporation¹⁶ (NERC) in late September.

Pursuant to FERC Order 743, NERC established a Standard Drafting Team to develop a new Bulk Electric System (BES) definition and a Rules of Procedure Team to develop rules of procedure for an exception process. NYPA's internal team of subject matter experts continues to monitor the work of both of these teams. At a July meeting in Salt Lake City, the teams reviewed and discussed industry comments related to demonstrating exceptions and the exception process. In August, the teams posted the second draft of the new BES Definition and Implementation Plan for a 45-day ballot pool and comment period and a 10-day ballot period.

The Rules of Procedure, which addresses the process for requesting BES exceptions, is anticipated to be posted for stakeholder comment and ballot in September. NYPA will submit comments and vote on these proposals pursuant to the established standards development process.

Representatives from the New York Independent System Operator¹⁷ (NYISO) and the New York Transmission Owners continue to work together to plan for obligations that could result from the revised BES definition. Preliminary estimates of possible cost and resource implications to meet the obligations of the Reliability Coordinator and Transmission Operator functions using three evaluated options of registration models were completed following a high level review of the requirements within the current applicable NERC Standards. The general consensus during the team's August 30 meeting was that compliance may require significant increases in enduring resources to manage both operational and compliance requirements. However, the analysis remains insufficient to inform a recommendation. The team agreed to review the requirements in more detail and identify what additional next steps are required to achieve a robust recommendation. The next meeting is planned for September 16, when NPCC will be invited to provide its perspective on Transmission Operator registration options.

NYPA continues to implement its assessment plan developed in response to NERC's Alert Recommendation to Industry regarding overhead transmission line ground clearances pursuant to the NERC Facility Ratings Standards. NYPA's assessment progressed as planned in July and August. Consultants performing ground clearance studies of NYPA transmission facilities issued an updated schedule confirming that all studies will be complete by the end of 2011.

In July, NYPA received notification that the mitigation plans for self-reports identified in February 2011 associated with NERC Standards PRC-005 and PRC-018 were approved by NPCC and NERC enforcement staff.

Energy Resource Management

NYISO Markets

In July, Energy Resource Management (ERM) bid more than 2.7 million MWh of NYPA generation into the NYISO markets, netting \$85.8 million in power supplier payments to the Authority. In August, Energy Resource Management (ERM) bid more than 2.5 million MWh of NYPA generation into the NYISO markets, netting \$69.6 million in power supplier payments to the Authority. Year-to-date net power supplier payments are \$376.5 million.

Fuel Planning & Operations

In July, NYPA's Fuels Group transacted \$36.5 million in natural gas and oil purchases, compared with \$20.3 million in July 2010. In August, the Fuels Group transacted \$29.1 million of fuel purchases, compared with \$20.0 million in August 2010. Year-to-date natural gas and oil purchases are \$182.9 million, compared with \$155.2 million at this point in 2010. The total

year-to-date \$27.7 million increase is mainly attributed to the start up of Astoria Energy II Plant (+\$22.0 million), increased fuel cost at the 500-MW Combined Cycle Plant (+\$2.5 million), and increased generation at the Small Clean Power Plants (+\$6.1 million) and the Richard M. Flynn Power Plant (+\$9.7 million), which was offset by cessation of operations at the Poletti Power Project (-\$12.6 million, the last day of operations was January 31, 2010).

GLOSSARY

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 100-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** – Forced or emergency outages of individual generator units of duration greater than 72 hours, or with a total repair cost of greater than \$75,000, or resulting in greater than \$50,000 of lost revenues.

⁶ **Compressor** – The part of the gas-fired turbine that compresses intake air to high pressure so that it can be used in the combustion area.

⁷ **Transmission Reliability** – A measurement of the impact of forced and scheduled outages on the statewide system's ability to transmit power.

⁸ **Significant Unplanned Transmission Events** – Forced or emergency outages of individual transmission lines that 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 eight hours, or have a repair cost greater than \$75,000.

⁹ **Long Island Sound Cable** – The Sound Cable Project, designated as Feeder Y49, is a 345 kV AC transmission circuit connecting the Consolidated Edison Company of New York, Inc. Sprain Brook Substation in Westchester County with the LIPA East Garden City Substation in Nassau County. The project is approximately 26.3 mile long, including 18.4 miles of underground high pressure fluid filled pipe-type cable and 7.9 miles of underwater self-contained fluid filled cable submarine crossing in the Long Island Sound.

¹⁰ **Life Extension and Modernization Program** — A major undertaking in which all the turbines at the St. Lawrence-Franklin D. Roosevelt project are being replaced and the generators

and other components significantly refurbished. The program is intended to ensure that the project operates at maximum efficiency far into the future.

¹¹ **R-22 Refrigerant** – Common refrigerant used in residential and light commercial air conditioning, refrigerators, and freezers. R-22 is being phased out of production in the U.S. because of concerns over its threat to ozone depletion.

¹² **State Pollution Discharge Elimination System (SPDES) Permit** – A permit required by the New York State Department of Environmental Conservation to regulate the point source discharge of pollutants contained in process water and storm water to surface water and ground water in New York State.

¹³ **Northeast Power Coordinating Council (NPCC)** – The Northeast Power Coordinating Council, Inc. (NPCC) is the cross-border regional entity and criteria services corporation for Northeastern North America. NPCC's mission is to promote and enhance the reliable and efficient operation of the international, interconnected bulk power system in Northeastern North America pursuant to an agreement with the Electric Reliability Organization (ERO) which designates NPCC as a regional entity and delegates authority from the U.S. Federal Energy Regulatory Commission (FERC), and by Memoranda of Understanding with applicable Canadian Provincial regulatory and/or governmental authorities. The ERO to which NPCC reports is the North American Electric Reliability Corporation (NERC).

¹⁴ **Federal Energy Regulatory Commission (FERC)** – An independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.

¹⁵ **Critical Infrastructure Protection (CIP)** – The Critical Infrastructure Protection (CIP) program coordinates all of the North American Electric Reliability Corporation's (NERC) efforts to improve physical and cyber security for the bulk power system of North America, as it relates to reliability. These efforts include standards development, compliance enforcement, assessments of risk and preparedness, disseminating critical information via alerts to industry, and raising awareness of key issues.

¹⁶ **North American Electric Reliability Corporation (NERC)** – The organization that develops and enforces mandatory reliability standards for the bulk power system in the United States, issues long-term and seasonal reliability forecasts and monitors the power system. (NERC standards are also mandatory and enforceable in parts of Canada.)

¹⁷ **New York Independent System Operator** – A not-for-profit organization that operates New York State's transmission system, administers the state's wholesale electricity markets, and engages in planning to ensure the future reliability of the statewide power system.