

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



Edward Welz
Acting Chief Operating Officer

TO: NYPA BOARD OF TRUSTEES
FROM: EDWARD WELZ, ACTING CHIEF OPERATING OFFICER
DATE: NOVEMBER 15, 2011
SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

This report covers performance of the Operations group in October.

Power Supply

Plant Performance

Systemwide net generation¹ was 2,196,660 megawatt-hours² (MWh) in October, compared to projected net generation of 2,033,537 MWh. Year-to-date net generation is 22,811,323 MWh, compared to the target of 21,038,091 MWh.

The fleet availability factor³ was 91.0 percent in October and is 96.5 percent for the year. Generation market readiness factor⁴ was 100.0 percent in October, compared with the monthly target of 99.4 percent. Year-to-date generation market readiness factor is 99.8 percent.

There were two significant unplanned generation events⁵ in October, both of which occurred on the 500-MW Combined Cycle Plant's Unit 7B. First, repair of the 7B exciter⁶, which failed on September 27, ended on October 5. Also, an oil leak on Unit 7B turning gear occurred on October 7.

Generation revenue in October was \$167.1 million, with \$0.35 million revenue lost from unscheduled outages. Year-to-date lost opportunity cost is \$2.31 million, about 0.14 percent of year-to-date generation revenue of \$1,710.0 million.

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

Transmission Performance

Transmission reliability⁷ in October was 86.67 percent, which was above the target of 86.54 percent. Year-to-date transmission reliability is 97.14 percent, below the target of 97.47 percent.

There were no significant unplanned transmission events⁸ in October.

Environmental

There were two reportable events for October. At the Poletti Power Project, while excavating to determine the cause of a ground subsidence, approximately 1-2 gallons of oil were released from a broken pipe feeding the oil water separator at the former 825 MW facility.

The second event took place at the Clark Energy Center where, when preparing equipment for auction, a contractor hooked up to a NYPA owned gooseneck trailer and, while in the process, pressurized a hydraulic hose on the trailer which failed, releasing 1-2 pints of oil to the stone surface.

Year-to-date number of recordable environmental incidents is 31; the 2011 target is 27.

Relicensing – Niagara Power Project

Two Requests for Proposals (RFP) were issued for excavation and plant cultivation/installation for the Motor Island Habitat Improvement Project (HIP), and the NYS Department of State issued a letter concurring that the project met Coastal Zone Management Policy consistency requirements. The ninety percent design for the Frog Island HIP was presented to the Ecological Standing Committee.

Construction work continued at Reservoir State Park on landscaping, interior work and utilities at the new comfort station and Winter Pavilion; roofing at new open pavilions; drilling of softball diamond no. 1 lighting foundations; and final surface treatments at new and refurbished ball courts. Landscaping work was completed at the Niagara intakes, with shelter and kiosk fabrication for the intakes area still ongoing.

Relicensing – St. Lawrence-FDR Power Project

An RFP for construction was issued for the Little Sucker Brook Habitat Improvement Project. The U.S. Army Corps of Engineers permit Public Notice for the Nichols Island HIP was issued with a closing date of November 4. We anticipate this will result in a permit for construction shortly. The construction of the pumphouse on the Wilson Hill Causeway has commenced. This is the last element to complete the water management system at the Wilson Hill Wildlife Management Area. Perras Excavating is expected to begin construction in November of two new fishing piers in Waddington that will be compliant with the Americans with Disabilities Act.

Technical Compliance – NERC Reliability Standards

In October, NYPA successfully completed the Northeast Power Coordinating Council⁹ (NPCC) self-certifications associated with the Critical Infrastructure Protection¹⁰ (CIP) Standards CIP-002-3 through CIP-009-3. All of NYPA's 2011 NPCC self-certifications of reliability standards compliance are now complete.

NPCC developed and conducted a Culture of Compliance Survey of its approximately 350 North American Electric Reliability Corporation¹¹ (NERC) registered entities and expects to have all results compiled by the end of 2011. In a letter NYPA received on October 18, NPCC concluded that NYPA clearly has demonstrated that it meets or exceeds all minimum characteristics of a favorable culture of compliance. Entities will be given credit with regard to penalties and sanctions if an effective compliance program is in place.

In October, the industry cast ballots and submitted comments for the revised Bulk Electric System (BES) Definition and the Technical Principles for Demonstrating BES Exceptions. The industry approved the new BES Definition, but rejected the Technical Principles for Demonstrating BES Exceptions. Final recirculation ballots for these are expected in November and adoption of both is expected in January 2012. With the adoption of the new BES Definition NYPA will have to provide NPCC with a Transition Plan for applying the NERC Reliability Standards to all transmission and generation elements, if any, according to the new definition. In NYPA's case, additional transmission elements will become part of the BES. NYPA's Transition Plan will need to be submitted to NPCC in December 2011.

Research & Technology Development

Three Kelman multiple gas analyzers were installed (for a total of six) on the Massena substation's 765kV transformers. These gas analyzers monitor the transformers and warn if failure is imminent, preventing spillage of the transformer oil. This information will be available to St. Lawrence and Asset Management staff.

A new project was initiated entitled "New Integrated Digital Fault Record (DFR) / Phasor Measurement Unit (PMU)" at Marcy. This equipment will provide additional networking capabilities which are beneficial in anticipation of potential future NERC requirements. This equipment will replace old DFRs at the Marcy substation and provide additional Phasor Measurement Unit capabilities.

The Chief Technology Officer made a presentation entitled "NYPA – Academia R&D Collaboration" to the IEEE Central Area Industry Day Conference. This conference provided a platform for the exchange of information across multiple disciplines regarding technical exchanges and collaboration between academia and industry.

Energy Resource Management

NYISO Markets

In October, Energy Resource Management (ERM) bid more than 2.1 million MWh of NYPA generation into the NYISO markets, netting \$40.0 million in power supplier payments to the Authority. Year-to-date net power supplier payments are \$470.3 million.

Fuel Planning & Operations

In October, NYPA's Fuels Group transacted \$12.9 million in natural gas and oil purchases, compared with \$12.8 million in October 2010. Year-to-date natural gas and oil purchases are \$220.2 million, compared with \$181.8 million at this point in 2010. The total year-to-date \$38.4 million increase is mainly attributed to the start up of Astoria Energy II Plant (+\$34.1 million), increased fuel cost at the 500-MW Combined Cycle Plant (+\$4.0 million), and increased generation at the Small Clean Power Plants (+\$6.8 million) and the Richard M. Flynn Power Plant (+\$6.1 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 **Exciter** – The system used to regulate the machine speed and voltage output.

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 **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).

¹⁰ **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.

¹¹ **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.)