



**Edward Welz**  
Chief Operating Officer

TO: NYPA BOARD OF TRUSTEES  
FROM: EDWARD WELZ, CHIEF OPERATING OFFICER  
DATE: FEBRUARY 12, 2013  
SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

\*\*\*\*\*

This report covers performance of the Operations group in January 2013.

## **Operations**

### *Plant Performance*

Systemwide net generation<sup>1</sup> was 2,016,214 megawatt-hours<sup>2</sup> (MWh) for January 2013 (and for year-to-date), which is above the projected net generation of 2,007,781 MWh.

The fleet availability factor<sup>3</sup> was 87.3 percent in January 2013. Generation market readiness factor<sup>4</sup> was 99.7\* percent in January, which is above the monthly target of 99.4 percent. Year-to-date generation market readiness factor was also at 98.9 percent.

Three significant outages occurred during January, while one significant outage that began last year continued into the month:

- a) Astoria 500MW had three major outages:
  1. Unit 7A failed to make start-up schedule and remained out of service for 24 hours. This resulted in loss of revenue of \$1,143,448.
  2. The following week, Unit 7A went out of service due to emission issues. The unit returned to service on February 3, 2013. The length of the outage was 166 hours with a revenue loss of \$69,370.
  3. Unit 7S was forced out of service due to loss of vacuum. The unit returned to service on February 3, 2013. The length of the outage was 179 hours with no loss of revenue.

- b) The weld crack repairs on St. Lawrence Unit 28 continued into the month. The unit is expected to return to service on March 15, 2013.

Generation net revenue in January (and for the year) was \$37.3 million with loss of revenue of \$1.2 million during the month.

Niagara River flows in January 2013 continued to be below the historical average, and are expected to be below average for at least the next two years. St. Lawrence River flows during January 2013 were also below forecast. River flows are expected to be below historical levels beyond 2013.

#### *Transmission Performance*

Transmission reliability<sup>[i]</sup> in January was 96.81 percent, which was above the target of 95.17 percent. Year-to-date transmission reliability is 96.81 percent, above the target of 95.17 percent.

There were no significant unplanned transmission events to report in January.

#### *Safety*

The NYPA Dart Rate for January 2013, and year-to-date, is 0.83 compared to the target of 0.78. The Operations Dart Rate for January 2013 is 1.28 compared to the target of 1.08.

One lost time injury occurred in January at Niagara when a maintenance mechanic suffered a concussion when he fell backwards and hit his head on the ground.

#### *Environmental*

There were two reportable incidents for January 2013 and for the year:

- 1) At Gilboa, approximately 20 lbs. of R-22 refrigerant was found absent from the S&R building AC unit.
- 2) At St. Lawrence, a SPDES excursion runoff exceeded the Total Suspended Solid (TSS) at outfall 018. This was attributed to sand and salt runoff.

The annual target is 32 incidents.

#### *Relicensing – Niagara Power Project*

Work at the Schoellkopf Overlook has been halted. Construction associated with the Maid of the Mist proposal will require disturbing significant areas at the Overlook. To minimize the amount of reinstallation and restoration required at the end of those activities, the Relicensing refurbishment efforts have been suspended, awaiting resolution of the Maid of the Mist proposal.

Construction work at the Habitat Improvement Projects (HIP) has been suspended for the winter. During the winter months, we expect to receive the remaining permits (primarily Corps of Engineers) needed to commence construction on Frog Island next season. The Corps has indicated that they intend to permit this HIP under their Nationwide permit program which should expedite the process. Design work on the Strawberry Island HIP, which is the last of the Niagara HIPs, continues.

#### *Relicensing – St. Lawrence-FDR Power Project*

Construction of the Nichols Island Controlled Level Pond HIP continues although progress is day-to-day as winter has set in. The access road through the project is now complete. The rehabilitation of Dike A (eastern most) is nearly complete. Dike construction will now proceed moving the west. Dike B construction will be next.

Office of Parks, Recreation and Historic Preservation (OPRHP) continues construction of the new Coles Creek Marina Building. Foundations and steel frame erection are complete. Work continues day-to-day due to winter conditions.

#### *Relicensing – Blenheim-Gilboa Project*

Preparation of the preliminary licensing documents continues. A Strategy White Paper is being prepared to support executive decision making. At this time, no significant regulatory issues that would impact relicensing have been identified.

#### *Life Extension and Modernization Programs*

##### St. Lawrence LEM Upgrade

Unit 17 was taken out of service on January 2, 2013 to start unit automation work. To-date, all required asbestos abatement activities have been completed and cable pulling started. The unit is projected to return to service on June 28, 2013. The 2013 scheduled completion date for the LEM Program remains unchanged.

##### Transmission LEM

Project teams continue coordinating activities to support engineering, procurement, and construction activities associated with the St. Lawrence Circuit Breaker and Relay Replacement as well as the Niagara Relay Replacement projects approved under the program. Relay replacements are on-going at Blenheim-Gilboa and Clark Energy Center.

Replacement of the spare auto-transformer at Massena Substation is in progress with equipment delivery expected in mid-2013. A kick-off meeting was conducted with SMIT for fabrication and delivery of the remaining (6) auto-transformers at Massena Substation..

Refurbishment of Auto-Transformer 1B at Marcy is ongoing with completion expected in May 2013. Proposals have been received and are being evaluated for refurbishment of the remaining auto-transformers and reactors at Marcy as well as Massena Substation.

A Request for Proposal (RFQ) has been issued for tower modeling of the weathering steel structures. A RFQ is being compiled for painting of the transmission structures in the St. Lawrence region.

### LPGP LEM

The fourth (and final) feeder outage (Feeder 1) to replace the fourth GSU, and potheads at the Switchyard and LPGP in addition to upgrading of the Isolated Phase Bus sections, is scheduled to commence February 11, 2013. The new Unit Control Board for the first unit to be upgraded (#11) was inspected and the factory acceptance testing commenced in January and the delivery has been moved to March. The first new turbine is scheduled to arrive at LPGP in April 2013. The fabrication of the second and third turbine components are well underway and the fourth turbine was released for fabrication. The first unit outage commenced and the disassembly was completed on January 12, 2013 as scheduled. The stay ring was cleaned and inspected and repairs are required similar to the St. Lawrence stay ring; this work is being expedited in order to maintain schedule. The LPGP LEM program is scheduled to be completed in 2020.

### RMNPP Unit 13 Standardization

The outage for the standardization work commenced on September 14<sup>th</sup>, 2012. The measurements of the stator sole plates and the surrounding stator concrete floor revealed that a ½ inch of concrete needs to be removed around half of the underlying stator floor circumference. The concrete removal work will not impact the schedule. Voith continued with the assembly of the new stator in the Assembly Bay which is scheduled to be completed by May 2013 in time for installation into Unit 13.

### *Technical Compliance – NERC Reliability Standards*

In January, Technical Compliance continued to oversee compliance enforcement actions related to several of the NERC Reliability Standards that are applicable to NYPA's NERC registrations. There are currently active enforcement actions for six (6) self reports of possible violations of the standards. One of these was submitted to the Northeast Power Coordination Council (NPCC) in 2011, one in 2012 and four (4) in January 2013. For those submitted in 2011 and 2012, NYPA is awaiting the initiation by NPCC of settlement discussions. For those submitted in January 2013, mitigation plan documents are under development that will be submitted to NPCC as part of the enforcement process.

The self reports of possible violations submitted to NPCC in January were the result of investigations of compliance concerns identified by the staff pursuant to an internal procedure entitled "Possible NERC Reliability Standards Compliance

Violation.” The compliance concerns were associated with the Voltage and Reactive (VAR), Critical Information Protection (CIP), and Protection and Control (PRC) reliability standards. Investigations of two possible compliance violation concerns related to the Modeling, Data, and Analysis (MOD) reliability standards continued in January. This internal process is viewed by the regulator as evidence that NYPA has a strong internal compliance program.

The Federal Energy Regulatory Commission (FERC) approved the new Bulk Electric System (BES) definition on December 20, 2012 that will require transmission assets above 100 kV to be subject to the NERC Reliability Standards. In January, NYPA staff continued work to identify any compliance gaps for 40 newly identified BES elements under NYPA’s current NERC registrations. NYPA staff also continued to engage the NYISO and the other NY Transmission Owners to assess both Transmission Operator (TOP) and Transmission Planning (TP) functional registration and compliance management impacts and actions pursuant to the new BES definition.

In January, NYPA continued to implement its work plan for responding to a 2010 NERC Alert Recommendation that requires NYPA to review its current facility ratings methodology for their solely and jointly owned transmission lines to verify that the methodology used to determine facility ratings is based on actual field conditions. The assessment revealed that there are about 260 line clearance discrepancies in NYPA’s 1,400 miles of transmission lines. Staff engaged contractors and other utilities to remediate the discrepancies on the high priority lines. Currently, there is one outstanding high priority discrepancy pending resolution by National Grid. The remediation of discrepancies on the medium priority lines is being planned for completion in 2013. Design packages are being finalized by Quanta Technology / Realtime Utility Engineers and CT Male for mitigating the discrepancies on the medium and low priority transmission lines.

## Energy Resource Management

### *NYISO Markets*

In January, Energy Resource Management (ERM) bid 2.2 million MWh of NYPA generation into the NYISO markets, netting almost \$60.2 million in power supplier payments to the Authority. Year-to-date net power supplier payments are \$60.2 million after the first month of 2013.

### *Fuel Planning & Operations*

In January, NYPA's Fuels Group transacted \$39.7 million in natural gas and oil purchases, compared with \$27.0 million in January 2012. The total \$12.7 million increase is mainly due to the higher cost of fuel at the Astoria Energy II Plant (\$11.3 million), Small Clean Power Plants (\$3.4 million) and the Richard M. Flynn Power Plant (\$1.1 million), which was offset by the outage at the 500-MW Combined Cycle Plant (-\$3.3 million).

Fuel oil was purchased for AEII (\$2.6m) and Flynn (\$985k) respectively for the purpose of replenishing inventory level in preparation for winter operations and to meet contractual obligations. In anticipation of compliance with *NYS DEC regulation 225-1, Fuel Composition and Use-Sulfur Limitations* the fuels group sold 28,000Bbls of 2,000ppm sulfur oil to Northville Industries in an effort to deplete one oil storage tank with the intent to refill with compliant oil (15ppm sulfur).

## GLOSSARY

---

<sup>1</sup> **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.

<sup>2</sup> **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.

<sup>3</sup> **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).

<sup>4</sup> **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.

<sup>5</sup> **Regional Greenhouse Gas Initiative (RGGI)** – A cooperative effort by Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. These nine states have capped CO<sub>2</sub> emissions from the power sector, and will require a 10 percent reduction in these emissions by 2018. RGGI is composed of individual CO<sub>2</sub> Budget Trading Programs in each of the nine participating states. Regulated power plants can use a CO<sub>2</sub> allowance issued by any of the nine participating states to demonstrate compliance with the state program governing their facility. Taken together, the nine individual state programs function as a single regional compliance market for carbon emissions, the first mandatory, market-based CO<sub>2</sub> emissions reduction program in the United States. New Jersey was a tenth state within the RGGI program but New Jersey's governor pulled the state out of the program in 2011.

\* Generation Market Readiness result does not include STL Unit 28 which is under review.