

123 Main Street
White Plains, NY 10601-3170
914.681.6621
914.681-6804 (Fax)
Gil.Quiniones@nypa.gov



Gil C. Quiniones
Chief Operating Officer

TO: NYPA BOARD OF TRUSTEES
FROM: GIL C. QUINIONES, CHIEF OPERATING OFFICER
DATE: DECEMBER 13, 2010
SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

This report covers performance of the Operations Group in the months of October and November. During these months, NYPA continued to limit lost opportunity cost from unscheduled generation outages to a small share of total generation revenues.

Power Supply

Plant Performance

Systemwide net generation¹ in October was 1,919,280 megawatt-hours² (MWh), compared to projected net generation of 1,963,412 MWh, and in November was 2,080,978 MWh compared to projected 2,255,802 MWh. For the year, actual net generation is 22,095,378 MWh, which is below the year-to-date net generation target of 23,243,940 MWh.

The fleet availability factor³ was 95.9 percent during October. November and year-to-date fleet availability factor data was not available for this report but will be included in the January 2011 COO Report. The generation market readiness factor⁴ was 99.9 percent in October and 100 percent in November, performance in both months above the monthly target of 99.4 percent. For the year, generation market readiness is 99.8 percent.

There were no significant unplanned generation events⁵ in October. There was one significant unplanned generation event in November: a failure of the compressor⁶ in Unit 5 at the Gowanus Gas Turbine facility in Brooklyn. The cause of this failure has not yet been determined. Repairs are due to be completed in early December.

There was no lost opportunity cost from unscheduled outages in October, compared with generation revenue of \$138.8 million. In November, total lost opportunity cost from unscheduled outages was \$0.2 million compared with generation revenue of \$143.1 million. The year-to-date lost opportunity cost is \$0.9 million, which is about 0.05 percent of year-to-date generation revenue of \$1,814.8 million.

River flows at the Niagara project were below forecast in October and November, and they are forecast to be well below normal for the next several months, due to low precipitation in the Great Lakes Basin that has continued since December 2009. At the St. Lawrence-FDR project, flows were slightly above forecast in October but slightly below forecast in November.

Transmission Performance

Transmission reliability⁷ in October was 91.79 percent, which was above the target of 91.46 percent; it was 97.01 percent in November, which was above the target of 95.64 percent. The year-to-date actual reliability is 95.75 percent, below the target of 95.96 percent. Performance has been affected by some unanticipated outages in 2010, several forced outages⁸, and some scheduled outages⁹ that have taken longer than expected.

There was one significant unplanned transmission event¹⁰ in October. The FACTS STATCOM¹¹ at the Clark Energy Center in Marcy, NY, had an outage for a total of 38 hours because of a burnt capacitor¹².

There was also one significant unplanned transmission event in November. The Niagara-Rochester line was out of service for a total of seven hours to repair an underground conduit¹³ damaged while leveling the surface of the stone gravel surrounding the power terminal in the switchyard.

Life Extension and Modernization Programs

Work on Unit 24 at the St. Lawrence-FDR project, the 14th of the 16 units, continues as part of the project's Life Extension and Modernization¹⁴ (LEM) program. The upgrade is expected to be completed in May 2011. The 2013 scheduled completion date for the LEM project remains unchanged.

Environmental

There were three environmental events in October. At Blenheim-Gilboa, a release of an unknown amount of oil and gasoline occurred, associated with the removal of underground storage tanks at the facility. There was also a minor release of cable oil associated with a leaking pothead¹⁵ at the Harlem River Yards Gas Turbine facility. Finally, the Niagara Power Project received a Notice of Violation for failure to have underground storage tanks labeled in accordance with requirements of the New York State Department of Environmental Conservation.

There were also three environmental events in November: there was a release of an estimated 100 gallons of oil at the Clark Energy Center, a release of 2.5 gallons of ethylene glycol at the Niagara Power Project, and a release of approximately two gallons of fire fighting foam concentrate into the East River near the Poletti Power Project during a joint exercise with the New York City Fire Department.

The total year-to-date number of recordable environmental incidents is 24. The 2010 maximum target for recordable environmental incidents is 25.

Technical Compliance – NERC Reliability Standards

On October 21, the Northeast Power Coordinating Council¹⁶ (NPCC) conducted an assessment of NYPA's Technical Feasibility Exception requests for Part B in the White Plains Office. These apply to NYPA's Critical Infrastructure Protection¹⁷ (CIP) program. NPCC approved all of NYPA's requests.

On November 16, NPCC sent a "Notice of Dismissal" to NYPA for one potential violation of NYPA's CIP Physical Security of Critical Cyber Assets (CIP-006) standard. NYPA had submitted a self report for this standard in July. NYPA was not found to be in violation of the standard and was assessed no penalty. This matter will not require further action.

On November 18, the Federal Energy Regulatory Commission¹⁸ issued its final rule on the "Revision to Electric Reliability Organization Definition of the Bulk Electric System". The implications of this rule on NYPA are being evaluated by Technical Compliance in consultation with the NPCC, which will be issuing guidance to its members regarding the definition, registration impacts (e.g. potential for NYPA to register as a Transmission Operator), the exemption process, and the implementation plan.

On November 30, due to concerns expressed by the industry, the North American Electric Reliability Corporation¹⁹ (NERC) extended the deadline for responses to its "Alert Recommendation to Industry" to mid-January 2011. NERC issued the Alert to address possible discrepancies between the design and actual field conditions of transmission facilities. NYPA will need to review current Facility Ratings Methodology for our solely- and jointly-owned transmission lines to verify that they are based on actual field conditions.

In early December, NPCC notified NYPA that it had closed the Compliance Inquiry opened in February requesting information and documentation regarding a system event that occurred at the Niagara Power Project that took a 345 kV transmission line to Ontario, Canada, out of service.

Energy Resource Management

NYISO Markets

In October, Energy Resource Management (ERM) bid more than 1.9 million MWh of NYPA generation into the NYISO markets, netting \$22.7 million in power supplier payments to the Authority. In November, ERM bid more than 2.0 million MWh of NYPA generation into the NYISO markets, netting \$31.9 million in power supplier payments.

In October, Niagara production was 11.9 percent lower relative to the prior year. In November, Niagara production was 13 percent lower relative to 2009. While energy prices are higher relative to last year, they remain below the historical average.

At Blenheim-Gilboa, October production and revenues were both higher relative to the previous year, but in November they have fallen as a result of entering into the shoulder period between the summer peak and winter off-peak markets.

The Small Clean Power Plants and the 500-MW Combined Cycle Plant are exceeding year-to-date forecasted net margin.

Fuel Planning & Operations

In October, NYPA's Fuels Group transacted \$13 million in natural gas and oil purchases, compared with \$30 million in October 2009. In November, Fuels Group transacted \$12 million of fuel purchases, compared with \$25 million in November 2009. Year-to-date natural gas and oil purchases are \$194 million compared with \$328 million year-to-date in November 2009. Total year-to-date reduction of \$134 million is mainly attributed to cessation of operation at Poletti (-\$72 million year-over-year) and lower cost of fuel to meet higher generating output for the 500-MW unit (-\$70 million). Decreased costs at Flynn (-\$10 million) due to outage were offset by higher costs associated with increased generation at the SSCP's (+\$18 million).

Regional Greenhouse Gas Initiative

On December 1, Auction 10 of the Regional Greenhouse Gas Initiative²⁰ was held, but NYPA did not participate as we have secured all of our estimated allowance requirements for 2010 from prior auctions.

Office of the Chief Operating Officer

New York State Climate Action Plan

On November 9, Governor Paterson released the New York State Climate Action Plan Interim Report for a 90-day public comment period. The Interim Report includes the draft policy options developed through a collaborative process coordinated by the Climate Action Council, a group established by Executive Order 24 and consisting of representatives from several state

agencies and authorities, including NYPA. The Council's mandate is to reduce New York's greenhouse gas emissions 80 percent from 1990 levels by 2050. Policy options developed by the Council's Power Supply and Delivery Technical Working Group (on which NYPA participated) aim to reduce emissions from electricity generation, increase the amount of renewable energy in the State's portfolio, and improve the electric grid. Other chapters of the Interim Report propose policies to reduce emissions from end-users, transportation, agriculture, and other sectors, recommend climate change adaptation policies, and analyze potential for innovation and economic growth through investment in clean energy technologies. The next phase of the process, slated to begin in 2011, will include cost analysis of the policy options and final recommendations for implementation of the Climate Action Plan.

Sustainability Action Plan

NYPA continues to make progress on implementing the 41 action items laid out in the Sustainability Action Plan. In October, NYPA submitted its report for Executive Order 4 on green procurement and agency sustainability. In addition, the White Plains Office green team continues to organize events to engage employees on various sustainability topics, and a green team was recently initiated at the Niagara Power Project that is initially focusing on expanding recycling efforts at the facility.

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 pump storage unit was pumping water instead of generating power).

⁴ **Generation Market Readiness** – The availability of generating facilities for bidding into the NYISO market. It factors in available hours and forced outage hours which 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 **Forced Outages** – An outage that requires immediate removal of a unit from service, automatically. This outage is considered Unplanned and Unscheduled.

⁹ **Scheduled Outages** – An outage is Scheduled if it was either submitted in advance (Planned) or can be delayed a few days (Maintenance).

¹⁰ **Significant Unplanned Transmission Events** – Forced or emergency outages of individual transmission lines which 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 8 hours, or that have a repair cost greater than \$75,000.

¹¹ **FACTS STATCOM** – The primary mode of the Marcy FACTS (Flexible A/C Transmission System) Device, a sophisticated device for controlling voltage and power flows on transmission lines to increase the capability of an existing transmission system. In a pioneering effort, NYPA completed installation of a series of advanced technologies (known as FACTS) in 2004 at the

Clark Energy Center’s Marcy Substation. The project boosted the capability of the New York State system by nearly 200 megawatts without the need to build new lines.

¹² **Capacitor** – Stores an electrical charge and is used to support system voltage.

¹³ **Conduit** – An electrical piping system used for protection and routing of electrical wiring.

¹⁴ **Life Extension and Modernization Programs**—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 programs are intended to ensure that the projects operate at maximum efficiency far into the future.

¹⁵ **Pothhead** – A type of insulator with a bell or pot-like shape used to connect underground electrical cables to overhead lines. It serves to separate the bunched-up conductors from one another in the cable to the much wider separation in the overhead line. It also seals the cable end from the weather.

¹⁶ **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).

¹⁷ **Critical Infrastructure Protection (CIP)** – The Critical Infrastructure Protection (CIP) program coordinates all of the North American Electricity 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.

¹⁸ **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.

¹⁹ **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.)

²⁰ **Regional Greenhouse Gas Initiative (RGGI)** – A cooperative effort by Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode

Island, and Vermont. These ten states have capped CO₂ emissions from the power sector, and will require a 10 percent reduction in these emissions by 2018. RGGI is composed of individual CO₂ Budget Trading Programs in each of the ten participating states. Regulated power plants can use a CO₂ allowance issued by any of the ten participating states to demonstrate compliance with the state program governing their facility. Taken together, the ten individual state programs function as a single regional compliance market for carbon emissions, the first mandatory, market-based CO₂ emissions reduction program in the United States.