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TO: NYPA BOARD OF TRUSTEES
FROM: GIL C. QUINIONES, CHIEF OPERATING OFFICER
DATE: JANUARY 25, 2011
SUBJECT: MONTHLY REPORT FOR THE BOARD OF TRUSTEES

This report covers the performance of the Operations group in December 2010 as well as year-end highlights.

Facing some early challenges, including unanticipated outages and below-average energy markets, the Operations group achieved significant milestones in 2010, such as completion of the Life Extension and Modernization program at the Blenheim-Gilboa Pumped Storage Power Project, and other remediation projects to improve conditions of the Authority's generation assets.

In 2011, the Operations group looks forward to advancing Life Extension and Modernization programs at the St. Lawrence-Franklin D. Roosevelt Power Project and Lewiston Pump Generating Plant at the Niagara Power Project, developing the New York Transmission Initiative to increase transmission capacity between Canada and downstate New York, and assisting the Astoria II project in Queens toward commercial operation.

Power Supply

Plant Performance

Systemwide net generation¹ in December was 2,271,628 megawatt-hours² (MWh), compared to projected net generation of 2,283,903 MWh. In 2010, actual net generation was 24,369,223 MWh, which was below the net generation target of 25,526,844 MWh.

The fleet availability factor³ was 98.8 percent in December and 95.7 percent in 2010. Generation market readiness factor⁴ was 99.7 percent in December, above the monthly target of 99.4 percent. Generation market readiness factor was 99.8 percent in 2010.

There was one significant unplanned generation event⁵ in December. At the Pouch Terminal Gas Turbine facility on Staten Island, a cable was damaged during an excavation of the sidewalk. This resulted in the unit being out of service for over two weeks and a loss of revenue of \$0.15 million.

There was \$0.32 million in lost opportunity cost from unscheduled outages in December, compared with generation revenue of \$161.3 million. In 2010, lost opportunity cost was \$1.26 million, which was about 0.06 percent of annual generation revenue of \$1,980.0 million.

River flows at the Niagara project were below forecast in December, and they are forecast to be well below normal for the next year 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 December and are expected to be slightly above average at the start of 2011. Flows are expected to be below normal from spring 2011 through the next two years.

Transmission Performance

Transmission reliability⁶ in December was 96.61 percent, which was above the target of 96.48 percent. The 2010 actual reliability was 95.82 percent, below the target of 96.01 percent. This performance metric was affected early in the year by some unanticipated outages, several forced outages⁷, and some scheduled outages⁸ that were longer than expected. Despite these early difficulties, NYPA's transmission reliability metric was above target for six of the last seven months of 2010.

There were no significant unplanned transmission events⁹ in December.

Life Extension and Modernization Program

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 Modernization¹⁰ (LEM) program. The upgrade is expected to be completed in May 2011. The 2013 scheduled completion date for the LEM project remains unchanged.

Civil Remediation Work at Niagara Power Project

Replacement of deteriorated concrete for both the interior and exterior of a particularly crucial area of the dam at the Niagara Power Project was completed successfully on December 29, on-time and within the \$2.2 million budget. NYPA staff and contractors worked extended days under an aggressive, compressed work schedule that established working hours when electrical loads are traditionally the lowest, to avoid significant outages on transmission lines connecting the U.S. and Canada. This required the exterior civil work to be performed at times when the weather was the most inclement. The willingness to work through schedule constraints

assured the timely return of crucial transmission lines in time for anticipated 2011 winter peak heating loads.

Environmental

There were two reportable events in December. A failed demineralizer¹¹ trailer valve at the Kent Gas Turbine facility in Brooklyn resulted in a release entering the New York City combined sewer system and violating a site permitted value. The second event occurred when the sump pumps of Unit 19 at the St. Lawrence-FDR Power Project failed and the turbine pit flooded. The rising water flooded a reservoir holding lubricating oil and caused approximately 100 gallons of oil to be spilled, but all of the oil was contained in the turbine pit.

The 2010 number of recordable environmental incidents was 26, exceeding the target of 25.

Transmission Initiative

NYPA is continuing 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. NYPA staff anticipates additional comments on the economic studies from Con Edison in mid-January. Scopes of work for additional System Planning Studies and the Project Evaluation Study have been prepared in conjunction with National Grid. An executive-level meeting between NYPA, National Grid, Con Edison and LIPA to further discuss the Transmission Initiative is scheduled for February 18.

Technical Compliance – NERC Reliability Standards

In December, Power Supply submitted two responses to Alerts issued by the North American Electric Reliability Corporation¹² (NERC). On December 9, NYPA responded to an Alert related to the management of system frequency response of the North American Interconnections. NERC asked for information and settings for generator governors for all generators rated 20 MVA or higher, or plants that aggregate to a total of 75 MVA or greater net rating at the point of interconnection (i.e., wind farms). On December 13, NYPA submitted information in response to NERC's Alert Recommendation to Industry urging entities to consider and implement identified mitigation elements that NERC classified into two broad categories – "Protection and Control Engineering Practices" and "Electronic and Physical Security Mitigation Measures" – to address specific vulnerabilities in their equipment.

On December 10, the Northeast Power Coordinating Council¹³ (NPCC) notified Alcoa of a pending registration action. In 2010, NPCC required the municipal power entities for which NYPA had been registered as the Load Serving Entity¹⁴ (LSE) to become registered LSEs. When this registration action is completed, NPCC will delist NYPA as an LSE. NYPA is also currently registered as the LSE for Alcoa, and NPCC has scheduled a meeting with Alcoa on January 27 to discuss the registration changes. NPCC has informed Technical Compliance that because of these registration actions, NYPA will not be audited in 2011 for NERC LSE standards.

On December 16, NYPA received a Notice of Dismissal from NPCC for one of the potential violations related to the Physical Security of Critical Cyber Assets that NYPA itself reported in July. The matter is now closed with NYPA not found in violation of the standard and not assessed any penalty.

Also in December, Internal Audits completed its audit of the standards not related to NERC's Critical Infrastructure Program. They prepared a draft report including one substantive recommendation pertaining to work processes for maintaining operator log data required by the standards.

Energy Resource Management

NYISO Markets

In December, Energy Resource Management bid more than 2.2 million MWh of NYPA generation into the New York Independent System Operator (NYISO) markets, netting \$58.2 million in power supplier payments to the Authority. While energy prices were higher in December relative to last year, they remained below the historical average. Total net power supplier payments in 2010 were over \$496 million.

In December, production at the Niagara Power Project was 1.9 percent lower relative to its four-year average, and it received \$16.6 million in power supplier payments. At STL-FDR, production was 3.5 percent higher than the four-year average and the project received \$10.2 million in power supplier payments. Blenheim-Gilboa received \$0.5 million in power supplier payments.

The Small Clean Power Plants (SCPP's) and the 500-MW Combined Cycle Plant are exceeding their year-to-date forecasted net margins.

Fuel Planning & Operations

In December, NYPA's Fuels Group transacted \$29 million in natural gas and oil purchases, compared with \$37 million in December 2009. In 2010, natural gas and oil purchases were \$224 million, compared with \$365 million in 2009; the \$141 million reduction is mainly attributed to cessation of operations at the Poletti Power Project (-\$80 million year-over-year) and lower cost of fuel to meet higher generating output for the 500-MW unit (-\$70 million). Decreased costs at the Richard M. Flynn Power Plant (-\$10 million) due to outages were offset by higher costs associated with increased generation at the SCPP's (+\$19 million).

Office of the Chief Operating Officer

Sustainability Action Plan

In 2010, NYPA completed 40 milestones established by the Sustainability Action Plan, exceeding the target goal of completing 35 milestones. More details will be provided in NYPA's first Sustainability Progress Report, targeted for release in 2011. The Progress Report will provide an update on all 41 action items and will include a number of performance indicators set forth by the Global Reporting Initiative¹⁵.

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

⁷ **Forced Outages** – Outages that require immediate removal of a unit from service, automatically. Such outages are considered Unplanned and Unscheduled.

⁸ **Scheduled Outages** – An outage is Scheduled if it was either submitted in advance (Planned) or can be delayed a few days (Maintenance).

⁹ **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.

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 **Demineralizer** – A component that removes minerals from water so that it can be used in industrial machines, such as the cooling system of a gas turbine power plant. Using pure water helps avoid corrosion in machines and pipes.

¹² **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.)

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 to 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 **Load Serving Entity (LSE)** – An entity designated by a retail electricity customer to provide capacity, energy and ancillary services to serve such customer, in compliance with NYISO tariffs, rules, manuals and procedures.

¹⁵ **Global Reporting Initiative (GRI)** – An organization that developed the world's most widely used sustainability reporting framework through a consensus-seeking process engaging participants from business, civil society, labor, and professional institutions. The GRI framework includes a standardized approach to sustainability reporting and sector-specific supplemental frameworks, including one for the electric utility sector.