Two-Year Report to the NYPA Board of Trustees

Submitted by
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President and CEO

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Overview

It's been a pleasure to serve as President and CEO of the New York Power Authority these past two years. No other period in my professional career has gone by so fast and has been so satisfying.

At my first Board of Trustees meeting in October, 2008, I set out some objectives to achieve that I thought would help overcome some of the challenges that confronted the Authority at that time. I also believed that one of the most important endeavors we could undertake would be to use our varied resources to create "jobs, jobs, jobs."

In thinking about the "jobs" goal and the timeframe in which it was articulated – the high point of the Wall Street economic meltdown – it seems that we were way ahead of the curve in directing our energies and resources to producing as positive an economic outcome as possible for New York and its citizens.

At that time, I stressed four top priorities, which included:

- restoring the Authority's integrity and reputation;
- a special focus on upstate New York and its economic challenges;
- upgrading the State's transmission system including the possibility of constructing a major north-south transmission line; and
- continuing to pursue ambitious energy efficiency and renewable energy goals.

Other priorities included continuing to achieve the high performance standards attained by our electric generation assets, especially the Niagara, St. Lawrence and Blenheim-Gilboa facilities.

Through the hard work of a highly motivated workforce, both union and management, we've been able to advance on all of these objectives.

And, personally, a great deal of travel has been undertaken to a reach a wide range of diverse stakeholders across the state including: NYPA employees and customers; elected officials; news media and editorial boards; community, environmental and business groups; and the public.

I'm pleased to present this report that highlights some of our collective accomplishments over the last two years. At the same time I want to thank the Trustees for their support and guidance, and NYPA's employees for their dedication and professionalism.

Richard M. Kessel
President/CEO
New York Power Authority

Improving Stakeholder Relations

Prior to my arrival at NYPA, the Authority's reputation was at risk due to a number of questionable practices that had taken place and investigations that were underway, namely the probe by the State Attorney General. Clearly, NYPA's standing as a credible state entity was under siege, jeopardizing its ability to secure public support so critical to advancing its projects and mission. Sadly, it was also greatly impacting employee morale at the same time.

It was evident that the next President and CEO of NYPA would need to take a much more active, hands-on role in advancing the Authority's agenda and in communicating directly with a wide range of stakeholders statewide.

Upon my arrival at the Power Authority in October, 2008, I made the commitment to enhance NYPA's reputation as a good corporate citizen and neighbor, and to raise awareness of the Authority's economic development priorities, its energy conservation programs and its commitment to clean energy research and development. Indeed, upon joining the Power Authority, I quickly learned its vital role as a foremost public power utility and leader in the energy field.

In the past two years, we have boosted NYPA's community, media and government outreach, customer relations and public awareness programs. Indeed, we have worked aggressively to build the foundations of relationships with federal, state and local officials and we have worked to open better lines of communication between NYPA and various stakeholders.

Community and Stakeholder Outreach

Within weeks of my first days as president, I traveled to Western New York and the North County, to reach out to stakeholders and officials to explore ways the Power Authority can partner with them in improving their communities and bolstering their economies.

Since that time, I have traveled to upstate New York more than 100 times, not only to the Buffalo-Niagara area and Massena – where, as you know, NYPA maintains its two major hydropower projects, but also to Watertown, Syracuse, Rochester, Elmira, Plattsburgh, Lake Placid, Rome, Gilboa, Greene, Sherburne, Hamilton, Schenectady, and Cooperstown to name just some of the locations visited. The purpose of these many ventures is to establish relations with stakeholders in regions where NYPA has critical infrastructure, and to raise greater awareness and understading throughout the State of our mission and goal. Indeed, we have business and municipal customers spread over every region of the State and a mandate to help our municipal governments, schools and public facilities lower their energy costs through clean energy and energy conservation efforts as there are nearly unlimited opportunities for clean energy projects in every corner of the state.

In my travels, I have met with hundreds of officials on the federal, state and local level to build upon existing relationships and create new ones. I've developed relations with local and regional economic development officials, community activists and Native American tribal leaders. I have

promoted NYPA's priorities to the editorial boards of major newspapers, including the Buffalo News, the Niagara Gazette, Buffalo Business First, the Rochester Democrat and Chronicle, the Syracuse Post Standard, the Watertown Daily Times, the Ogdensburg Journal, and the Plattsburgh Press Republican. I am proud to call "friend" both Mike Vogel, editor of the Buffalo News and John Johnson, publisher and editor of the Watertown Daily Times.

In fact, I strongly believe that my efforts to provide an open and ongoing line of communication with the Buffalo News led to its October 1 editorial "Keeping the Lights On," which strongly supported NYPA's decision and the trustee approval of power contract extensions for 106 Western New York Expansion power and Replacement Power customers. And, I'm also pleased that the Watertown Daily Times has recognized that "NYPA has become one of the most important economic development engines in the state."

I have delivered remarks at major industry conferences such as the Municipal Electric Utility Association, New York Association of Public Power, NYC Building Congress, Citizens Budget Commission, the Advanced Energy Research Technology Center and the International Trade Commission. In addition, I have spoken before numerous local business and community groups, many of which I consider recognized opinion leaders in their regions – the Plattsburgh Rotary, Buffalo Rotary, the Otsego Cooperative, Watertown and Rome Chambers of Commerce, Niagara USA Chamber and the Cornell Cooperative Extension. I have even delivered remarks to the Jefferson County and Niagara County legislatures during public sessions.

In an effort to bolster relations with our business customers, I've toured the facilities of such industry leaders as Steuben Foods, SCA Tissue, Anchor Glass, Corning Glass, and later today, I'll be traveling to Elba, NY to tour the facilities of Moog Inc.

Over the last two years our community outreach teams have participated in over 50 events in the New York metropolitan area, and have held scores of community events at our Niagara, St. Lawrence and Blenhiem-Gilboa visitor centers.

In support of the Governor's efforts to grow the clean energy economy in New York State, NYPA has taken an aggressive role in promoting its business-to-business registries for its two significant clean energy projects – the Great Lakes Off Shore Wind Initiative and the 100 MW Statewide Photovoltaic Initiative. These registries help link large clean energy corporations with smaller or specialized New York State-based businesses for opportunities to become subcontractors, suppliers or vendors. In doing so, I have personally engaged local business members at four "Get Listed" events sponsored by the Power Authority in Upstate New York, which attracted nearly 450 of business participants and have resulted in the registration of nearly 300 New York companies.

While developing the "Get Listed" effort, we also built strong and positive ties to groups such as the Buffalo/Niagara Business Enterprise that helped us organize and promote the initiative.

In addition, we have worked to promote NYPA's energy services and clean energy efforts with public events on projects such as the hybrid school bus demonstration project, the 100 MW Photovoltaic Initiative that could install dozens of megawatts of clean power at schools

throughout the state, NYPA's weatherization programs for consumers, and delivered electric- and hybrid-vehicles to our municipal customers.

We have stepped up community relations efforts by hosting energy conservation seminars in Central New York; sponsoring envirothons and energy expos; participating in local Earth Day events, Diversity Day events, Black, Hispanic, Asian and Legislative caucuses; and hosting minority- and women-owned business supplier network forums. More recently, NYPA provided helping hands and financing for the construction of energy efficient low-income housing in Westchester County through Habitat for Humanity.

And to enhance transparency, we have an improved Web site that is available 24/7 and is constantly updated with new and interesting information on our initiatives and undertakings.

Ecological and Environmental Support

In the past two years, we have undertaken numerous environmental projects such as advancing the beautification and construction of the Reservoir State Park and Artpark State Park in Niagara County, Little Beaver State Park in Grand Island and the Robert Moses State Park in the North Country. We have worked to help the local ecology with creation of additional nesting habitats for Common Tern, a threatened species in New York, at two locations within the Buffalo Harbor and completed the installation of underwater structures to create artificial reefs to enhance the aquatic environment of the Upper Niagara River. In the North Country, we've funded projects for the breeding studies on the golden-winged warbler in shrub land along transmission lines and helped *Save The River* monitor and collect data on the general health of the St. Lawrence River. Altogether, NYPA has demonstrated its commitment through ecological and community enhancements that improve the lives and environments of its host communities.

Summary

This is truly an exciting time at the Power Authority. With the tremendous efforts of the NYPA staff and with the continued support and dedication of the Board of Trustees, we have taken the New York Power Authority to a new level of activism and truly made it a leader in public power, economic development and clean energy in every region of the state and in the nation.

Economic Development

"NYPA has become one of the most important economic development engines in the state."

Watertown Daily Times
September 15, 2010

Since October 2008, NYPA has helped to either preserve or create some 7,200 jobs across the state.

While preserving or creating jobs around the state has been the overall goal, special emphasis has been placed allocating NYPA's hydropower and/or financial incentive resources to the greatest extent possible in Western New York, the North Country and Central New York, which are the regions that have suffered the most economically over the long term.

The following highlights some of the actions taken over the last two years to deliver on NYPA's collective goal of focusing on the preservation or creation of "jobs, jobs, jobs."

Hydropower for Business – Western New York

Since October 2008, NYPA has allocated over 58 megawatts (MW) of hydropower to 16 businesses. The majority of these businesses have been in Western New York where Authority hydropower has been vital in helping to attract new businesses and to incentivize existing ones to stay and expand.

NYPA's hydropower allocations will help create 874 new jobs with an average salary of over $50,000 and will bring over $800 million in capital investment to Western New York. Allocations were made to both large, world-class companies and to small, growing businesses.

Yahoo! received a 15 MW hydro allocation that was instrumental in bringing the Internet giant to Western New York. As a result, Yahoo! built a state-of-the-art, energy efficient data center and will create 125 jobs. Additionally, Yahoo! will act as a magnet that will draw other high-technology companies to Western New York, which will further benefit the regional economy and will help jump start a new era of business growth based on the digital sector.

ENrG, a manufacturer of clean energy systems, received a 200 kW allocation that will help them expand and more than double its workforce from 14 to 30. ENrG is a good example of the kind of clean energy company the New York State is seeking to attract in the years ahead.

Other economic development projects that have involved hydropower allocations to Western New York companies include:

- Surface Ignitor Corporation, a leading manufacturer of hot surface igniters for home appliances, will relocate its operations from out-of-state and overseas and invest $1.08

million to build a manufacturing and distribution facility in Western New York, which will lead to the creation of 110 new jobs.

- GEICO, one of the leading auto insurers in the nation, will open new operations in Amherst and invest $2.4 million in its expansion, creating 300 new jobs in the region.
- Globe Specialty Metals, a leading silicon manufacturer in Niagara Falls, has reopened its plant, invested $27 million and created 138 jobs as part of the first phase of a $60 million economic development project.
- Norampac, a Canadian-based containerboard products company, will create 100 new jobs in Western New York with its plans to open a state-of-the-art facility to make green containerboard in a facility adjacent to its current site in Niagara Falls.
- Metaullics Systems in Sanborn, Niagara County, plans a $19 million expansion for advanced batteries for electric-drive vehicles, a project which will create 48 new jobs.
- North American Hoganas is undertaking a $12 million expansion of its Niagara Falls facility, which manufactures sponge iron products primarily for the automotive industry. With an allocation of 1,000 kW, this company will add 13 jobs to its current workforce of 48.

In addition, key to sustaining a strong regional western New York economy is the recently approved long-term contract extensions for businesses in the Niagara Frontier. This was a substantial development for supporting and retaining tens of thousands of Western New York jobs and promoting substantial capital investments for future job growth at more than 100 of the Buffalo-Niagara region's foremost businesses. The contract extensions for 106 Western New York businesses include higher minimum job thresholds and, for the first time, annual capital investment commitments over the lifetime of the contracts. The business customers will have to meet at least 90 percent of their job commitments and undertake capital investments totaling approximately $150 million a year in their Western New York facilities over the seven-year contract term, or more than $1 billion in economic activity in the region. The contract extensions are currently awaiting gubernatorial approval.

Hydropower for Business – Northern New York

In March 2009, NYPA and Alcoa reached an agreement that saved hundreds of jobs at Alcoa's smelters in Massena, New York in the short-term and potentially preserved hundreds more under its planned long-term modernization project at the plant. Due to the historic 60 percent decline in aluminum prices at the time, Alcoa was considering curtailing operations at both Massena East and West smelters, which would have resulted in elimination of about 1,100 jobs. Recognizing the extraordinary economic circumstances, NYPA and Alcoa worked together to reach an agreement that will allowed the West Plant to remain operational at its current employment level and to retain more than 250 of the approximately 420 East Plant employees.

In order to enable the Alcoa - Massena East Modernization Project to continue to move forward, given the new long-term contract post 2013, NYPA agreed to a more flexible schedule in light of the economic downturn. NYPA and Alcoa officials meet on a regular basis to review business conditions and we are committed to establishing a project schedule that results in the modernization of the East Plant as soon as global aluminum market conditions recover. We

understand Alcoa's temporary business situation in the context of the global economy and are confident that they will have a bright future in Massena.

Throughout the temporary idling of the Alcoa East plant, however, NYPA has worked to support the North Country economy using the revenues generated from the unused Alcoa hydropower allocation. Working in cooperation with National Grid and New York State Electric and Gas, NYPA implemented the North Country Power Discount program, which is providing up to $10 Million/year for a temporary credit to the monthly electric bills of businesses and other eligible customers in Franklin, Jefferson and St. Lawrence counties Since the commencement of the program, approximately 3,500 commercial and industrial businesses and dairy farms have each received, on average, total savings on their electric bills of approximately $1,200, representing an average nine percent discount.

In addition, in June of this year, NYPA entered into an historic agreement to provide some of the most significant economic development benefits to North Country region in years. The agreement called for the Power Authority to provide $16 million and 20 MW of low-cost hydropower for economic development purposes throughout St. Lawrence County. Specifically, NYPA entered into an agreement with the St. Lawrence River Valley Redevelopment Agency (RVRDA) that provides that the funds be used for loans or grants to businesses within the county, with a small portion used for community development and environmental and improvement projects.

Also this past summer, NYPA made the first allocation of Preservation Power - to Florelle Tissue in Jefferson County in the North Country. This was made from the power relinquished by GM when it closed a major facility. The 1.3 MW allocation will help create 75 new jobs, which we hope is among the first of many good things to come for the North Country.

Municipal & Cooperative Economic Development Program

Since October 2008, NYPA has made four allocations of Municipal & Cooperative Economic Development Power. The 6.1 MW allocated will help create and retain 1,050 jobs at businesses served by the 51 municipal and cooperative electric systems around the state that NYPA supplies.

SKF Aeroengine was very close to moving their Chautauqua County operations to South Carolina. However, a 2 MW allocation of hydropower helped convince SKF to not only keep 691 jobs in Falconer, but to agree to expand and create an additional 40 jobs.

Power for Jobs (PFJ)/Energy Cost Savings Benefit (ECSB)– Energize New York

Power For Jobs and Energy Cost Savings Benefit are considered the two significant statewide economic development programs administered by the Power Authority to help New York businesses retain and create jobs in return for energy rebates or discounts.

Throughout my tenure at the Power Authority, I have consistently advocated for improvements and reforms to the statutes for the PFJ and ECSB programs. During the past two years, I've pushed hard for the legislative authorization: to offer long-term commitments for current customers of the PFJ and ECSB programs to encourage long-term investment planning by the beneficiary companies; to reallocate unused benefits for job creation and job retention for new businesses; to include criteria that allows the Power Authority to consider a company's commitment to energy efficiency; and to authorize the Power Authority to use low-cost hydropower for economic development that is currently distributed by NYPA to upstate utilities in a program that provides small discounts on energy bills for residential and rural customers.

Unfortunately, the efforts to enact critical reforms to these programs have twice involved legislative impasse that threatened to cut off current PFJ and ECSB customers from their tens of thousands of dollars in energy rebates and discounts, thereby jeopardizing the 300,000 jobs associated with the programs. In the meantime, I've successfully worked to maintain these critical benefits for the current customers even as the effort to enact reforms to the statutes continues.

Industrial Incentive Awards

NYPA's Power for Jobs and Energy Cost Savings Benefits Programs, as currently structured by law, are helpful only to those businesses already in the programs. Even with our abilities limited by the program's exiting restrictions, NYPA has been able to provide Industrial Incentive

Awards to 10 businesses since May 2009 to help companies in the state that were at risk of closing or relocating out of state and could not participate in our existing programs. The awards are helping businesses all over the state: Kolmar Labs in Port Jervis, Owl Wire in Rome, Nucor Steel in Auburn, Buckingham Manufacturing in Binghamton and GE Aviation Systems on Long Island. Overall, the awards helped protect some 3,880 meaningful jobs statewide.

In addition to these awards, in December 2009, NYPA agreed to provide the critical financial support for the launch of major initiatives in the Buffalo Inner Harbor for recreational and community development opportunities by the Erie Harbor Development Corporation. To support the project's financial needs, NYPA agreed to: expedite commitments it made under its 2007 license for its Niagara Power Project from $3.5 million for 50 years to $4.7 million for 20 years; and grant an Industrial Incentive Award of $3.7 million for 20 years. The Canal Side Project – one of the waterfront initiatives supported under this agreement – is expected to generate approximately 1,000 jobs, almost $9.5 million in annual sales tax revenues and $1.2 million in new yearly property taxes for the City of Buffalo.

Doing Business with New York Businesses

NYPA has made it a priority to support the state's economy with efforts to purchase the products and engage the services of New York State-based companies.

In fact, two-thirds of all NYPA procurement contracts have gone to New York State-based companies since late 2009. With a value of more than $3.7 billion, these contracts support local

tax-paying businesses and jobs with the infusion of capital into the local economies across the state.

Over the past two years, NYPA has entered into major contracts with a number a Western New York firms alone. For instance, Solar Liberty of Buffalo has been awarded numerous contracts including the solar projects with Niagara Frontier Transportation Authority and the University at Buffalo and other photovoltaic projects on Long Island. Just this past summer, Hohl Industrial Services, Inc. of Tonawanda was awarded an $18.7 million contract and Scrufari Construction Company, Inc. of Niagara Falls was awarded contracts valued over $6.6 million for critical refurbishment work at the Niagara Power Project.

Also, as part of the criteria requested of companies submitting bids on both NYPA's two major clean energy projects – the Great Lakes Off Shore Wind Initiative and the 100 MW Statewide Photovoltaic Initiative – the Power Authority sought plans for the bidder's use of New York State-based companies. In fact, as part of these initiatives, NYPA has established business-to-business registries to help support the growth of New York State's clean energy economy by linking our bidders with potential New York subcontractors, suppliers and vendors. To encourage the participation by local companies and to market this registry, I have traveled to Buffalo, Syracuse, Rochester and Dunkirk to host "Get Listed" events to promote the clean energy projects and the local opportunities. To date, the registry has listed well over 300 New York businesses interested in participating in clean energy projects.

Summary

Over the past two years NYPA's economic development initiatives have helped dozens of businesses to stay, grow or locate in New York State. As a result, the Authority's efforts have directly helped create over 1,200 jobs and retain over 6,000 and, supported local economies through efforts to engage New York State businesses in clean energy opportunities. From Long Island, to the Southern Tier, to Central New York, to the North Country and especially in Western New York, the Power Authority has ramped up its mission to provide economic development benefits to foster job creation and retention to the maximum extent possible.

Operations Group

"...provide clean, low cost and reliable energy..."

Overall, NYPA's power generation assets have performed extremely well over the last two years. We have experienced no major outages that prevented us from meeting our overall mission to "provide clean, low cost and reliable energy with our commitment to the environment and safety."

In 2008 and 2009, NYPA exceeded annual targets for system-wide net generation. In 2008, NYPA generated 27.1 million megawatt-hours (MWH) of electricity on a target of 20.4 million MWH. In 2009, 27.4 million MWH were produced on a target of 26.9 MWH.

In 2010, despite low river flows at the Niagara and St. Lawrence, depressed energy markets due to the economy, and an unplanned plant outage for a portion of the summer, NYPA Operations optimized the Authority's generation assets, maintaining year-to-date generation market readiness of 99.8 percent on a target of 99.4 percent. During a July that included an extreme heat wave that impacted the entire state, we recorded a 99.4 percent readiness. In August, another high demand month, we achieved 100 percent readiness.

Major facilities such as the St. Lawrence-FDR, Niagara, and Blenheim-Gilboa (B-G) projects continue or completed Upgrade or Life Extension and Modernization (LEM) programs that will make the facilities more efficient and require less maintenance. The Blenheim-Gilboa program was completed successfully earlier in May of this year. The St. Lawrence project has been moving forward on schedule and under budget. A new LEM was just recently approved by the Trustees for the Lewiston Pump Generating Project that's part of the Niagara Power Project, and is in preliminary engineering and design with the award to the successful bidder to design and test the new turbine.

Spotlighting the B-G $135 million LEM project, which was completed ahead of schedule and under budget, the plant's capacity was increased nearly 12% from 1,040 megawatts to 1,160 megawatts.

At the St. Lawrence-FDR project, LEM work on the 13th of 16 units was completed.

NYPA's 1,400 miles of transmission system also remains in a good state of repair and is highly reliable. New techniques are being employed to identify and locate potential trouble spots before they present a repair situation or failure.

Transmission system reliability also exceeded targets. In 2008, NYPA achieved 97.92 percent readiness on a target of 97.58; in 2009, 97.36 percent was achieved on a target of 96.33.

The fact that our core assets – both generation and transmission – operate reliably and safely is a credit to our highly skilled, professional and dedicated workforce who labor 24/7 to help keep the lights on around New York State, and also to the foresight of the Board of Trustees in

supporting the kinds of capital and operating programs that keep our assets well maintained and reliable.

We're also looking to the future. 21st Century smart grid technology is being brought to NYPA's transmission system to make it even more efficient and reliable, and to enhance its capacity to deliver wind power resources currently bottled up in various parts of the state to a broader consumer base.

NYPA has been aggressively pursuing the potential for improving the north/south transmission system that runs from Massena to the New York metropolitan area so that cheap hydropower from Canada can be imported for the benefit of all New Yorkers.

A new cross-Hudson transmission line that will bring power resources in from the PJM power grid for the benefit of New York City-based consumers is extremely close to becoming a reality.

On a daily basis, projects large and small are advanced that help keep our power generation and transmission system operating and also help us keep the commitments we've made to the communities in which our facilities are located and also to the people of New York who we serve.

Here's a brief re-cap of just some of the projects that have been engaged in over the last two years.

NIAGARA POWER PROJECT

Lake Erie Ice Boom Storage Site Purchased and Modified to Accept Ice Boom Strings

During discussions with Erie County and the City of Buffalo as part of the relicensing of the Niagara Power Project, the Authority agreed to search for a new storage location for the Ice Boom that is used to prevent ice from lowing from Lake Erie into the water intakes for the Niagara project. The Trustees approved the purchase of property located at 41 Hamburg Street in Buffalo to be used as the new Ice Boom storage facility. Detailed site design and construction plans received Board approval in September 2009. Work commenced in late September 2009 and the boom storage area was successfully completed to receive the Ice Boom for the first time upon its removal in March 2010.

New Ice Boom Storage Site Workshop and Public Community Park

As part of the relocation of the Ice Boom, a new workshop that will allow on-site repairs is currently being constructed. As part of the partnership between NYPA and the local neighborhood, a new park will be built in 2011 on a section of the site NYPA acquired. The park will provide the community with direct access to the water for small water craft such a kayaks for the first time in recent history. Design of the new park has been reviewed by local officials and will be issued for bid in late 2010 with construction expected to be completed by the end of 2011. The community is extremely pleased that this project is being undertaken by NYPA.

Niagara University Wall and Berm (Good Neighbor Agreement)

Initiated through negotiations with Niagara University, the Authority agreed to construct a berm and a wall with a total height of 25 feet between the Niagara Switchyard and Niagara University Athletic Field at an estimated cost of $3.325 million. The project was completed on schedule and within budget in 2009.

New Warehouse

As part of the re-licensing negotiation with Niagara University it was agreed that the existing Niagara warehouse will be turned over to Niagara University. In exchange, Niagara University has provided a 6.5 acre parcel of land for NYPA to construct a new warehouse. Nelson Associates Architectural Engineering completed the design in August 2009 and a contract award to SLR was approved in January 2010. Construction commenced in March 2010 and is continuing on schedule for completion by July 2011. The existing warehouse will be decommissioned and turned over to Niagara University in 2011.

ST. LAWRENCE-FDR POWER PROJECT

Completed the Life Extension and Modernization (LEM) refurbishment of St. Lawrence-FDR Power Project (STL) Units # 31, 32, & 23 including installation of major equipment such as circuit breakers, exciters, turbines and generation control systems. Thirteen of the 16 STL-FDR units have been refurbished, and the 2013 scheduled completion date for the LEM project remains unchanged.

Replaced the brick face of the entire STL Admin Building including the area above E-bay with the windows being replaced with more energy efficient glazing and proper functional weeps. Life Extension and Modernization (LEM) refurbishment of St. Lawrence-FDR Power Project (STL) Unit # 24 including installation of major equipment such as circuit breakers, exciters, turbines and generation control systems is in progress.

Wind Farm Projects

Two new substations (Duley and Ryan) were constructed, connected and energized to NYPA Willis – Plattsburgh transmission lines. Work included the interconnections of wind farm developer generators to NYPA's transmission system subject to NYPA's design specifications and interconnection criteria and NYISO criteria.

Dynamic Thermal Circuit Ratings

NYPA, in partnership with the Electric Power Research Institute, received funding from the US Department of Energy via the American Recovery and Reinvestment Act for a smart grid demonstration project that will evaluate a suite of emerging technologies and applications that measure the real-time thermal capacity of NYPA's 230 kV Moses-Willis and Willis-Ryan

overhead transmission lines in the North Country. This project will utilize temperature monitors (backscatter sensors), video sagometers, and simulated conductor systems to communicate real-time data (i.e. temperature, sag, tension, weather conditions) to a central server that will calculate real-time ratings based on actual load and weather conditions. Dynamic line ratings have the potential to add system capacity without significant capital investment by providing system operators with conductor temperature ratings higher than those modeled.
Additionally, NYPA selected test sites in areas of New York that have high wind generation capacity in order to test a possible correlation between increased wind speed and higher dynamic ratings. The hypothesis is that higher wind speeds, which generate more wind power, will simultaneously cool transmission lines and thereby increase their capability to deliver that power.

BLENHIEM-GILBOA PUMPED STORAGE POWER PROJECT

In 2010, NYPA completed the four-year Blenheim Gilboa LEM program approximately $10 million under budget and ahead of schedule. Blenheim Gilboa has been operating original equipment in the power house since commissioning in 1973. The spherical valve has never been completely inspected since going into service due to the lack of a headgate that would allow dewatering of the penstock. Significant improvements in operational and maintenance efficiency can be realized by replacing and/or updating the original equipment. The largest gain will be with the replacement of the pump/turbine which will provide efficiency gains of 2-3% in both the pump and generate mode. An increased cycle efficiency of 4-6% will go a long way to increasing overall revenue from BG. An increase in operating range will also substantially help us gain entry into the ISO ancillary market and help to increase revenue. With the completion of these units the plant will have seen 37 years of service and it is expected that the LEM will provide the project with core equipment capable of another 30+ years.

BG Tainter Gates

The BG Tainter Gates are critical equipment to the water management operation of the BG Project and under regulatory compliance to the FERC. BG Tainter Gates were painted, gate seals replaced, and grout repairs made to the embedded seal plates in accordance with KA's recommendations from their 1999 Tainter Gate Inspection Report

POLETTI DECOMMISSIONING

Under terms of an agreement reached with the State of New York in 2002, the 885 Megawatt Charles Poletti Power Plant ceased to operate as a power generating asset on January 31, 2010.

The process for decommissioning the Poletti plant, which will include its deconstruction between 2012 and 2014 is underway. The work plan includes two phases:

Phase I: Permanent Shutdown Pre- Demolition: The shutdown portion of Phase I, which included environmental stabilization of the plant to minimize risk was completed by site Operations May 30, 2010. The pre-demolition portion of Phase I include utilizing Poletti O&M staff to perform

selective removal of equipment, to support the salvage or sale of assets, as well as performing support tasks that will facilitate the future demolition.

Phase II: Deconstruction: Under the Phase II deconstruction task, TRC Engineering has been hired to establish the deconstruction execution plan and produce deconstruction documents. Phase II also involves NYPA engineering working with Project Management and TRC to prepare drawings and specifications to relocate infrastructure essential to remain after Poletti is deconstructed. This includes but is not limited to the new Admin Building gas line, new communication lines to the 500 MW, and the new fire pump house.

Energy Services & Technology
"45 By 15"

Since October 2008, $236 million in Energy Service projects have been completed, representing an annual savings to program participants of $17 million or $340 million over the 20-year life of the programs at current energy costs. Electricity use was reduced by 77,000 megawatt-hours (MWH) annually, which in turn reduces Greenhouse Gases by 85,000 tons per year.

2009 set a one-year record for Energy Service projects with $145 million worth of initiatives completed, which constituted a 25 percent increase over 2008 initiatives.

For 2010, some $160 million worth of initiatives are on track to be completed.

During the same two-year period, $1.9 billion in new projects were either identified or are already in construction that will result in annual savings of $82 million by reducing electricity use by 400,000 MWH, which will reduce Greenhouse Gases by 405,000 tons annually.

NYPA has also initiated an innovative process to install 100 megawatts of solar power at municipal facilities, school and university buildings and other locations around the state in an effort to meet the State Energy Policy goal of providing 30 percent of the state's energy requirement through renewable energy resources by 2015. NYPA's 100 megawatt solar initiative, when completed, will triple the amount of solar provided energy in New York.

Other NYPA initiatives, such as the Business Customer and Renewable Energy programs, have also been enhanced over the past two years either as a result of actions taken by the Board of Trustees or state legislative initiatives supported by NYPA that have also increased the Authority's effectiveness in reducing energy costs for businesses across the state while helping to meet the State Energy Policy goals of increasing the efficient use of New York's energy resources and reducing the dependency on fossil fuels.

NYPA's Research and Development endeavors have also been increased, again as a way to meet the state's goal of reducing New York's use of fossil fuels by 45 percent by 2015 either through energy efficiency, increased use of renewable energy resources, and more efficient operation of our power generating assets and transmission facilities.

CLEAN ENERGY INITIATIVES

100 MW Statewide Solar Photovoltaic

NYPA issued a Request For Proposals (RFP) in January, 2010 based on the overwhelming responses from the solar Photovoltaic industry to the Authority's Request For Expressions of Interest (RFEI) to install 100 megawatts of PV systems on municipal, school and university and other buildings around the state. A prospective bidders conference was convened that attracted

over 400 attendees. By the April 22 deadline, 44 proposals were received representing most of the national and international solar development corporations. An extensive evaluation process was put in place which resulted in the preparation of a list of recommended awards for Trustee review. Subject to Trustee approval, NYPA is prepared to negotiate final awards with qualified contractors and implement the full 100 MW program by December, 2014.

Installing 100 MWs of solar power systems around the state will triple the amount of solar power generated in New York.

Offshore Wind Project Initiatives

The Power Authority has become a leader in promoting the use of off-shore wind as a critical resource of the NYPA's efforts to promote clean energy and the green economy throughout New York State. On Earth Day 2009, NYPA announced its intentions to consider development of a Great Lakes Offshore Wind (GLOW) project in the New York State waters of Lake Erie and/or Lake Ontario on Earth Day. The project has the goal to increase New York's use of clean renewable energy and help revitalize the Upstate economy with the jobs and construction of the wind power industry. Following initial desktop technical studies, NYPA proceeded with announcing a Request for Proposals (RFP) to solicit bids for the development of a utility scale, offshore wind power project in the range of 120 megawatts (MW) to 500 MW. Five proposals were received by the June 1, 2010 deadline and are currently under a rigorous and thorough review by NYPA staff and its consultant specialists. It is expected that in early 2011the Trustees will evaluate the staff recommendations and identify a preferred developer(s) pending successful contract negotiations, completion of all regulatory and environmental reviews, and incorporation of community input.

In addition to the upstate wind initiative, NYPA has agreed to a public-private partnership with the Long Island Power Authority, Con Edison and several New York State and City public entities for the advancement of a LI-NYC Offshore Wind Project. The partners are evaluating the feasibility of installing offshore wind generating capacity of 350 megawatts (MW) up to 700 MW approximately 14 nautical miles (13 to 15 standard miles) southeast of the Rockaway Peninsula, New York.

ENERGY SERVICES PROJECTS

NYC Department of Environmental Protection Program

As a result of the major growth in this program, 11 new projects are currently in development. Additionally, one completed project, North River Wastewater Treatment Facility ($37 million), was the largest project undertaken by NYPA through the Energy Services program.

City University of New York

This program has increased by approximately $25 million per year since 2008 resulting in the largest project currently in construction, which is at the New York City College of Technology

totaling $66 million. Since 2008, 24 projects at CUNY have been completed, are currently in construction or have been identified.

New York City Housing Authority

Since 2008, 32 projects have been completed are in construction or have been identified. This program averages $25 million per year, which will increase exponentially based upon the NYCHA interest in having NYPA take on an active role in maintaining and operating their plants at a cost of $290 million over multi-years.

Energy Services Program Statewide

This program was expanded by $400 million in response to an increased volume of work bringing total authorized funding to $833 million. In addition, new implementation services contracts with six contractors were issued, which doubled the number of contractors implementing statewide Energy Services programs.

NYPA LEED Initiatives at Authority Visitors Centers & Facilities

NYPA initiated a project that will pursue a minimum of LEED Certification at the Blenheim Gilboa, Hawkins Point, and Niagara Visitors Centers. Currently, site visits to complete the first part of the initial LEED study are being coordinated with the three sites. In addition, NYPA initiated energy audits at other NYPA facilities located at the Niagara, Blenheim-Gilboa, Saint Lawrence power projects, Clark Control Center, and the Poletti 500 megawatt and Flynn power plants. Construction has begun on Blenheim-Gilboa upgrades.

New Technologies Being Developed/Implemented

In addition to the typical measures implemented via NYPA's ESP projects there were a variety of new measures incorporated into projects over the past two years. These include: LED Traffic Signals, LED Lighting for Bridge Necklace Lighting, Ice Storage for Air Conditioning, Rail Road Track Third Rail Heating Controls, Micro Hydro turbines, Rail Road Signal Compressed Air Systems, Swimming Pool Lighting, College Dormitory Room Heating Controls, Lighting and Heating Controls in Public Housing Apartments, Solar Thermal Systems, T5 Wide Area Bay Lighting, Escalator Motor Controls, Co-generation Systems, Micro Steam Turbines, Biomass Boilers, Rapid Roll Up Doors, Laundry Facility Upgrades, Water Conservation.

Fuel Cells

Over past two years, NYPA has completed and commissioned two fuel cells that include installations at the Bronx Zoo and NYPA's White Plains Office.
Three 400kw fuels cells have also been delivered to Tower 1 at the World Trade Center. Six more fuel cells are scheduled to be delivered to Towers 3 and 4 later this month. Three fuel cells for Tower 2 will be delivered when construction of that tower proceeds. The fuel cells will eventually supplement the electricity supplied to the Trade Center when construction is completed and the fuel cells are placed into service.

Energy Efficiency Weatherization Program

Distribution of energy savings kits to over 38,000 lower income residents who reside in areas served by the 51 Municipal Electric Systems and Cooperatives around the state that receive NYPA power, and also in Westchester County Housing Authority units and utility paying residents of NYCHA was completed.

It is projected that the energy saving kits could help save these consumers some $200 in energy costs annually.

Business Customers

Legislative authorization enhancing NYPA's energy efficiency programs in 2008 allowed the Authority to expand its energy efficiency program, which resulted in the completion of energy audits for 54 business customers. Combined, the audits identified energy efficiency strategies that could save these businesses some $6.3M in energy costs, which in turn can help save numerous jobs.

This legislation also opened the door to new projects such as water conservation. For example, NYPA is working with the New York State Office of General Services to implement these measures at their sites. These projects will generate $101,000 in savings (about 22.4 million gallons water and 12,000 therms natural gas)

ARRA – Funded Energy Efficiency Projects

NYPA assisted in bringing American Recovery and Reinvestment Act-related (ARRA) funds to New York State resulting in 43 projects receiving $42 million in Federal Stimulus funding that are being implemented statewide.

Customer Implemented (Incremental CI) Projects

Under this ESP measure, the Authority would provide design review, technical support, financing, and/or other services to ESP participants to encourage the inclusion of high efficiency and renewable enhancement into substantial renovation or new construction projects. This will prevent energy-efficiency to be value engineered out of new construction projects and building efficiently is more cost-effective than post construction retrofit.

NYPA Renewable Energy Program

In 2008, the Board of Trustees approved $21 million in funding to expand the Power Authority's statewide Renewable Energy Program for introducing new clean and sustainable energy technologies, particularly in upstate regions. The funding, to be provided over five years, was approved in support of New York State's Renewable Energy Task Force. Over the last two years numerous renewable energy projects have been initiated throughout New York State including over 2.5 megawatts of solar PV projects, distributed wind projects, energy storage

projects focused on better renewable energy integration into the grid, fuel cells fueled by renewable energy sources, and biomass projects.

Medium Duty Plug-Hybrid Vehicle Demonstration & Evaluation Program

In May 2009, NYPA partnered with Electric Power Research Institute (EPRI), Ford and other utilities to submit a proposal for US Department of Energy (USDOE) ARRA Transportation Electrification funds to accelerate the development and commercialization of medium-duty plug-in hybrid trucks and buses. NYPA enlisted ten customers from around the state to participate in the program – NYPA and its customers make up 11 of the 50 participating fleets.
In July 2009, the USDOE awarded $45.4 million to the project team for the manufacture of 378 plug-in hybrid vehicles and noted that the award was made in part because of the diversity of the fleets. EPRI credited NYPA for this diversity and presented NYPA with a Technology Transfer award for its success in bringing the New York team together. NYPA has hosted five regional meetings for New York participants and continues to work with EPRI to manage the program. The program is on schedule and vehicles are due to be delivered in 2011.

Hybrid School Bus Evaluation Program

In November 2008, NYPA launched a program to evaluate the performance of first generation hybrid-electric and plug-in hybrid-electric school buses. The program's goal is to compare the energy efficiency of these two hybrid systems with conventional diesel school buses on urban, suburban and rural routes. This is the first evaluation of its kind nationwide and has become a testing ground for hybrid system improvements. The data collection and analysis performed under this program have not only provided valuable information on the best applications for the technology, they have also spurred the bus manufacturer, IC Bus Corporation, to make significant changes to the hybrid systems in order to improve energy efficiency.

RESEARCH AND TECHNOLOGY DEVELOPMENT

Niagara Acoustic Doppler Flow Measurement

NYPA has installed a new flow measurement technique to more accurately and frequently measure the water flow into the forebay area which enables the Niagara Power Project to optimize power generation and water usage. The technology utilized is Acoustic Doppler flow measurement system. Currently, all diversion-based calculations at the Niagara project rely on hourly measurements by elevation gauges. In practice, there could be significant volume errors depending on captured elevations for beginning / ending of the hour. These inaccuracies result in large tolerances for diversion of water that may generate control action in a wrong direction. This project helps alleviate this problem and improve the overall performance of the Niagara operations.

Y49 Cathodic Protection System for Long Island Sound Cable

The Self Contained Fluid Filled (SCFF) Y-49 power cables represent a $300 million asset and are very important to NYPA's operations and transmission of power to Long Island. A Cathodic

Protection system is required to prevent damage to the cable due to stray DC currents due to trains, etc. Without the Cathodic Protection system, it is anticipated that the life expectancy of the power cables would be reduced by at least 15 years. NYPA successfully installed this Cathodic Protection System on the power cables in Long Island Sound. This system automatically adjusts itself to mitigate the effects of the stray DC currents, which could corrode the return conductor and ultimately cause the cables to fail.

Network-based Automated Transmission Line Fault Analysis System

This computer network-based system provides system fault data quickly to authorized personnel for analysis and decision making and restoration of service. In the event of a permanent transmission line fault, speedy restoration of service is imperative to maintain transmission availability as high as possible and to avoid having dispatch of energy in a less economic mode. This system automatically collects the fault data from the digital fault recorders located in the substations and generating stations using secure protocols. The data is then processed and converted to a standard format on a central computer. The fault analysis software automatically puts the analysis report on the web-page to instantaneously allow sites operators and engineers to view the fault report and waveforms and enable them to take quick corrective action.

Non-intrusive Assessment of Transmission Tower Grillages (ongoing)

In order to determine the condition of NYPA's transmission towers, this project has developed and implemented a non-intrusive method for testing of transmission tower lattice structures to accurately determine the actual physical condition and the integrity of the structure. The leg of the transmission tower showing the worst condition is excavated completely to a depth of 10 feet to validate the report of the non-invasive system. Repairs (steel splices and coating) are performed if the loss of the cross section due to corrosion is more than 20 percent. Confirmation that this non-intrusive system provides reliable results will allow NYPA to inspect all its towers using this technology and save O&M costs and increase reliability.

Antenna Array System

Partial discharge (arcing) inside power equipment can lead to equipment failures and long outages. Early identification of partial discharges allows system operators to take remedial action to prevent the catastrophic failure of equipment. This project developed a non-invasive technique for monitoring partial discharge activity at NYPA substations and pinpointing the location of equipment (transformers, reactors, breakers, etc.) that generate partial discharge. Four antenna arrays have been installed at Massena substation to monitor the partial discharge activity throughout the substation. Plans are underway to install similar systems at Marcy and Niagara.

Smart Grid Related R&TD (ongoing)

NYPA has been a pioneer in the area of Smart Grid technologies. These technologies are expected to improve the operation and control of the power grids and enhance their efficiency, reliability, and safety. GPS-based precise measurement devices called the Phasor Measurement

Units (PMU) have been installed at NYPA substations for almost 20 years. NYPA is working closely with the NYISO as a partner in the DOE SGIG Stimulus project to deploy additional PMUs as well as the required communication links to securely send this data to NYPA energy control center and the NYISO.

Maintenance and Upgrade of the CSC at Marcy (ongoing)

NYPA operates the world's most advanced high power electronics controller installed at Marcy substation called the Convertible Static Compensator (CSC). This device has unique capabilities in controlling the system voltage and if necessary power flows. NYPA system operators as well as the NYISO operators rely on the CSC for reliable and secure operation of the NYS transmission system. NYPA R&TD is currently working to ensure longevity and continuous availability of this device. Work is on-going to upgrade the CSC's computer-based Controls. The CSC helps relieve congestion in the NYS transmission system and allows nearly 200 MWs more power to be transferred from north and west to NYC area while increasing the system reliability and resiliency

General Organization & Administration

Important changes have taken place throughout the Authority to enhance the overall efficiency of the organization and to streamline procedures.

Some of those actions have included:

Buffalo Office

To enhance NYPA's commitment to Western New York and increase outreach capabilities to customers in the City of Buffalo and Erie County, an office was opened in the Cobblestone District of Downtown Buffalo on November 9, 2009. Located at 95 Perry Street, which is in the same building as the Empire State Development Corporation and the Erie Canal Harbor Development Corporation, the office helps facilitate a wide range of NYPA services, including working with businesses in the area on energy efficiency and conservation programs.

Comprehensive Emergency Management Plan Development

While NYPA as an organization is well prepared to respond to an emergency a need existed to develop an overall comprehensive plan that would establish a coordinated Authority-wide emergency response plan.

By hiring an experienced emergency response professional, NYPA has a comprehensive CEMP that is ready to be rolled out Authority-wide.

Sustainability

This past winter, NYPA finalized its Sustainability Action Plan that incorporates the "triple-bottom-line" approach of environmental stewardship, social equity and economic prosperity throughout the Power Authority. Generating Sustainability enables NYPA to tie many of its long-standing practices with several new initiatives under one sustainability umbrella.

The Sustainability plan was built around five key areas that encompass all facets of the Power Authority: workplace, community, environment, marketplace and operations. Each of the plan's 21 focus areas came with a high-level commitment and one or more specific action items. While the plan set a long-term vision for the Power Authority, the strategies to reach these goals were intentionally short-term in order that tangible, targeted initiatives that have an immediate positive impact.

This Sustainability Action Plan was comprehensive yet strategic, ambitious yet realistic, and continues to bring increasing value to NYPA's employees, its stakeholders and, ideally, everyone who lives, works or visits New York State.

Power Supply and Energy Resource Management

In 2010, the Power Supply and Energy Resource Management units were consolidated into a new Operations Business Organization under the Chief Operating Officer. The consolidation realigned NYPA's core power generation, transmission, and energy market participation business units into one cohesive unit.

Secretary's Office

Working with NYPA's IT Department, the preparation and distribution of meeting materials for the Board of Trustees, the Audit Committee, and the Governance Committee have been streamlined. A new Web portal, Director's Desk, enables Trustees to access materials from a computer or PDA. Easy access is now provided to a wide variety of documents 24/7 and it eliminates a great deal of paper in the process.

IPAD's have also been introduced for Trustee use, which can also reduce the need for paper documents associated with Board and Committee meetings.

The agenda review process has been streamlined in an effort to get Board item materials to the Trustees as soon as possible and well in advance of meetings.

More briefings have been scheduled for Trustees to provide more opportunities for information sharing and questions.

More Board meetings are held in locations around the state that in the past to provide more opportunities for public input and to also provide the opportunity for Trustees to receive on site briefings at NYPA facilities, which provides more opportunities for direct interaction with NYPA employees. Meetings at various locations around the state also provides the opportunity for Trustee and key NYPA staff to visit with NYPA customers such as local municipal or cooperative electric utilities and Power For Jobs customers.

The Secretary's Office has also increased access to teleconferencing equipment, which has reduced costs for in-person meetings.

Human Resources

Human Resources activities that were once performed independently at NYPA's various facilities have been centralized to the White Plains Office. While an HR resource person is available at our larger facilities to help address immediate personnel issues, centralized functions at White Plains allows for more efficient Authority-wide assessments for personnel and staffing needs and training.

Centralizing HR functions at White Plains also enhances the opportunities for Succession Planning and in identifying appropriate candidates promotion.

The HR function has also been separated from the Labor Relations function at the facilities to ensure a more focused and comprehensive approach to labor relations issues.

Performance Plus Employee Evaluations have been redefined and re-implemented.

Diversity initiatives have been enhanced to provide tools to embrace and embellish set goals.

A paper reduction initiative – Human Resource Information Services – has been established to reduce paper and files through high speed scanning for document retention. An initial reduction goal of a 30% has been set.

Law Department

Improved the effectiveness of interactions between NYPA's Law Department and the Authority's Business Units through team building, which has resulted in more timely resolution of potential legal issues and more effective use of department personnel,

Have also taken steps to:

> Enhance NYPA's role in responding to legislative and regulatory proposals that could impact NYPA and its customers, while ensuring compliance with new legal and regulatory requirements;
>
> Improve training and development of legal staff; and
> Increase the role of NYPA's Law Department attorneys on legal matters to reduce the need for outside counsel and related costs.

NYPA's Ethics and Compliance Program has been enhanced to improve the Authority's ability to meet its and its employees' legal and regulatory obligations.

In 2009, the Board adopted, upon executive management's recommendation, a revised Code of Conduct, which set forth the standards of conduct required of all NYPA Trustees, officers and employees. In 2010, NYPA's Ethics and Compliance Office provided training to all NYPA Trustees, officers and employees on the Code's provisions.

Efforts were made to also heighten employee awareness NYPA's Employee Concerns hotline, a toll-free, external resource for raising ethics and compliance issues (1-877-TEL-NYPA). The hotline is part of an effort to provide a work environment free of retaliation along with a streamlined process for conducting investigations into potential ethics and compliance violations.

The Board's Governance Committee also provides independent oversight and evaluation.

NYPA has also improved its commitment and ability to comply with the North American Reliability Corporation's (NERC) Reliability Standards, which are designed to protect the nation's bulk electric system.

Finance Department

In 2009, the Board approved a search for a new Chief Financial Officer. The search was successfully completed and Elizabeth McCarthy, who has extensive financial and utility industries experience, was hired as NYPA's new CFO.

Ms. McCarthy, in addition to reviewing all of NYPA's financial activities, has instituted some new procedures to streamline and enhance the Authority's financial management practices. Additionally, with the approval of the Board, a search was initiated and successfully completed to hire a new Chief Risk Officer, who is undertaking a comprehensive Authority-wide risk assessment of all of NYPA's activities.