

2015 Accomplishments



**NY Power
Authority**

Statewide Edition



The New York Power Authority (NYPA) has a proud history of developing renewable energy and serving as the state's delivery backbone. We supply 20 percent of the demand for electricity with low-cost, clean and reliable power, and operate more than one-third of the high-voltage transmission system.

Guided by our Mission Statement, NYPA is constantly building on a strong foundation of success. We are bringing jobs and economic growth to New York. We continue to embrace new technologies. And we are providing customers with more choices than ever before. All of these efforts are rooted in Gov. Andrew M. Cuomo's Reforming the Energy Vision (REV) initiative, which envisions a clean, reliable and affordable energy system for all New Yorkers.

The Mission Statement supports our Strategic Vision 2020, with its six key elements: **Customer Solutions, Asset Management, Smart Generation and Transmission, Workforce Planning, Knowledge Management and Process Excellence.** We are moving beyond the traditional utility business model and thinking more broadly about being a technological leader and trusted advisor for our customers while setting new standards of excellence and innovation for our industry.

OPERATIONS

Reinventing New York's grid and meeting the long-term energy demands of millions of New Yorkers remained a NYPA priority.

- The Switchyard Automated Monitoring and Controls system, part of NYPA's \$726 million Transmission Life Extension and Modernization program, is being installed at the Robert Moses switchyard in Massena. It is creating one of the most advanced transmission hubs in North America.
- NYPA unveiled SMART Path, a project to replace its aging Moses-Adirondack transmission lines, built in 1942, that run 85 miles from the St. Lawrence-FDR Power Project in Massena to a substation in Croghan, Lewis County.
- Funding was approved for a \$68 million joint project with Vermont Electric for the replacement of transmission cables that connect a NYPA substation in Plattsburgh to one in Milton, Vt. The new cables support increased energy demand and will have fiber-optic capability.

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- The Marcy South Series Compensation smart-grid project is being undertaken by NYPA and New York State Electric and Gas Corp./Iberdrola USA to help relieve transmission congestion, from Central New York to the Catskills, without adding power lines.
- NYPA reached the halfway mark of a \$20 million Life Extension and Modernization (LEM) program to overhaul and extend the life of three of its four small hydropower plants—Crescent, Vischer Ferry and Ashokan.
- A shunt reactor was installed at NYPA's Coopers Corners Substation as part of a nearly \$9.8 million investment to protect power lines from high-voltage spikes.
- The Niagara Power Project's Lewiston Pump-Generating Plant reached a milestone in its LEM project. Maintenance and refurbishment was completed on the third of 12 pump-turbines to be overhauled.

IBEW Contract

NYPA reached agreement with the International Brotherhood of Electrical Workers on a contract that covers about 560 employees at the St. Lawrence-FDR and Niagara power projects, the Blenheim-Gilboa Pumped Storage Power Project and small hydropower facilities in five upstate counties. The agreement is retroactive to April 1, 2011, and runs through March 2019.

ECONOMIC DEVELOPMENT

NYPA's low-cost power continued to help create or retain thousands of jobs in New York. Through September, this included:

ReChargeNY

Fifty-four allocations of ReChargeNY power, totaling 21.6 megawatts (MW), to 45 businesses and not-for-profit facilities in return for commitments linked to more than 10,000 jobs and in excess of \$438 million in capital spending.

Hydropower

Allocations totaling more than 5 MW of Expansion Power and/or Replacement Power to eight Western New York businesses, supporting the creation of 270 jobs and more than \$118 million in capital investment. A 300 kilowatt (kW) Preservation Power allocation was awarded to New York Air Brake, a supplier of train control systems in Watertown, supporting 560 existing jobs, 10 new jobs and more than \$6 million in capital investment.

Western NY Economic Development Fund

Awards totaling about \$9.9 million were recommended by the Western NY Power Proceeds Allocation Board and approved by NYPA for nine businesses that will create or retain 339 jobs and generate \$69.8 million in project investment.

North Country Economic Development Fund

A \$300,000 loan was approved for Pohl's North Woods Inn in Old Forge for the creation of 17 jobs and the reopening of the hotel in summer 2016. The fund also gave

a \$300,000 loan to SterRx of Plattsburgh, a medical supply firm that will expand its business; and a \$100,000 loan to Hoosier Magnetics, Inc. of Ogdensburg, a manufacturer of ferrite powders.

Northern NY Economic Development Fund

Up to \$3 million a year, from the sale of unused hydropower from the St. Lawrence-FDR project, was approved to support new jobs and capital investments in St. Lawrence County.

SUCCESSFUL REVIEW OF RELICENSING TO BENEFIT NORTHERN NY

NYPA reached an agreement that will provide at least \$115 million in benefits to the North Country over the next 40 years. The accord was part of a 10-year review of the 2003 relicensing settlement agreement for the St. Lawrence-FDR project. Funds will be used for economic development and recreational/tourism studies, shoreline stabilization and road improvements.

ALCOA AGREEMENT WITH NYPA SAVES NORTH COUNTRY JOBS

NYPA reworked its power supply agreement with Alcoa to help keep approximately 600 jobs in Massena. The new arrangement includes tens of millions of dollars in additional NYPA hydropower savings through March 2019.



KEY CUSTOMER HIGHLIGHTS

The state's incentive package for the 150,000-square-foot expansion of Yahoo!'s data center and the construction of a customer call center in Lockport included 7.2 MW of low-cost NYPA hydropower. The project will result in 115 new jobs and a capital investment of \$170 million.

1366 Technologies, a manufacturer of solar energy technologies, will establish a production plant and significantly grow its workforce in Alabama, Genesee County. 1366 will invest approximately \$700 million and NYPA is providing up to 8.5 MW of

low-cost hydropower. 1366 expects to create more than 1,000 jobs in the Finger Lakes region.

Autronic Plastics, an injection molding company in Suffolk County, will create 21 jobs, support 106 existing jobs and commit to about \$4 million in capital investments in exchange for 436 kW of low-cost electricity under ReChargeNY.

Yancey's Fancy completed a 112,000-square-foot expansion in Corfu, Genesee County, with \$500,000 in support from our Western New York Power Proceeds program. The manufacturer of specialty and artisan cheeses retained 65 jobs and created 50 new jobs.

Energy Efficiency

Through November, we completed 50 projects and financed \$139 million statewide. Noteworthy projects included:

- A \$25 million energy efficiency project at Grand Central Terminal in Manhattan. It will save \$2.5 million in annual energy costs and reduce greenhouse gases by more than 11,200 tons a year.
- A \$15.2 million energy efficiency project at the Monroe County Civic Center that will save more than \$750,000 in annual energy costs. Improvements included high-efficiency lighting, a micro-steam turbine and an 85 kW solar installation.
- We awarded \$1.5 million in contracts in Westchester County to help municipalities install energy efficient street lighting in Briarcliff Manor, Harrison, Rye Brook, Cortlandt and Mount Pleasant. The work is expected to save taxpayers nearly \$400,000 per year.
- Cornwall Central School District in Orange County partnered with NYPA on a \$5.5 million energy efficiency project at five schools, saving more than \$300,000 in annual energy costs. The upgrades will reduce greenhouse gases by 895 tons a year. Work included installation of boilers and lighting controls.

K-Solar

Significant progress on K-Solar was made to help public and nonprofit schools lower energy costs by installing solar power. Under a partnership with the New York State Energy Research and Development Authority (NYSERDA), and working with the state Education Department, almost 40 percent of the state's public districts (298 districts in total) have requested information.



NYPA offers its expertise in solar power and power purchase agreements so districts pay no upfront costs. K-Solar supports Governor Cuomo's STEM-based learning initiatives to enhance student awareness of energy efficiency, renewable energy and careers in the emerging energy economy.

By fall 2015, more than 330 schools received free solar site assessments, 107 districts received formal proposals from solar developers and four districts (in Bronx, Montgomery, Rockland and Washington counties) signed agreements totaling 2.3 MW.

Electric Vehicles

Working under the Charge NY initiative, NYPA and NYSERDA installed 83 of 100 charging stations at public and workplace locations with the balance expected to be in service by year's end.

PIONEERING DRONE TECHNOLOGIES

NYPA continued to adopt new technologies with an assessment in October of aerial drone technologies along our Gilboa-Fraser line. Working with the Electric Power Research Institute (EPRI), six vendors showcased their systems to approximately a dozen utilities. The drones are a safe, less-costly alternative inspection method and capture conditions in real time.

TOURISM

The visitors centers at our three largest hydropower projects and nearby recreation facilities are well attended as they provide memorable experiences for local residents and tourists. With this thought in mind, we are modernizing these sites.



- Construction began on a multimillion dollar project to redesign the Niagara Power Vista. By mid-2016, several new interactive exhibits, a simulator theater and numerous touch-screens will offer a heightened visitor experience on how the Niagara project works.
- NYPA approved a \$7.6 million contract to build a nature center at Robert Moses State Park in Massena to replace one destroyed by fire in 2010. It will include exhibit and office space for the Friends of Robert Moses State Park Nature Center, and serve

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as a trail send-out station and equipment rental depot. The facility falls under the Federal Energy Regulatory Commission's Recreation Plan for NYPA's St. Lawrence-FDR project.

FIVE CITIES ENERGY PLANS

NYPA unveiled the Five Cities Energy Plans to help Albany, Buffalo, Rochester, Syracuse and Yonkers reduce overall energy costs and carbon emissions, advance energy sustainability and support clean energy technologies and jobs. These plans could save the cities up to \$400 million annually in combined energy costs.

43NORTH AWARDS \$1 MILLION PRIZE

For the second consecutive year, NYPA funded 43North, the world's largest business idea competition. ACV Auctions of Buffalo won the \$1 million grand prize.

WESTERN NY WORKFORCE DEVELOPMENT CENTER

NYPA will play a key role in the Western New York Workforce Development Center, a new hub in Buffalo focusing primarily on career training in energy and advanced manufacturing. NYPA's activities will focus on the need for innovative training, recruiting and retention strategies.

EMPLOYEE CAREER DEVELOPMENT

NYPA's inaugural class of employees in an MBA program affiliated with Pace University received their degrees. About 20 employees participated, using real-life work projects at NYPA for case-study material. The next class begins in April 2016.

INNOVATORS SUMMIT

In November, NYPA held its second Innovators Summit, in Albany, to recognize state and local government agencies aligned with the state's BuildSmart NY initiative.



Their use of innovative technology and strategies are reducing energy consumption, saving money and significantly reducing greenhouse gas emissions.

FINANCIAL POSITION

The three leading credit-rating agencies issued strong ratings for NYPA's Series 2015 A Revenue Bonds issue for up to \$80 million, with each citing NYPA's prudent fiscal management. Moody's Investor Service assigned an Aa1 rating, Standard & Poor's assigned an AA long-term rating and Fitch Ratings assigned an AA rating.

STRATEGIC VISION 2020 – NYPA AND ITS FUTURE

A dynamic organization like NYPA embraces new identities and recognizes when the status quo must be rejected. This is exactly where we are today.

With our Strategic Vision 2020, NYPA is pursuing initiatives in critical areas that will enhance its status as a leader in public power while addressing the transformation unfolding in the energy industry. All of these factors will help NYPA have a profound and lasting effect on our customers and industry for decades to come.

Cover, clockwise from left: Shaft and runner removal for the LEM at the Lewiston Pump-Generating Plant; workers at cheesemaker Yancey's Fancy in Corfu, which expanded with financial assistance from NYPA; transformers modernizing the Robert Moses switchyard in Massena; New York Air Brake of Watertown, a recipient of low-cost NYPA hydropower

Page 2, top: Installation of fiber optics to transmission lines as part of the Marcy South Series Compensation project; bottom: NYPA President and CEO Gil C. Quiniones with Alcoa workers in Massena

Page 3, top, clockwise from top left: Artist rendering of the nature center to be built at Robert Moses State Park in Massena; a NYPA electric vehicle at Albany International Airport; K-Solar event at Somers High School; drone testing along NYPA's Gilboa-Fraser transmission line; bottom: NYPA Chairman John R. Koelmel, right, at the 43North awards presentation with 43North Chairman Jordan Levy

Back cover, clockwise from top: Creation of the Western NY Workforce Development Center is announced in Buffalo; attendees at NYPA's 2015 Innovators Summit in Albany; NYPA Talent Development staff and members of the inaugural MBA class of NYPA employees celebrate their degrees from Pace University

