### 2800 ANNUAL REPORT 2024 OPERATING

### **FACILITIES**

# **NEW YORK POWER AUTHORITY:**

ST. LAWRENCE-FRANKLIN D. ROOSEVELT POWER PROJECT

Type: Hydroelectric

Location: Massena, St. Lawrence County

Net Dependable Capacity: 828.0MW\*

First Commercial Power: July 1958

2024 Net Generation: 7,369.6 GWh

NIAGARA POWER PROJECT

Type: Hydroelectric

Location: Lewiston, Niagara County

Net Dependable Capacity: 2,675.0MW\*

First Commercial Power: January 1961

2024 Net Generation: 15,281.2 GWh

BLENHEIM-GILBOA PUMPED STORAGE

POWER PROJECT

Type: Pumped Storage/Hydroelectric Location: North Blenheim and Gilboa,

Schoharie County

Net Dependable Capacity: 1,169.6MW\*

First Commercial Power: July 1973

2024 Gross Generation: 354.6 GWh

RICHARD M. FLYNN POWER PLANT

Type: Gas/Oil

Location: Holtsville, Suffolk County

Net Dependable Capacity: 149.8MW\*

First Commercial Power: May 1994

2024 Net Generation: 472.1 GWh

FREDERICK R. CLARK ENERGY CENTER

Function: Coordinates NYPA system operations

Location: Marcy, Oneida County

Opened: June 1980

#### SMALL HYDRO FACILITIES

Located on reservoirs and waterways around the state, these facilities include the Ashokan Project, Gregory B. Jarvis Plant, Crescent Plant and Vischer Ferry Plant

Combined Net Dependable Capacity: 36.8 MW\*\* 2024 Net Generation: 145.4 GWh

#### SMALL CLEAN POWER PLANTS

Type: Gas

Location: Six New York City sites and Brentwood, Suffolk County Net Dependable Capacity: 456.4 MW\*

First Commercial Power: June 2001

2024 Net Generation: 630.3 GWh

#### EUGENE W. ZELTMANN POWER PROJECT

Type: Gas/Oil

Location: Astoria, Queens County

Net Dependable Capacity: 507.2 MW\*

First Commercial Power: December 2005

2024 Net Generation: 3,686.7 GWh

#### NORTHC OUNTRYE NERGYS TORAGE

**SYSTEM** 

Type: Energy Limited Duration

Location: Chateaugay, Franklin County

Net Dependable Capacity: 20MW\*

First Commercial Power: September 2023

2024 Net Generation: 1.2 GWh

<sup>\*</sup> Net Dependable Capacity is a calculated average of the Winter and Summer net capability reported in the 2024 New York Independent System Operator Load & Capacity Data Report (Gold Book).

<sup>\*\*</sup>Net Dependable Capacity for Small Hydro facilities is based on 2023 data.

### **HUDSON TRANSMISSION PROJECT (HTP)\*\*\***

Type: High-Voltage Transmission Line

**Location**: Seven-mile cable, 230-kV line from Public Service Electric & Gas Co.'s Bergen Substation in Ridgefield, NJ, to Consolidated Edison Co.'s West 49th St. Substation (345 kV line from the HTP converter

station to NY) in Manhattan. (Includes approximately 3 ½-mile Hudson River underwater section)

Capacity: 660 MW

First Commercial Operation: June 2013

Average 2024 Availability to Transmit Power: 99.94% Availability Hours: 8779 Hours

\*\*\* NYPA has a 20-year firm transmission capacity purchase agreement with Hudson Transmission Partners, LLC, the developer, owner and operator of the line, which connects with a neighboring regional transmission organization, PJM Interconnection. NYPA contracts for 87 percent of HTP's transmission capacity, or up to 575 MW.

#### NYPA TRANSMISSION FACILITIES

1,550.4 circuit-miles of alternating current transmission lines.

Size	Underground	Overhead	Total
765kV	0.0	155.2	155.2
345kV	42.8	977.2	1,020.0
230kV	0.0	338.0	338.0
115kV	1.8	35.4	37.2
Total	44.6	1,505.8	1,550.4

# 2024 Accomplishments - New York Power Authority

In 2024, New York Power Authority ("NYPA") made substantial progress in expanding renewable energy generation, enhancing transmission infrastructure, supporting economic development, investing in workforce training and engaging with communities. These accomplishments align with New York State's clean energy goals and demonstrate NYPA's commitment to a sustainable and resilient energy future.

# **Expanded Authority/NYPA Renewables**

- Renewable Generation Strategic Plan: Published a draft of NYPA's first Renewable Generation Strategic Plan, identifying 40 proposed projects with a total capacity of 3.5 gigawatts (GW) across New York State. The final version of the plan, which NYPA's Board of Trustees approved in January 2025, identified the first tranche of 37 projects totaling 3.0 GW of renewable energy generation and storage systems. This followed an extensive public comment period in the fall of 2024, during which NYPA gathered input from more than 5,000 stakeholders and held 12 public hearings across the state, including one virtual session.
- Renewable Energy for Public Buildings: In collaboration with the New York
  State Office of General Services, NYPA began developing contracts to supply
  state agencies with renewable energy, aiming to achieve 100% renewable
  energy for state agencies by 2030. This initiative is expected to result in at least
  500 megawatts (MW) of renewable energy, creating 9,000 union jobs and
  reducing emissions.

# **Customer Partnerships and Innovative Energy Solutions**

- **Economic Development:** Through its Power Proceeds programs, NYPA awarded more than \$12.5 million in funding, supporting commitments to 10,600 jobs and \$6.5 billion in capital expenditures statewide. In 2024, NYPA made 91 power awards across all 10 economic development regions.
- Energy Efficiency Programs: NYPA continued its longstanding energy efficiency programs, investing approximately \$4.1 billion in more than 2,800

- projects, resulting in annual savings of over \$280 million and reducing energy consumption by nearly 1,900 gigawatt-hours.
- **Total Economic Development Awards:** Throughout 2024, NYPA awarded more than 100 businesses nearly 720 MW of low-cost power, supporting 26,300 jobs and spurring more than \$22.1 billion in private capital investments.
- **ReCharge NY Awards:** Approved allocations of more than 169 MW of low-cost power under the ReCharge NY program to 80 businesses, supporting 24,670 jobs and spurring nearly \$20.8 billion in private capital investments.
- **Power Proceeds Awards:** Awarded more than \$2.8 million to six organizations, spurring more than \$32.3 million in capital investments and supporting 80 jobs.
- Key Projects: Supported major projects, including Edwards Vacuum's new facility at the Science, Technology & Advanced Manufacturing Park in Genesee County, Amazon's e-commerce center in the Town of Niagara, Cocojune's facility expansion in Greene, Plug Power's hydrogen fuel production expansion, and EnerPlate's battery storage materials production facility in Niagara Falls.

# **Decarbonization Leadership**

Empire State Plaza Energy Master Plan: Released an Energy Master Plan
focused on decarbonizing the Empire State Plaza in Albany, including pathways
such as fuel switching and energy efficiency gains. A \$100 million project to
electrify the chiller systems was announced, with construction expected to begin
in late 2025.

# **Electric Vehicles**

- EVolve NY Fast Charging Infrastructure Expansion: Executed contracts for 394 electric vehicle (EV) charging stations, with 212 chargers at 52 sites operational and approximately 188 additional chargers in development. NYPA facilitated the development of more than 1,000 electric vehicle charging stations at government facilities and customer sites.
- National Electric Vehicle Infrastructure Funds Utilization: Partnered with the State Department of Transportation to leverage federal funding for EV charging infrastructure, opening charging ports at sites in the Hudson Valley, New York City and Westchester County.

- MTA Bus Depots: Managed the construction of 53 state-of-the-art overhead electric bus chargers at Metropolitan Transportation Authority depots, supporting the world's largest bus fleet's transition to zero-emissions buses.
- NYC EV Charging Hubs: Announced an agreement with the New York City Department of Transportation to create up to 13 EV fast-charging hubs at municipal parking facilities across the city.

### **Solar Power**

- Solar PV Systems at Public Schools: Collaborated with the City of New York to deploy solar PV systems on more than 50 K-12 public school rooftops.
- Solar Carport Canopy at John F. Kennedy International Airport: Began installation of what will be the largest solar carport canopy in New York State.

# **Transmission Projects**

- Central East Energy Connect: Celebrated its first anniversary of operation, alleviating transmission congestion between Albany (New Scotland) and Oneida (Marcy) counties.
- **Smart Path Connect:** The approximately 110-mile new line is being constructed with National Grid New York to upgrade existing high-voltage transmission lines in the North Country, connecting to the Mohawk Valley.
- Propel NY Energy: A 90-mile new transmission line will bolster reliability and resiliency of the grid connecting New York City, Long Island and Westchester County. Currently in the permitting phase of Article VII, the project will include four new stations, several new 345 kV underground and submarine lines, and a new 138 KV underground line. Construction is estimated to begin in 2026 with the project's in-service date estimated for 2030.
- **Five Boro Energy Connect:** NYPA, with collaborator LS Power New York, submitted 12 proposals to the New York Independent System Operator to deliver 5.4 GW of planned offshore wind generation into New York City.
- Clean Path: Filed a petition to the state Public Service Commission for Priority Transmission Project designation, expected to deliver carbon-free power to New York City by 2029.

### **Generation Projects**

- **Next Generation Niagara**: Advanced the refurbishment of the first turbine unit at the Niagara Power Project as part of the \$1.2 billion Next Generation Niagara capital improvement initiative.
- Niagara Power Project Control Room: Completed major upgrades to the control room, enhancing operational capabilities.

# **Energy Storage**

- First State-Owned Utility-Scale Battery Energy Storage Facility: Began operating New York's first state-owned utility-scale battery energy storage facility in Franklin County, serving as a model for future storage systems.
- Transitioning Small Natural Gas Sites: Signed term sheets with developers for battery storage projects at several small natural gas power plant sites and issued a Request for Information for NYPA's Kent small natural gas power plant site in Brooklyn.
- Battery Energy Storage System: Installed a first-of-its-kind battery energy storage system using high-safety, lithium-ion superCell technology at NYPA's administrative offices in White Plains.

# **Workforce Training**

- Workforce Training Investment: Awarded \$21 million to date in workforce training grants to various organizations, supporting training programs. The program expects to spend the full \$25 million designated in the expanded authority legislation this year, enabling many community-based organizations to strengthen their workforce training initiatives, preparing more New Yorkers for careers in the clean energy transition.
- Training Programs: Supported programs at the Renaissance Technical Institute in East Harlem, Institute for Workforce Advancement on Long Island, Oneida County Office of Workforce Development in Utica, Public Community Housing Fund in New York City, SUNY Clean Energy Microcredential Initiative, and the WVI Dolphin Foundation in New York City. These investments prepare workers for roles in wind and solar power maintenance, aerial-drone structural inspections, HVAC maintenance, and electric-vehicle charging equipment support.

# **Implementing Key Expanded Authority Commitments**

- Deactivation of Small Natural Gas Power Plants: NYPA progressed plans to deactivate its small natural gas power plants by 2030, signing term sheets for battery storage projects at its Harlem River and Gowanus power plants. NYPA is on track to deliver its strategic plan for this transition by May 5, 2025.
- REACH Program: NYPA petitioned the state Public Service Commission to establish the Renewable Energy Access and Community Help (REACH) program, which was granted in October 2024. The program will provide bill credits for low-income ratepayers in disadvantaged communities from revenue generated by renewable energy projects.

### **Energy Efficiency**

- Smart Street Lighting NY: Reached a milestone of replacing 500,000 streetlights with energy-efficient LED fixtures throughout New York State.
- Prototype Carbon Intensity Dashboard: Developed a prototype dashboard to enable building managers to report electricity consumption and identify load management opportunities to reduce carbon emissions.
- American Public Power Association Energy Innovator Award: Honored with the award for developing and applying creative, energy-efficient techniques and technologies.
- Induction Stove Challenge: Launched in collaboration with the New York State Energy Research and Development Authority (NYSERDA), this program encourages appliance manufacturers to design and produce energy-efficient, electric cooking systems for New York City Housing Authority (NYCHA) buildings.
- Clean Heat for All Challenge: Collaborated with NYSERDA and NYCHA to develop and install 72 cold climate packaged window heat pump units in NYCHA apartments, reducing greenhouse gas emissions.
- Bronx Community College Boiler Plant Upgrade: Partnered with the City University of New York to improve the heating system reliability at Bronx Community College, supporting the BuildSmart2025 energy efficiency program that NYPA administers on behalf of New York State.
- Clarkstown LED Lighting Project: Replaced all lights in the Town of Clarkstown's police headquarters and justice court building with energy-efficient LED fixtures.

 Port Authority and Office of General Services: Completed installation of energy-efficient LED lights at One World Trade Center and the Adam Clayton Powell Jr. State Office Building in New York City, supporting BuildSmart2025 goals.

# **Sustainability/Finance**

- Annual Integrated Report: Released the second annual integrated report detailing NYPA and the Canal Corporation's operations and activities, combining environmental, social and governance data with audited financial information.
- **Green Bonds:** issued \$450 Million in Green Bonds to fund capital expenditures, supported by a second-party opinion from Sustainalytics, affirming alignment with market principles and sustainability goals.
- East Buffalo Indoor Food Production: Unveiled an indoor food production container to advance urban farming and raise awareness about hydroponic gardening, sustainability and nutrition for underserved communities.

# **Community and Environmental Initiatives**

- **Bronx Green Action Challenge:** Funded the inaugural Bronx Green Action Challenge with \$1 million, which was won by Bronx Community College. The college will develop and implement campus sustainability plans.
- National Pollinator Week: Established new habitats for pollinators at NYPA's visitor centers in Lewiston and Massena to protect bees, butterflies and other pollinators.
- Monarch Butterfly Habitat Conservation: Signed a voluntary conservation agreement with the U.S. Fish & Wildlife Service to proactively maintain a habitat for monarch butterflies – a declining species – along rights-of-way under NYPAowned and operated transmission lines throughout New York State.
- STEM Curriculum Expansion: Incorporated offshore wind technology into NYPA's STEM programs and launched the curriculum in Long Island public school classrooms.
- **Scholarships:** Awarded \$10,000 scholarships to 10 New York State high school seniors pursuing careers in energy-related fields.

- **P-TECH Internship Program:** Continued the Pathways in Technology Early College High School internship program, increasing participation to 41 students, focusing on energy-related projects.
- **Green Classrooms:** Opened the first of four green classrooms in the Bronx at PS 25 The Bilingual School, featuring a hydroponic lab to teach students about agricultural skills, environmental science and sustainability.
- Rooftop Garden in Queens: Partnered with the Variety Boys and Girls Club of Queens to expand a rooftop garden, providing intergenerational learning opportunities for students and community members. This initiative supports urban agriculture and sustainable practices.

# **Supplier Diversity**

• **Supplier Diversity Expo:** Celebrated the 40th anniversary of NYPA's Supplier Diversity program, hosting hundreds of diverse business owners and industry professionals.