



# Small Natural Gas Power Plant Transition Plan

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# EXECUTIVE SUMMARY

The New York Power Authority (“NYPA”), the largest state power organization in the United States, is at the forefront of New York’s energy transition. NYPA generates 22% of the state’s electricity, with nearly 80% of its 2023 output from renewable hydropower, and is committed to transforming New York into a resilient, clean energy-powered state by 2040.

To further this commitment, NYPA plans to decarbonize its seven small natural gas power plants (“small plants”) that are located in the Southeastern New York region by the end of 2030, when it is feasible to do so without worsening air quality in disadvantaged communities or jeopardizing reliable electric service in New York.

The 2023-24 Enacted State Budget (Enactment) calls for NYPA to deactivate its small plants in New York City and Long Island by the end of 2030 if emissions from replacement resources will not cause more than a minimal increase in air pollution in disadvantaged communities and if they are not needed to maintain reliable electric service.<sup>1</sup>

Well before the law passed in 2023, NYPA had begun to explore ways to retire its small plants and reuse these sites, including options to replace them with battery energy storage. NYPA solicited the views of the communities in which the small plants are located on how the gas plants can be retired and the properties reused, and engaged in meaningful discussions with the New York Independent System Operator (“NYISO”), Consolidated Edison Company of New York, Inc. (“Con Edison”) and the Long Island Power Authority (“LIPA”) on the needs of the power grid and whether those needs can be met with energy storage.

In April 2022, NYPA solicited proposals to replace the small plants with energy storage facilities to store renewable energy produced on the grid for use when it is needed. Based on a robust response from developers, as of April 2025, NYPA has signed four term sheets and is negotiating a fifth to lease small plant sites for battery storage development, and is considering responses to a request for information on how the Kent site in Brooklyn could be redeveloped.

Concurrently, NYPA has been building out the transmission system with new lines to carry renewable energy to New York City to help facilitate the retirement of the small plants and other fossil-fueled generators. These projects include Smart Path, Smart Path Connect and Central East Energy Connect. NYPA is building Propel New York, which will improve the resiliency and reliability of the electric grid, and

is competing to win a NYISO bid to similarly enhance the reliability of the electric grid in New York City.

Since 2020, NYPA has been working to build a direct current transmission line, known as Clean Path, to bring renewable energy located in Upstate New York directly to the heart of New York City to reduce the reliance on fossil fuel generation. To this end, NYPA has petitioned the Public Service Commission to approve the Clean Path line as a Priority Transmission Project that would empower NYPA to build the line right away. The cancellation of or uncertainty faced by offshore wind projects has underscored the importance of Clean Path to bring on-shore renewable energy directly to the heart of New York City.

NYPA has taken all of these steps deliberately and methodically to enable renewable energy to serve New York City. Before NYPA can retire the small plants, the Enactment requires NYPA to consider how the deactivation of the small plants would affect emissions from other power plants that may worsen air quality in the communities where they are located. Then the NYISO, the Department of Public Service and the utilities will also have to decide whether the small plants are needed for power system reliability.

After considering the views of the communities and analyzing input from the electric utilities, two concerns are foremost in our minds. First, NYPA will ensure that shutting down its small plants will not cause air quality to worsen in disadvantaged communities due to emissions from other power plants that will operate when NYPA’s small plants, which are among the cleanest and most efficient in the New York City generation fleet, are retired. Second, NYPA will work with the electric utilities and other state agencies to ensure that the residents of New York City and Long Island will keep the highest level of reliability in their electric service should these small natural gas plants be turned off.

Over the past two years while NYPA has been assessing approaches to retire the small plants to meet these environmental and reliability conditions, significant policy developments have occurred that merit consideration. As described below, New York State and the New York City power grid are now facing challenges due to changes in Washington that threaten to delay or cancel new clean electricity resources that New York has counted on to replace the small plants to keep the lights on while reducing emissions from the power sector. At the same time, the state power grid operator, the NYISO has projected a need for new power resources and other reliability concerns on the New York City and the New York State power grids when running computer forecast models of the power system that assume the small plants will be out of service.<sup>2</sup> In addition,

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<sup>1</sup> Public Authorities Law § 1005(27-c).

<sup>2</sup> The NYISO issued its [2024 Reliability Needs Assessment Report in November 2024](#)

electric system demand in New York City and New York State is growing, largely as a result of new economic development.

This Transition Plan is in furtherance of the Authority's obligation to publish a Plan for the phase out of the production of electricity from the small plants by Dec. 31, 2030. The Transition Plan analyzes air emission and power system reliability challenges as NYPA plans to deactivate as many of its small plants as possible by the end of 2030. The Plan concludes that, at this time, NYPA must conduct additional studies with the NYISO and expert consultants to determine the impact to air quality in disadvantaged communities across New York State, including in New York City and Long Island, when the small plants are shuttered. Specifically, findings from more in-depth air quality analysis will equip NYPA, with input from the impacted communities, the NYISO and the Department of Public Service, to identify which power plants it can deactivate by 2030 or sooner without making air quality worse in disadvantaged communities.

For those plants that NYPA determines can deactivate without worsening air quality, NYPA will work with the state power grid operator, the Department of Public Service, and local utilities to decide if we can retire them and maintain reliable electric service in the communities they serve and across New York City and the state. While the application to deactivate a power plant is submitted in a single moment in time, the need for that plant depends on current conditions, historical use and, most importantly, the needs of the future electricity grid.

Due to many factors described below, there is unprecedented uncertainty regarding which resources will make up the New York grid going forward. NYPA has been continuously monitoring these changes since the law was enacted two years ago, and we continue to receive significant updates; as recently as early April, the NYISO released updated analysis showing that power grid reliability concerns in New York continue to increase, especially if additional generation retires from the power system or the Champlain-Hudson Power Express line is delayed.

In light of these developments, this plan shares NYPA's methodology for how NYPA will time and sequence our applications for deactivation of each small plant with the NYISO, along with a primer on how the NYISO, the Department of Public Service and the utilities make determinations of power grid reliability needs.

In summary, NYPA's Transition Plan is already fully underway and consists of the following six deliberate steps:

1. NYPA will determine on a plant-by-plant basis whether each plant can deactivate without causing more than a de minimis increase in air emissions in a disadvantaged community. We have entered into agreements with the NYISO and an expert consultant to verify our initial findings

that net emissions in New York City, Long Island and in disadvantaged communities in New York State increase when all of the small plants retire, and to determine on a plant-by-plant basis which of the small plants could be deactivated without emissions from other older plants degrading air quality in a disadvantaged community.

2. For each plant that NYPA can retire without causing increased air emissions in a disadvantaged community, NYPA will apply to the NYISO to work with the Department of Public Service, and Con Edison and LIPA, to determine whether that plant is needed for emergency power or to keep the lights on, and when that plant can be deactivated without causing a reliability need on the power system.
3. For each plant that NYPA can retire consistent with air quality in disadvantaged communities, NYPA will deactivate that plant before the end of 2030, if it is determined that doing so does not result in a need for emergency power or an electric system reliability issue.
4. At the five sites where NYPA has entered into term sheets with energy storage developers, NYPA will enter into development agreements to lease those sites to developers to remove the gas turbines and build energy storage facilities in their place, conditioned on the power plants not being needed for emergency power or electric system reliability.
5. For each small plant that NYPA determines cannot be retired due to increasing air emissions from other power plants or because the plant is needed to provide emergency power or electric system reliability, NYPA will revisit its determination on that plant every two years until that plant can be retired.
6. NYPA will continue building transmission to bring renewable energy directly to the heart of New York City to reduce reliance on the small plants and other fossil-fueled generators. These projects include completion of Smart Path, Smart Path Connect, Central East Energy Connect, Propel NY Energy, the proposed Clean Path Transmission Project and the proposed Five Boro Transmission Project.

Section 1 of the Transition Plan presents the Power Authority's role as a public power utility and its expanded mission and reviews the history of the small plants. It discusses NYPA's unique relationship with the Southeastern New York Region and commitment to making contributions to meeting the state's clean energy ambitions while maintaining a reliable power grid. Section 1 also presents the historic background on NYPA's installation of small plant units and their roles on New York's electric grid.

Section 2 provides insight into the applicable statutory and state and federal regulatory requirements for the proposed deactivation of the small plants.

Section 3 outlines the key considerations incorporated in developing this Plan, including air emission impacts in disadvantaged communities, maintaining reliable electric service, stakeholder impact, public input and reuse opportunities.

Section 4 of the Plan presents NYPA's Transition Plan and the steps that are underway to determine when and how it can deactivate each small plant and place energy storage in service.

# 1. NYPA AND OUR EXPANDED MISSION

## 1.1 About NYPA

NYPA is the largest state power organization in the United States, owning 17 generating facilities and more than 1,550 circuit-miles of transmission lines. Together with the Public Service Commission, investor-owned utilities and private-sector partners, NYPA has undertaken the largest transmission expansion in New York State in decades.<sup>3</sup>

In addition to these projects, NYPA and LS Power have jointly proposed building the Five Boro transmission project to strengthen the electric grid in New York City.<sup>4</sup> Among its key power generation assets, the Power Authority owns and operates three large hydropower generating facilities, two large-scale fossil fuel-powered generating facilities, seven small natural gas power plants sites, four small hydroelectric facilities, and one utility-scale battery energy storage system. These assets total approximately 6,000 megawatts ("MW") and generate roughly 22% of the state's electricity. More than 80% of power NYPA generates is renewable hydropower. NYPA's work has been entirely self-funded.

### VISION

A thriving, resilient New York State powered by clean energy.

### MISSION

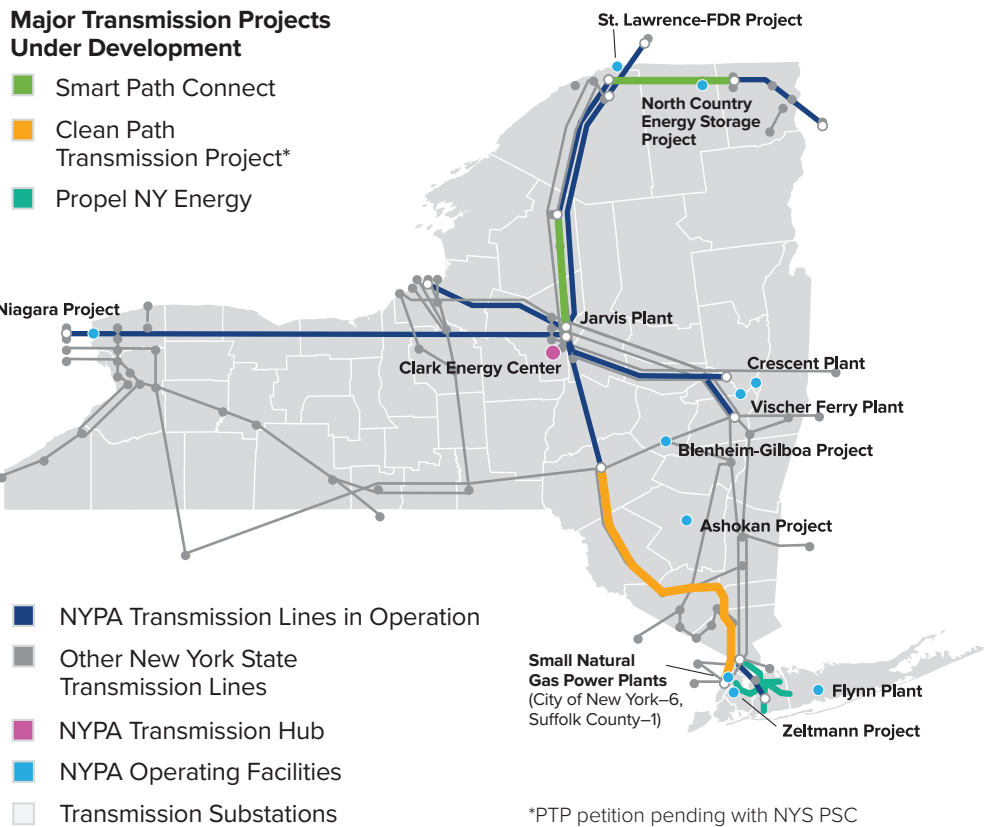
Lead the state's transition to an emissions-free, economically vibrant New York through customer partnerships, joint development opportunities, innovative energy solutions, and the responsible supply of affordable, clean, and reliable energy.

The Power Authority provides the lowest-cost electricity in New York State and is the only statewide electricity supplier. We provide our customers with electricity and offer energy services to help them achieve their decarbonization and electrification goals. Our low-cost, clean hydropower promotes economic development and supports more than 450,000 jobs in New York State.

In addition to generation, NYPA is a national leader in promoting energy efficiency, the development of clean energy technologies and the adoption of electric vehicles.

FIGURE 1: TRANSMISSION CAPACITY IN NEW YORK STATE

## Growing Transmission in New York State



<sup>3</sup> It is important to note that NYPA operates several electricity generation plants but does not operate the distribution wires feeding into the impacted neighborhoods. Also, NYPA does not decide which generation plant runs at a given time to meet the electricity needs. Rather, NYPA follows the New York State grid operator's dispatch instructions in running the electricity generation plants.

<sup>4</sup> <https://www.lspower.com/new-york-power-authority-and-ls-power-submit-proposals-for-new-transmission-solutions-to-deliver-clean-energy-to-new-york-city/>

The Power Authority’s energy efficiency projects for government agencies, municipalities and non-profits save electricity and taxpayer dollars while reducing greenhouse gas emissions. NYPA has been, and is committed to continue, making significant contributions towards New York’s clean energy ambitions.

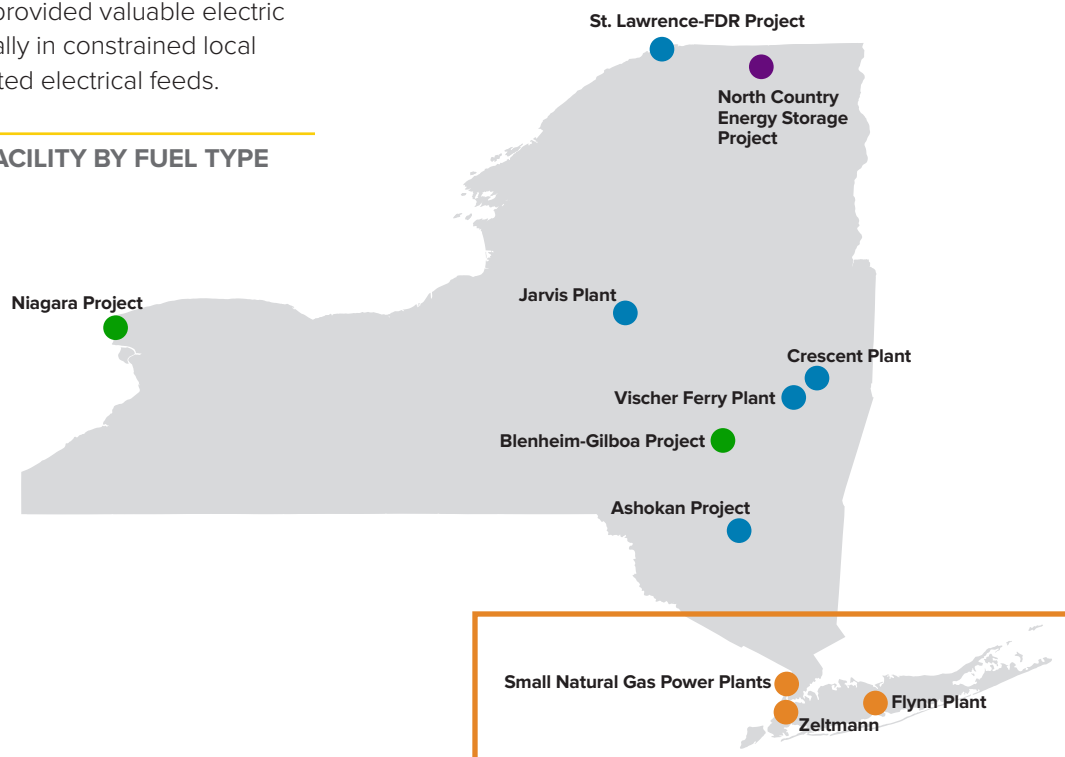
VISION2030 Renewed<sup>5</sup>, NYPA’s 10-year strategic plan that builds upon the original VISION2030 put in place in 2020, was approved by its Board of Trustees in March 2025. Among other notable undertakings, VISION2030 Renewed commits NYPA to decarbonizing the Power Authority’s small plant units by 2030, as long as electric system reliability and environmental conditions are met, and all fossil fuel assets by 2035. VISION2030 Renewed reinforces NYPA’s commitment to put the people of New York first, stimulate job creation and capital investments and contribute to a stronger economy.

## 1.2 Southeastern New York Region and the Authority Customers

The Authority’s commitment to the Southeast New York (“SENY”) region is unique (see Figure 2). NYPA powers many customers located in New York City, such as the Metropolitan Transportation Authority (“MTA”), the City of New York, the Port Authority of New York and New Jersey, the New York City Housing Authority, and the New York State Office of General Services. To provide valuable electric services throughout New York City and Long Island, NYPA’s generating assets are strategically located and, together, have an operating capacity of approximately 1,263 MW of electricity. The small plants have provided valuable electric services in New York City, especially in constrained local areas of the system that have limited electrical feeds.

**FIGURE 2: NYPA OPERATING FACILITY BY FUEL TYPE**

- = Hydro
- = Pumped Storage
- = Gas
- = Battery Storage



In addition to the small plants, the Authority owns two large gas plants – the Eugene W. Zeltmann Power Project (“Zeltmann”) and the Richard M. Flynn Power Plant (“Flynn”) plant. The Zeltmann plant began commercial operations in 2005 and is a combined-cycle plant consisting of two combustion turbine generators and a steam turbine generator with a total nameplate rating of 576 MW. Located in Astoria, Queens, the Zeltmann plant, along with the contracted output of the Astoria Energy II plant and capacity and energy purchased by the Authority in the NYISO markets, serves various municipalities, school districts and public agencies in New York City.

Located in Holtsville, Long Island, and with a nameplate rating of 170 MW, the Flynn plant began commercial operation in 1994. The Flynn plant has been contracted to the Long Island Power Authority for the majority of its output.

NYPA’s long-standing relationship with SENY customers has also resulted in the implementation of several clean energy projects, including:

- Electrified ground support equipment for airports
- Community solar and other Distributed Energy Resources
- Heat pumps at the New York City Housing Authority
- Electric bus charging for the MTA
- Upgraded interior and street lighting

<sup>5</sup> <https://www.nypa.gov/vision2030-renewed>



**FIGURE 3: MAP OF SMALL NATURAL GAS POWER PLANT SITES**



### 1.3 Small Natural Gas Power Plants: Background

In 2001, the NYISO identified an imminent power shortage in New York City and the Authority was tasked with quickly installing seven natural-gas-fueled power plants with a total output of approximately 460 MW. This rapid buildout addressed the power shortage, preserving the reliability of the grid, capacity deficiencies and ongoing load requirements in the New York City metropolitan area.

Built across seven sites – two sites in the Bronx, two sites in Brooklyn, one site in Queens, one on Staten Island, and one in Brentwood, Long Island (see Figure 3) – and equipped with state-of-the-art air pollution controls, the 11 generating units are among the most efficient and cleanest generation sources in New York City. Many electric generators in New York City are more than 50 and even 60 years old, and rely on older, less-efficient generators that burn more fuel per unit of electricity produced and emit more air pollution per unit of burned fuel.

By contrast, the small plants installed in 2001 have more efficient generators and lower emissions compared to other plants in the New York City area. Table 1 below provides additional information regarding the small plant sites.

### 1.4 Small Plants Value to the Electricity System

The small plants were built in historically constrained locations known as “load pockets,” where limited electricity lines supply those areas. As a result, the small plants have alleviated local electric system congestion and increased reliability and resiliency to meet customer demand in such areas. Given their relatively low operating and fuel costs, the small plants have historically run more often compared to less efficient and more polluting units. The small natural gas power plants are also valued in system operations because they have fast-start capability, which means that they can turn on quickly during peak load conditions to provide additional electricity when consumers are using more power. Two of NYPA’s small plants are also specially equipped to help restore power after a system outage, referred to as “black start” capability. Nevertheless, the small plant energy outputs are relatively low compared to much larger base load generators such as combined cycle generators that combine a combustion turbine and a steam turbine.

### 1.5 Commitment to Innovation

NYPA is committed to exploring innovative solutions to New York’s decarbonization efforts. To that end, NYPA has also been innovative in its approach to optimizing the performance and value of its state-owned generation and transmission assets, and ensuring these serve New Yorkers long into the future.



NYPA was the first electric utility in North America to achieve ISO55001 certification – an international standard for asset management systems that aims to help organizations manage the lifecycle of assets more effectively. Since 2020, NYPA has invested more than \$8 million at the small plants, including catalyst replacements for a unit at Gowanus and Vernon Boulevard, which helps the plants maintain their emissions in compliance with requirements. NYPA also conducts annual inspections, repairs and improvements on the plants to ensure efficient operations.

Further, NYPA completed a first-of-its-kind demonstration at the Brentwood plant to evaluate the effects of different concentrations of green hydrogen blended with natural gas to assess the impact on greenhouse gas emissions and its overall system and environmental impacts. Preliminary results showed a decrease in CO<sub>2</sub> emissions of as much as 20% at peak hydrogen levels.<sup>6</sup>

In addition, in 2023 NYPA installed New York’s first state-owned utility-scale battery energy storage, a 20 MW project in the North Country’s Franklin County, to help relieve transmission congestion and better understand ways to integrate clean energy into the power system, especially during times of peak demand.

## 1.6 DEC Title V Air Permits

Title V of the federal Clean Air Act requires air emission permits for major sources of air pollution in the United States. In New York, such air emission permits are issued by the Department of Environmental Conservation (“DEC”). Because NYPA cannot be out of compliance with the law, NYPA has applied to the DEC for renewal of the air emission permits for its small plants until they can be closed. DEC is considering the applications and has held a public hearing on Harlem River. As the small plants continue to perform within the requirements of their Title V permits, NYPA is also putting in place a comprehensive \$1 million analyzer replacement program for the entire SENY region for nitrogen oxides (NO<sub>x</sub>), ammonia (NH<sub>3</sub>), carbon monoxide (CO), and oxygen (O<sub>2</sub>).<sup>7</sup>

## 1.7 Stakeholder and Community Engagement

The Power Authority has many stakeholders that have an active interest in how NYPA’s assets are managed and maintained. Due to the nature of the electricity services NYPA provides and their importance to New York State and the local communities in which it coexists, these stakeholders are an important part of planning and operations of the facilities.

TABLE 1: SMALL PLANT PROPERTY DETAILS

Site Name	Location	Transmission Owner	Description	Net Output to the Power System (MW)
Harlem River	Bronx, NY 10454 (Port Morris section)	Con Edison	2 units x LM6000 Simple Cycle PC Engine	79.9
Hellgate	Bronx, NY 10454 (Port Morris section)	Con Edison	2 units x LM6000 Simple Cycle PC Engine	79.9
Gowanus	Brooklyn, NY 11232 (Greenwood Heights section)	Con Edison	2 units x LM6000 Simple Cycle PC Engine	79.9
Kent	Brooklyn, NY (Williamsburg section)	Con Edison	1 unit x LM6000 Simple Cycle PC Engine	47
Vernon Blvd	Queens, NY (Long Island City)	Con Edison	2 units x LM6000 Simple Cycle PC Engine	79.9
Pouch	Staten Island, NY 10305 (Rosebank section)	Con Edison	1 unit x LM6000 Simple Cycle PC Engine	47
Brentwood	Brentwood, Long Island, NY (Suffolk County)	LIPA	1 unit x LM6000 Simple Cycle PC Engine	47

<sup>6</sup> <https://www.nypa.gov/news/press-releases/2022/20220923-greenhydrogen>  
<sup>7</sup> NYPA’s small plants meet the lowest achievable emissions rates pursuant to 6 NYCRR Part 231.

NYP&A engages with stakeholders through:

- Meetings and discussions
- Interaction with customers
- Membership of industry working groups and committees
- Engagement with state and local lawmakers
- Planning sessions
- Analyst inquiries and presentations
- Monitoring publications and sharing and collaborating on media releases
- Surveys

NYP&A has an Environmental Justice (“EJ”) program<sup>8</sup> that supports the low-income and historically disadvantaged communities that intersect with our strategic operations. The goal of the EJ program is to ensure that under served communities are prioritized in the transition to a clean energy economy.

NYP&A staff hosts meetings and site tours for critical stakeholders and has worked with its business units to incorporate an environmental justice lens into the Power Authority’s program development and execution. NYP&A’s EJ program leverages its expertise in generation, transmission, renewable energy and electric vehicle technology to provide meaningful programs in four fundamental areas:

- **Public education**, designed to increase community understanding of energy infrastructure. We provide multi-lingual energy literacy programs delivered by NYP&A environmental educators and community-based educators. NYP&A is committed to ensuring that historically disadvantaged communities are central to our planning for investments in new projects or infrastructure.
- **Workforce pathway programs** to ensure that communities are equipped to participate in clean energy jobs. We invest in future energy leader college scholarships and paid internships, including funding training for the NYCHA’s Clean Energy Academy that trains public housing residents in clean energy careers.

- **Community energy projects**, NYP&A’s EJ program implements no-cost community energy projects in public housing authorities, schools and community-based organizations to bring new resources into disadvantaged communities and increase equitable access to clean energy infrastructure. Additionally, NYP&A has invested in food justice research and projects that support climate-vulnerable communities from science labs in New York City public schools to supporting urban growers throughout the state.

In 2020, NYP&A entered into a Memorandum of Understanding with the PEAK Coalition – a group of five leading environmental justice and clean energy interests – outlining an agreement to collaborate about opportunities to support energy storage, climate and air pollution goals, and to evaluate the potential to replace NYP&A’s existing small plant units and augment and otherwise install renewable and battery storage systems or other low-emission energy resources at NYP&A’s small plant sites and surrounding communities. The PEAK Coalition includes UPROSE, the New York City Environmental Justice Alliance, Clean Energy Group, the POINT CDC and New York Lawyers for the Public Interest. The collaboration informed NYP&A’s solicitation for bulk energy storage projects to replace the small plants.

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<sup>8</sup> <https://www.nypa.gov/communities/nypa-engagement/environmental-justice>

## 2. STATE AND FEDERAL REQUIREMENTS FOR DEACTIVATION

NYPA's small plant deactivation and planned replacements by energy storage technology will be subject to the requirements set forth by the 2023-24 Budget Enactment and will be aligned with New York's clean energy ambitions. Additionally, NYPA's small plant deactivations will comply with the applicable state and federal regulatory provisions for the deactivation of electric generation facilities and other policies and procedures, as discussed below.

### 2.1 NYPA's Expanded Authority in 2023-24 Enacted State Budget

The 2023-24 Enacted State Budget authorized and directed the Power Authority to engage in the largest expansion of our responsibilities in decades to advance renewable energy and support other state priorities.<sup>9</sup> The Enactment expanded the mission of the Authority by authorizing it to develop new renewable energy generating projects to support New York State's clean energy ambitions.<sup>10</sup>

This expanded authority enabled NYPA to accelerate the development of renewable energy and to establish the Renewable Energy Access and Community Help ("REACH") program to provide bill credits for low- and moderate-income ratepayers in disadvantaged communities served by New York's investor-owned utilities. The Enactment further authorized NYPA to support workforce training for jobs in the renewable energy sector and provide up to \$25 million in annual funding for workforce training programs.

Most relevant to the Transition Plan, the Enactment directed NYPA to publish a plan to deactivate its small plants within two years of its passage, and to deactivate those plants by Dec. 31, 2030 so long as two preconditions are met. First and foremost, the Enactment instructed NYPA to consider whether air emissions from replacement electric generation resources would cause more than a de minimis increase in emissions of certain air pollutants in a disadvantaged community.

Second, the law provided that NYPA may retire the small plants on a plant-by-plant basis if they are not needed for

emergency power or to meet an electric system reliability need. Finally, the Enactment calls for NYPA to consider reusing the small plant sites and electrical equipment for purposes that do not involve the combustion of fossil fuels.<sup>11</sup> It specifically calls on NYPA to consider energy storage as a possible reuse of the small plant sites. The full statutory provisions of PAL § 1005 (27-c) are included in their entirety in Appendix A.

### 2.2 New York State Public Service Commission's Generator Retirement Requirements

By order issued in 2005, the New York State Public Service Commission ("PSC") requires that generators that are subject to PSC jurisdiction must provide adequate advance written notices of proposed retirements in order to prevent or mitigate degradation of electric system reliability.<sup>12</sup>

For generators that are sized 80 MW or more, the notice period is at least 180 days prior to the effective date of retirement and for the generators under 80 MW, the notice period is at least 90 days prior to the effective date of retirement. The PSC requires that the generator retirement notice must be provided to the Secretary to the PSC, the NYISO and any affected transmission and distribution utility.

The order does not require the PSC to act upon or approve generator deactivations. However, the order does require that the NYISO and the responsible utility work together, in consultation with Department of Public Service staff, to determine if the proposed retirement will result in a bulk and/or local system reliability need.

If a bulk or local system need is identified, the utility is required to coordinate a solution with the NYISO and Department of Public Service. The PSC encourages NYPA to voluntarily comply with the PSC's requirement of generator retirements notice. If NYISO determines that a small plant is not needed for electric system reliability or for emergency power service, NYPA plans to notify the PSC of its intent to deactivate the plant.

<sup>9</sup> In a separate provision of the 2023-24 Enacted State Budget, Chapter 58 of the Laws of 2023, Transportation, Economic Development and Environmental Conservation ("TED"), Part RR, the Enactment authorized NYPA to lead the [Decarbonization Leadership Program](#) and prepare decarbonization action plans for fifteen of the highest emitting state-owned facilities in New York State.

<sup>10</sup> Public Authorities Law ("PAL") § 1005(27-a).

<sup>11</sup> PAL § 1005 (27-c).

<sup>12</sup> CASE 05-E-0889 – Proceeding on Motion of the Commission to Establish Policies and Procedures Regarding Generation Unit Retirements, Order Adopting Notice Requirements for Generation Unit Retirements, Issued December 20, 2005.

### 2.3 NYISO’s Process to Address Generator Deactivation and Resulting Reliability Impacts

One of the NYISO’s core responsibilities is to prepare for the impacts of expected changes in electricity supplied from generators – including the deactivation of an electric generation resource – and of the increasing demand for power on the reliable operation of the New York transmission system. The analyses, evaluations and forecasts produced by the NYISO’s system and resource planning activities assist generators, utilities, transmission owners, electricity wholesale and retail suppliers, regulators and policy makers as they plan for the future.

One way the NYISO meets this responsibility is through the Reliability Planning Process, which is a comprehensive strategy used to assess and plan for the long-term reliability

of the bulk power system over a 10-year study period. Part of the Reliability Planning Process is a Short-Term Reliability Process that studies the reliability of the electric system over the next five years if power plants like NYPA’s small plants are retired.

In order to deactivate its small plants, individually or in groups, NYPA is required to submit a separate deactivation notice for each small plant to the NYISO at least 365 days in advance. While the submittal is called a “notice,” it is really an application for a decision by the NYISO in coordination with the responsible Transmission Owner(s), that retiring the plant will not cause a power system reliability problem. If the Short-Term Assessment of Reliability (“STAR”) finds a reliability need for a small plant to remain in operation for a period, the NYISO may determine that NYPA should keep its small plant in-service until other power system improvements can be made or new power resources can come online.

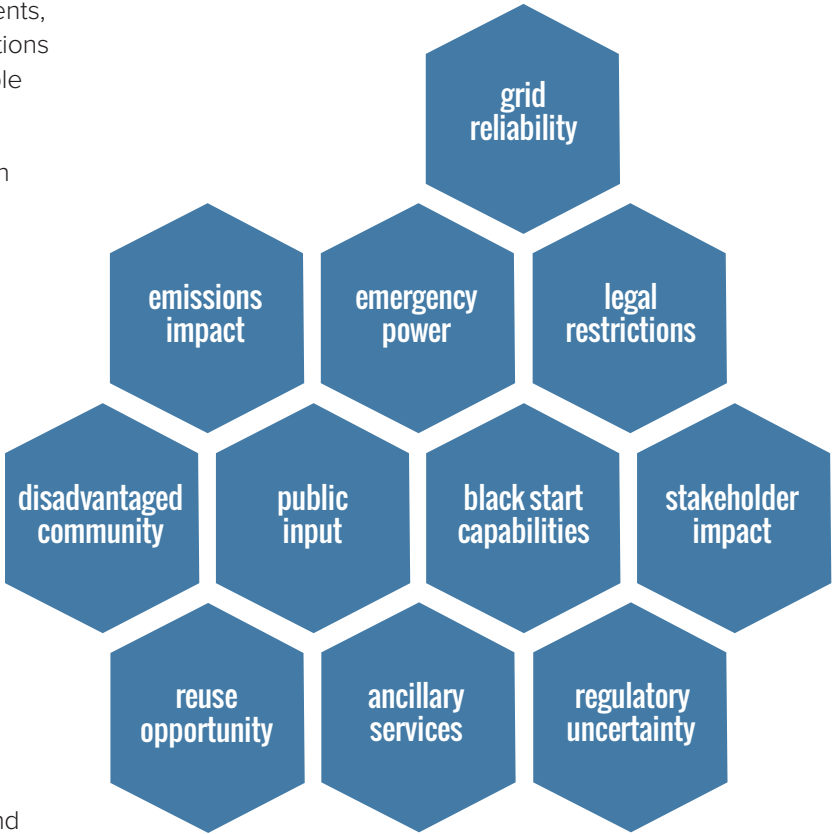
## 3. CONSIDERATIONS UNDERLYING A RELIABLE TRANSITION

Since February 2025, there has been a noticeable shift in federal energy and trade policy toward conventional energy sources. NYPA is closely monitoring these developments, including proposed changes to environmental regulations and federal support for decarbonization and renewable energy, as further described in Section 4.

Recent announcements from the federal administration raise the possibility of significant impacts on New York’s clean energy plans, such as potential delays or cancellations of offshore wind projects, new tariffs on imported clean energy and changes to the availability of federal funding or tax credits for renewable energy development. NYPA is assessing these potential impacts as it continues to support a reliable and sustainable energy future for New York.

While NYPA remains committed to deactivating the small plants, it must balance the critical nature of the electric system and rapidly changing energy landscape, especially in New York City. To achieve such balance, NYPA proposes a plan to undertake a phased approach that will fully evaluate the regulatory uncertainty and draw upon public input, electric and environmental considerations and opportunities, and the evolving energy landscape which includes new transmission and generation projects and planned generation retirements.

FIGURE 4: KEY PLANNING CONSIDERATIONS



In this section, NYPA has outlined the key considerations that have been reviewed and analyzed in developing this Plan and will be foundational in developing the preliminary plant-by-plant determinizations regarding when and how deactivations occur. These considerations will continue to be reflected in the procedural steps that NYPA will undertake in deactivating the small plants. A list of some of the key considerations is shown in Figure 4.

**REGULATORY UNCERTAINTY:**

Effects of the shift in federal policy and regulatory priority that are introducing uncertainty into New York’s ability to decarbonize each of the small plants

**RELIABILITY:**

Effect of plant deactivations on New York’s bulk and local grid reliability, in accordance with North American Electric Reliability Corporation and other reliability standards, and especially in communities that rely on a plant for energy supply

**EMERGENCY POWER:**

Effect of plant deactivations on emergency power services provided by a plant to New York’s bulk and local electric systems

**BLACK START CAPABILITY:**

Considering each plant’s “black start” capability and other grid support services (e.g., fast start and ramping capability when shortages occur)

**COMMUNITY IMPACT:**

Local community and stakeholder impacts of plant deactivation, including the host community’s history of being burdened by industrial uses

**EMISSIONS IMPACT:**

Effect of plant deactivation and proposed replacement generation on the emissions of criteria air pollutants or carbon dioxide within a disadvantaged community

**REUSE OPPORTUNITIES:**

Impact of plant deactivation on the opportunities to use a plant site for battery energy storage or other reuses within NYPA’s mission or in line with New York State priorities

**LEGAL RESTRICTIONS:**

Legal restrictions or other encumbrances that may constrain the use of a plant site following deactivation

**PUBLIC INPUT:**

Input from the public, including stakeholders, public officials, environmental groups and citizens

## 3.1 Preliminary Analysis

### 3.1.1 Previous Modeling

In 2020, NYPA, in consultation with the PEAK Coalition, commissioned an Adaptation Study to conduct a detailed assessment of adaptation strategies at each of the small plant sites and to analyze potential clean energy options to decarbonize the small plants.<sup>13</sup>

The Adaptation Study examined forecasts of changes in the New York electric supply mix as well as changes in demand over the next two decades. The findings showed that, as early as 2030, with the advent of more renewable energy coming into New York City, and a resulting decrease in the expected frequency and duration of generation run times, energy storage facilities with a four-hour duration could provide enough energy to fully replace the operations of any individual small plant, though not all small plants at once.

The study developed a three-pronged analytical framework that recognized the importance of capturing the detailed operations of the New York electricity system and the contributions of NYPA’s small plants to meeting electric system needs in New York City.

**Adaptation Study Phase 1:** Used GE-MAPS production cost model to develop an assessment of the impacts of the 2019 Climate Act requirements on New York’s electric system. The Phase 1 modeling included an examination of the impacts of the Climate Act’s economy-wide goals on the magnitude and timing of loads, driven by the electrification of the transportation and buildings sectors, as well as an assessment of changes to the resource mix in Zone J (New York City) and across the NYISO system to meet the state’s 70x30 and 100x40 goals.

**Adaptation Study Phase 2:** Included a detailed assessment of the feasibility of adaptation strategies at the small plant sites by examining the operations of the small plants over time and assessing the ability of battery storage to replace part or all the output on an hourly basis.

**Adaptation Study Phase 3:** Contained a financial analysis of the adaptation strategies and an examination of different implementation options.

### 3.1.2 New York Electricity System Modeling

The Adaptation Study modeled a Climate Act-aligned “Base Case” to assess changes in the New York electricity system and corresponding changes to the operations of NYPA’s small plants as New York State achieves its Clean Energy Standard target of 70X30. Over the following decade, the modeling

<sup>13</sup> Small Clean Power Plant Adaptation Report: <https://www.nypa.gov/-/media/nypa/documents/document-library/NYPA-SCPP-Adaptation-Study.pdf>



charted a scenario where New York added significant amounts of renewables and storage to meet the Climate Act's goals, including investments in offshore wind and storage resources in New York City and new transmission projects to increase the delivery of clean energy into the city.

In the Base Case modeling, the small plant operations decline significantly over the next decade relative to the historical operations observed over the past decade. Importantly, the reductions in small plant operations result in changes not only to the number of days that the small plants are running, but also to the duration over which the small plants are needed during those days. The combination of shorter dispatch durations and faster ramping requirements to meet future grid needs improves the ability of battery storage to replace the small plants.

By 2030, the Small Clean Power Plant Adaptation Study found that replacement with 4-hour energy storage becomes technically feasible. However, it is important to note that the feasibility of replacement significantly depends on the timing of new renewable generation deployment as well as the trajectory of load growth and resulting reliability needs. In particular, if currently expected renewable energy projects are delayed between 2025 and 2030, then the timing of replacement is likely to be impacted.

## 3.2 Evaluation of Small Plant Sites

Each small plant is located in physically constrained areas of New York City on small parcels of land. NYPA conducted a preliminary assessment of each site to examine the available land area and study site adaptation strategies and opportunities for implementation.

Due to their small footprint, the parcels where each small plant is located are too small to support either solar or wind power generation. Many of the existing small plant sites, however, would have sufficient land to support the replacement of electricity generation with battery storage. While battery storage facilities can generally provide power for up to four hours, as compared to a gas turbine that can run anytime without a time limit, energy storage provides an excellent tool to store renewable energy for use when it is needed and help maintain reliability on the power system.

In April 2022, NYPA issued a request for proposals ("RFP") for land lease and development opportunities for bulk electric storage. The RFP solicited proposals from qualified developers interested in utilizing one or more properties, and related electrical infrastructure, to develop and construct new energy storage facilities. Twenty-two suppliers proposed battery storage projects in June 2022.

As described in Section 3.7, NYPA has signed four Term Sheets<sup>14</sup> with counterparties outlining the potential development of battery storage facilities at the Harlem River, Gowanus, Hell Gate and Pouch sites. Negotiations are underway for a fifth Term Sheet for energy storage at the Brentwood site. The Authority is actively pursuing lease agreements with developers to build bulk energy storage facilities at these sites when the gas turbines are removed.

As discussed in Section 3.8, NYPA is also evaluating proposals that it has received to redevelop the Kent site. All told, NYPA is working methodically to evaluate its options to retire the gas turbines and replace them with energy storage or other uses compatible with local communities.

## 3.3 Emissions Analysis

In addition to evaluating potential reliability impacts, NYPA has undertaken preliminary analysis to assess the emissions impacts that would result from the retirement of the small plants. The 11 small plant units, due in part to their relatively recent installation, have a high efficiency and low NO<sub>x</sub> emissions rate in contrast to other simple-cycle combustion turbine units in New York City.

As a result of their high efficiency and lower costs, the small plants run more frequently than many of the older higher-emitting generating units. This means that if the small plants were removed from the electric system without replacement, higher-emitting, more expensive units could be called upon to replace the power that would otherwise have been provided by the small plants, and this could cause an increase in CO<sub>2</sub> and NO<sub>x</sub> emissions in a disadvantaged community. It is, therefore, important to carefully manage the retirement or replacement of the small plants to avoid an unintended increase in local emissions.

In order to estimate the expected impact on emissions due to the deactivation of the small plants, NYPA undertook an initial emissions impact analysis using GE MAPS production cost modeling software. NYPA's production cost modeling of emissions evaluated differences between a base case with the small plants in the system and a retirement case with the small plants deactivated.

Consistent with the analysis previously undertaken as part of the Adaptation Study, the base case assumed that new renewable resources would be coming online at high levels in support of the state's renewable energy goals. NYPA retained an expert consultant who reviewed and validated key aspects of NYPA's preliminary analysis regarding power plant dispatch changes and air emissions, confirming the accuracy of several critical findings.

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<sup>14</sup> Term Sheets set for a non-binding pre-agreement commitment whereby NYPA and developers agree to engage in good faith negotiations to enter into definitive binding agreements for the energy storage projects.

Even assuming that a large volume of new renewable resources will come online, NYPA's preliminary analysis forecasts an increase in emissions when NYPA's small power plants retire. NYPA will be very careful in verifying these results and conducting additional analysis in alignment with the 2023-24 Enactment that directs NYPA to consider whether closing a small plant would result in more than a de minimis increase in emissions of carbon dioxide or other air pollutants in a disadvantaged community.<sup>15</sup>

NYPA's modeling results are highly dependent on the renewable resources expected to be deployed in the base case. There have been a number of recent developments that may delay New York's transition to clean energy.

On July 1, 2024, NYSEDA and DPS jointly issued their Draft Clean Energy Standard Biennial Review. This report updated prior estimates and for the first time, projected that New York will likely not achieve the Climate Act's 70% renewable electricity goal by 2030 and includes a potential path to achieving the goal by 2033 instead. NYPA is closely monitoring the impact of recent federal actions targeting certain renewable energy sources on this trajectory.

The federal administration has directed federal agencies to pause permitting for certain renewable energy projects, has proposed significant financial tariffs on imports of energy and capital equipment and has expressed its intention to scale back federal incentives for renewable energy projects, all of which could diminish and delay New York's renewable buildout. Across-the-board tariffs have now been imposed by the U.S. on key trading partners, increasing the costs for, and threatening the availability of, key components for power system projects, including components for solar and electric transmission systems.<sup>16</sup>

Given these uncertainties and the importance of avoiding deterioration of air quality in disadvantaged communities, NYPA has enlisted the assistance of an expert consultant to undertake additional independent analysis to estimate emissions impacts under a range of future conditions. Performing such scenario analysis is crucial to ensure that any retirement of small plant units would not result in more than a de minimis net increase in air pollutants in a disadvantaged community, even if a portion of currently expected renewable energy projects are derailed and New York's transition to renewable energy is delayed.

NYPA will further analyze potential retirements of the small plant units individually to identify all opportunities to decarbonize our generation without impairing system reliability or negatively impacting disadvantaged communities.

### 3.4 System Reliability

In addition to the air emission impacts discussed above, more detailed electric system reliability assessments and analysis will be necessary before NYPA can deactivate each small plant. The NYISO's 2024 Reliability Needs Assessment identified "a Reliability Need beginning in summer 2033 within New York City primarily driven by a combination of forecasted increases in peak demand and the assumed retirement of the NYPA small gas plants."<sup>17</sup> Specifically, the NYISO forecasted New York City to be deficient by:

- 17 MW for one hour in summer of 2033; and
- 97 MW for three hours in summer 2034

Based on a 200-MW reduction in its load forecast, the NYISO has determined that it will not solicit solutions to these needs at this time, but warned that narrowing resource margins continue to be a concern.<sup>18</sup>

In April, the NYISO published updated reliability needs showing that reliability needs in New York City continue to get worse. With updated forecasts of power consumption and available resources, if NYPA's small plants retired and if there is a delay in the Champlain Hudson Power Express ("CHPE") transmission project, there will be a deficiency of 235 MW to 275 MW of power between 2027 and 2029. If consumption grows more quickly, the deficiency in generation will be 455 MW to 745 MW between 2027 and 2029.<sup>19</sup> The reliability needs are related to transmission security and will arise within Consolidated Edison, Inc.'s ("Con Edison's") transmission district.

Furthermore, Con Edison has identified reliability violations in the non-bulk Greenwood 138 kV transmission load area ranging from 150 MW to 300 MW. If the Greenwood deficiency is not addressed, neighboring transmission load areas, including the Vernon 138 kV transmission load area, would also have deficiencies. These needs arise even if CHPE comes online in spring 2026 as expected. Again, any delay in the CHPE project would make reliability needs arise sooner in New York City.

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<sup>15</sup> Public Authorities Law § 1005(27-c)(a).

<sup>16</sup> See <https://www.whitehouse.gov/presidential-actions/2025/04/further-amendment-to-duties-addressing-the-synthetic-opioid-supply-chain-in-the-peoples-republic-of-china-as-applied-to-low-value-imports/>; <https://www.whitehouse.gov/presidential-actions/2025/04/regulating-imports-with-a-reciprocal-tariff-to-rectify-trade-practices-that-contribute-to-large-and-persistent-annual-united-states-goods-trade-deficits/>.

<sup>17</sup> NYISO's 2024 Reliability Needs Assessment, <https://www.nyiso.com/documents/20142/2248793/2024-RNA-Report.pdf/0fe6fd1e-0f28-0332-3e80-28bea71a2344>

<sup>18</sup> See [2025-2034 Comprehensive Reliability Plan: Key Topics \(May 6, 2025\)](#)

<sup>19</sup> See [Short-Term Assessment of Reliability: 2025 Q1 Margin Sensitivity Results, April 7, 2025](#)



### 3.5 “Black Start” Capability Impacts on Reliability

Related to the grid reliability impacts, two of NYPA’s small plants, Harlem River and Hellgate, have black start capability (see Section 2.5) and participate in Con Edison’s Restoration Plan, providing critical restoration services. The loss of black start capability with the proposed small plant unit retirements will be analyzed as part of the NYISO’s deactivation process, when the NYISO and Con Edison will consider the Power Authority’s generator deactivation notices for each of those plants and proposed solutions to replace those units to provide black start service.

### 3.6 Re-use of Sites at Harlem River, Hellgate, Gowanus, Brentwood, Pouch

NYPA has considered the feasibility of replacing the natural gas turbine generators at the small plants with renewable energy generating projects and energy storage in formulating this Transition Plan. The small plant sites are too small in their footprints to host grid-scale solar farms or wind turbines. However, a key component of NYPA’s plan is to avoid causing reliability impacts on the electric system by replacing its gas turbine generators with rechargeable energy storage units that can discharge and meet electrical needs in New York City on demand.

NYPA has identified five of the small plant sites (Harlem River, Hellgate, Gowanus, Pouch and Brentwood) as having opportunities for reuse with battery storage projects. NYPA hopes megawatts of proposed emissions-free storage will keep these facilities actively supporting the reliability of the local electric system and contributing to the local community. NYPA, in collaboration with the NYISO, has studies underway to determine if the proposed batteries are large enough and technically capable of ensuring reliability of the local electric system.

In 2022, NYPA issued an RFP for potential use of its small plant sites and related electric infrastructure for the development of bulk-scale battery storage projects to explore strategies to decarbonize the small plant sites. The RFP solicited proposals from qualified developers interested in utilizing one or more properties, and related electrical infrastructure, to develop and construct new energy storage facilities.

Twenty-two suppliers proposed battery storage projects in June 2022. Following review of the proposals received in response to this RFP, NYPA engaged in negotiations with developers for energy storage projects proposed at Gowanus, Harlem River and Brentwood sites, followed by Hell Gate and Pouch.

As of April 2025, NYPA has signed four Term Sheets<sup>20</sup> with counterparties outlining the potential development of battery storage facilities at the Harlem River, Gowanus, Hell Gate and Pouch sites. Negotiations are underway for a fifth Term Sheet for energy storage at the Brentwood site. The Authority is pursuing lease agreements with developers to build bulk energy storage facilities at these sites when the gas turbines are removed.

### 3.7 Re-use at Kent: Request for Information

For the Kent site, in 2024, NYPA issued a Request for Information (“RFI”) intended to support NYPA’s understanding of the value and relevant market data, current industry considerations and information on proposed reuse opportunities from interested stakeholders. NYPA received several proposals for development ideas, ranging from battery energy storage solutions and other renewable generation ideas to multi-use and residential real estate development. Based on the RFI responses, NYPA is considering viable alternative uses for the Kent site following the plant deactivation and issuance of an RFP for creative new uses for the site.

### 3.8 Re-use at Vernon

In 2001, the Authority entered a stipulation settling legal claims regarding the small plant located at Vernon Boulevard. The stipulation and relevant agreements, among other applicable provisions, provide for a “Put,” meaning that if the operations of the Vernon Boulevard turbines do not cease by Oct. 31, 2004 and certain other conditions are met, the counterparty to the stipulation, Silvercup Studios, can exercise a “Put” on the Authority obligating it to purchase or sell certain real estate at a stipulated Fair Market Value.

To date, no formal “Put” notice has been received. A transition plan for the Vernon site is forthcoming, which will be subject to resolving the legal constraints associated with this site.

<sup>20</sup> Term Sheets set for a non-binding pre-agreement commitment whereby NYPA and developers agree to engage in good faith negotiations to enter into definitive binding agreements for the energy storage projects.

# 4. DEACTIVATION ANALYSIS AND TRANSITION PLAN

## 4.1 Preliminary Analysis of Air Pollution Impacts

The Power Authority is committed to transitioning away from generating electricity with fossil fuel at its seven small plant sites consistent with conditions in the Enactment that emissions of air pollutants do not increase in a disadvantaged community more than a de minimis amount due to older, dirtier plants running more if NYPA's small plants are retired, and that the plants are not needed for electric system reliability or emergency power.

First and foremost, the Enactment provides for NYPA to continue operating its small plants if deactivating them would cause other power plants that are older and dirtier to run more and increase air pollution in a disadvantaged community more than a de minimis (minimal) amount.<sup>21</sup> It is a fact that NYPA's small plants run on natural gas, which is a fossil fuel, and that they contribute to air emissions, but they are among the cleanest and most efficient power plants in New York City. It is also true that the small plants do not burn oil, which has higher emissions, and they are outfitted with modern technologies that produce much more power per unit of fuel burned than older power plants.

Also, NYPA's power plants are outfitted with state-of-the-art pollution controls to minimize emissions, which means that they emit less when they run than other generators do. The result is that when the small plants run more, other power plants that burn oil, are less efficient, or that have less advanced pollution controls than NYPA's plants, run less.

Simply put, when electricity is needed today and NYPA's small plants supply that power instead of older, less efficient and higher emitting power plants, the air is cleaner than it would be without NYPA's small plants.

Over the last two years, NYPA has been studying whether air emissions from the other power plants in New York City would increase if NYPA's small plants retired. Our initial studies show that air emissions increase in New York City if NYPA shuts down *all* of its small power plants. We also see that those emissions increase in disadvantaged communities in New York City, including in the neighborhoods where the small plants are located.

Again, this is because NYPA's small plants are cleaner than the other power plants that would have to run more to keep the lights on if NYPA's small plants are shuttered. NYPA enlisted an expert consultant to independently review NYPA's preliminary modeling (GE-MAPS production cost model) results and the evaluation of the impact on emissions. NYPA will also conduct additional studies to determine what happens to air pollution if it retires each small plant individually or in groups.

The NYISO, as part of the electric system planning process, will conduct the 2025-2044 System & Resource Outlook (the "Outlook") study beginning in June 2025. The Outlook study will be conducted with input from stakeholders and state agencies to examine a wide range of potential future system conditions and provide a comprehensive overview of potential resource development over the 20-year period.<sup>22</sup>

In addition to the Outlook, the NYISO has agreed to conduct an additional study called a Requested Economic Planning Study ("REPS") to analyze potential air emissions impacts of shutting down NYPA's small plants. The outcome of this analysis will allow NYPA to understand the expected changes in air pollution without the small plants and identify the next steps.

The assumptions, inputs, and outcomes of these studies will allow NYPA to understand changes in air pollution without NYPA's small plants and identify whether individual plants or a combination of small plants could be retired while following the state law's call not to increase air pollution in disadvantaged communities more than a de minimis amount.

Building on the system-wide studies, NYPA will apply air dispersion modeling to the generator retirement scenarios. Dispersion modeling can isolate the impact of a specific generator and avoid monitoring interference and uncertainty found in complex urban areas. This scientifically proven approach will provide accurate projections of generator retirement impact on localized air pollution, with a specific focus on Disadvantaged Communities. NYPA will also investigate opportunities to leverage existing data from the state's recent community air monitoring initiative.<sup>23</sup>

<sup>21</sup> PAL § 1005(27-c).

<sup>22</sup> Because it was started in 2022 before the state law on shuttering the small plants was enacted, the 2023-2042 Outlook did not report specific impacts on air emissions when NYPA's small power plants are deactivated. The NYISO has committed to analyzing these impacts in its 2025-2044 Outlook and through a REPS study, and this will assist NYPA to find out what happens to air quality when the plants are retired individually or in groups.

<sup>23</sup> <https://dec.ny.gov/environmental-protection/air-quality/community-air-quality/2022-23-statewide-community-air-monitoring-initiative>

Ultimately, NYPA must ensure that plant deactivations do not inadvertently result in increased exposure to harmful pollutants for nearby residents. This science-based and community-informed approach will protect air quality in disadvantaged communities, while advancing the goal of transitioning away from fossil fuels.

## 4.2 New Challenges to Keeping the Lights on in New York City and Local Communities

### 4.2.1 The Fundamental Importance of Electric System Reliability

New York has one of the largest and the most reliable electric power systems in the world. The power grid serves New York's hospitals, subways, schools, the buildings where New Yorkers work and the homes where they live. As the largest metropolitan area in the United States, the country's economic and cultural capital, and home of the United Nations, New York cannot suffer the catastrophic loss of electric service.

New York learned the lessons and costs of blackouts in 1965, 1977 and 2003. Blackouts threaten public health and public safety, as well as peoples' livelihoods and homes. As a public power utility, NYPA's mission is to ensure reliable electric service for all New Yorkers while also carrying out its other mission to address the threats of climate change.

The following sections show the unprecedented changes NYPA and New York face in greening the grid and making sure that reliable electric service is never compromised.

### 4.2.2 Impacts of the New Federal Administration

When the law calling for NYPA to deactivate its small plants was passed in 2023, New York State was making progress toward adding thousands of megawatts of new emissions-free power generation resources to the New York State and City power systems.<sup>24</sup> These included thousands of megawatts of new offshore wind facilities; the CHPE line bringing hydroelectric power directly into New York City from Quebec; thousands of megawatts of new on-shore wind; and solar farms all over New York State that were or are under development.<sup>25</sup>

All of these new resources were fully supported by the federal administration in Washington in the form of land leases, environmental permits, import permits, direct grants from the Department of Energy and refundable tax credits for solar, wind, and energy storage, all stemming from the federal Infrastructure Investment and Jobs Act and the Inflation Reduction Act. Also at that time, New York and the neighboring Canadian provinces of Ontario and Quebec had engaged in the largest international power exchange in the world for many years as power efficiently crossed the border in both directions.

The new administration has introduced new uncertainties into New York's energy security and clean energy priorities. Threats to existing power imports from Ontario and Quebec, which make up the largest international power exchange in the world, were previously unimaginable but are real today.

The federal administration has stated its intention to deny permits to thousands of megawatts of offshore wind power plants that were to supply New York City and state with clean, emissions-free power to maintain reliability and fulfill the renewable energy targets of the Climate Act.<sup>26</sup> Offshore wind projects that are in the midst of permitting have been promised that no new or renewed federal permits that are necessary to proceed will be issued.<sup>27</sup>

Moreover, on April 17, 2025, the U.S. Department of Interior, through the Bureau of Ocean Energy Management, ordered a halt to all construction activities on the fully permitted 810 MW Empire Wind 1 offshore wind project pending a further permitting review.<sup>28</sup>

The pace of uncertainty in renewable energy and the electric industry continues to increase as the federal administration releases multiple executive orders that may impact how electricity is regulated, and how states may address climate change challenges within their borders. For example, the White House has issued an executive order directing the U.S. attorney general to bring legal challenges to state laws addressing climate change and promoting renewable energy generation resources, singling out New York<sup>29</sup> and another executive order directing the Department of Energy to supersede state action on power grid reliability.<sup>30</sup>

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<sup>24</sup> [Clean Energy Standard Annual Progress Report 2023 Compliance Year, January 2025](#)

<sup>25</sup> See Id.

<sup>26</sup> "Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects", Executive Order, January 2025, <https://www.whitehouse.gov/presidential-actions/2025/01/temporary-withdrawal-of-all-areas-on-the-outer-continental-shelf-from-offshore-wind-leasing-and-review-of-the-federal-governments-leasing-and-permitting-practices-for-wind-projects/>

<sup>27</sup> See Id.

<sup>28</sup> Letter of BOEM Acting Director Walter D. Cruickshank to Matthew Brotmann, Secretary, Empire Offshore Wind LLC, <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BOEM%20Director%26%23039%3Bs%20Order%20Empire%20Wind.pdf>

<sup>29</sup> "Protecting American Energy from State Overreach", Executive Order, April 8, 2025

<sup>30</sup> "Strengthening the Reliability and Security of the United States Electricity Grid", Executive Order, April 8, 2025

Development of onshore wind, solar and energy storage power resources face strong new headwinds as well. Direct grants from the Department of Energy have been canceled, with efforts to claw back funding.<sup>31</sup> The investment tax credit and production tax credit provided under the Inflation Reduction Act, which are expected to provide crucial refundable revenues to new renewables that are under development by NYPA and by private sector developers across New York, are now under threat as Congress and the current U.S. president seek savings to fund new tax cuts and defense spending.<sup>32</sup>

### 4.2.3 Impacts of Economic Challenges

The growth of new renewable resources is facing economic and supply chain headwinds as well. Ongoing inflation is raising the costs of building new renewable resources. National and international supply chains for components of new renewable energy systems, such as solar panels and electrical components, remain uncertain. Tariffs on imported components, as well as tariffs on aluminum, steel and copper, are expected to increase renewable development costs in the United States even further.<sup>33</sup>

Across-the-board tariffs have now been imposed on key U.S. trading partners for raw materials and finished goods, including materials and components used in electric generation and transmission.<sup>34</sup> These economic and trade policy headwinds are expected to slow the addition of new renewable resources to the power system.

### 4.2.4 Impacts of Increasing Power Use

Last year, the NYISO's Reliability Needs Assessment identified reliability needs on the bulk power system in the early 2030s, just after the small gas plants are scheduled to be deactivated.<sup>35</sup> The NYISO also identified some reliability needs on Con Edison's local power system in New York City. The NYISO is predicting that those needs could arise even sooner on the bulk system if power system loads are higher

than predicted due to hotter weather in the summer or colder weather in the winter due to the effects of climate change.

Given that the state law expects deactivation of NYPA's small plants by the end of 2030, NYPA will seek further clarity from the NYISO on the scope and timing of future power system needs. We will also work with the NYISO and Con Edison on the local reliability needs they identified within New York City, and with the NYISO and LIPA on any local reliability needs identified on Long Island.

NYPA will use all this information to decide when we will submit deactivation notices and for which small plants on a plant-by-plant basis.<sup>36</sup> NYPA will communicate our findings to affected local communities during the public comment and public hearings in affected communities to fully inform the communities and gather their input. Such comment periods and public hearings will be duly noticed and publicized to ensure maximum community participation.

Adding to the uncertainty, demand for electricity is growing on the power system in New York City and New York State and is accelerating. The NYISO recently released its new load forecasts for 2025 looking forward for the next 30 years and it shows that baseline power system energy needs will grow at an average annual rate of 2%, while winter peak energy demand is expected to grow by 3.6% annually.<sup>37</sup>

Power system demands are increasing as New York decarbonizes its fossil-fuel resources. Former fossil fuel power sources for heating, cooking and transportation are being converted to electricity. New construction is underway with buildings that use electric heating, cooling, and cooking only.<sup>38</sup>

While electric vehicle adoption rates have slowed somewhat<sup>39</sup> the integration of personal electric vehicles will continue to grow, as will the electrification of school buses and mass transit bus fleets and other commercial vehicles. At the same time, new large electric loads are being planned across New York State for economic growth.

<sup>31</sup> Unleashing American Energy, Presidential Action, January 20, 2025, <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/>

<sup>32</sup> See *Id.*; see also Tax Law (and Controversy) Under the Trump Administration, Vinson & Elkins, March 6, 2025, <https://www.velaw.com/insights/tax-law-and-controversy-under-the-trump-administration/>; Trump Administration Puts Subsidized Green-Energy Companies on a Diet, Preston Brashers, Research Fellow, Tax Policy, and Andrew Weiss, Research Associate, Domestic Policy, <https://www.heritage.org/energy/commentary/trump-administration-puts-subsidized-green-energy-companies-diet>

<sup>33</sup> Fact Sheet: President Donald J. Trump Restores Section 232 Tariffs, February 11, 2025

<sup>34</sup> See <https://www.whitehouse.gov/presidential-actions/2025/04/further-amendment-to-duties-addressing-the-synthetic-opioid-supply-chain-in-the-peoples-republic-of-china-as-applied-to-low-value-imports/>; <https://www.whitehouse.gov/presidential-actions/2025/04/regulating-imports-with-a-reciprocal-tariff-to-rectify-trade-practices-that-contribute-to-large-and-persistent-annual-united-states-goods-trade-deficits/>

<sup>35</sup> The NYISO issued its 2024 Reliability Needs Assessment Report in November 2024: <https://www.nyiso.com/documents/20142/2248793/2024-RNA-Report.pdf>

<sup>36</sup> Some of NYPA's small power plants in New York City are equipped to help turn the power system back on after a blackout. NYPA expects to work with the NYISO and Con Edison on how that "black start" capability will be replaced by other resources, including the Champlain Hudson Power Express.

<sup>37</sup> See [NYISO 2025 Draft Load & Capacity Data Book \(Gold Book\)](#)

<sup>38</sup> New York's All-Electric Buildings Act (Part RR of Chapter 56 of the Laws of 2023)

<sup>39</sup> See [Trump's war on Biden's climate policy is creating a new form of EV range anxiety, March 16, 2025](#), see also [Electric vehicles: slowing market likely to accelerate again, March 25, 2025](#)



Economic development is essential to our state's economy and New York is committed to supplying new industries with clean reliable power. At the same time, the manufacturing of computer chips and the addition of data centers needed for artificial intelligence and other electric-intensive applications are projected to grow rapidly in coming years, and they are expected to add thousands of megawatts of new electric demand on the power system in New York City and statewide.

### 4.2.5 Resiliency of New York's Power Grid

With respect to growing demand in the power system, the NYISO has pointed out that it is essential to account for the effect of climate change.<sup>40</sup> Climate change means not only an increase in the warmth, but an increase in the volatility of the climate system. This means that some summers can be cool and rainy while other summers can be extremely hot and dry, and that some winters can be mild while other winters experience multiple intense cold snaps and polar vortexes. New York already has some of the hottest summers and coldest winters requiring a dynamic, responsive power grid that can keep the lights on in both situations and during storms that require redundancy in and flexibility from the grid.

Today more than ever, the power system needs to be equipped to meet electricity demands in a changing climate. This uncertainty in future power system demands adds a further challenge to planning for the deactivation of NYPA's small power plants. With the NYISO's help, NYPA is looking at updated power system load forecasts issued this year to inform us on how to account for the shifting power system demands in planning the deactivation of the small power plants.

In the midst of all of the challenges facing the future renewable resources expected to power New York City and State, New York's power plant fleet continues to age. New fossil fuel power plants are challenging to site and not well aligned with New York's clean energy ambitions. As a result, no new fossil-fueled power plants are being added to the power system to replace older, dirtier and less efficient power plants.

This means that New York's generation fleet, especially in New York City, is heavily dependent on existing legacy fossil fueled electric generation facilities. Many power plants in the New York fleet are 60 to 80 years old.<sup>41</sup> Older power plants have higher outage rates, are less efficient, are less capable of ramping up and down to meet increases and decreases in consumers' needs and, as noted above, emit more air pollution.

By comparison, NYPA's small plants are 25 years old, equipped with state-of-the-art pollution controls, and can rapidly turn on and ramp up to meet the electricity needs of the communities they are located in and city-wide.

In sum, the combined uncertainty over the future of New York City's aging fossil fuel power plants, uncertainty over offshore wind, threats to Canadian power imports and challenges to the pace of adding new renewable resources to the power system means that NYPA must further evaluate with the NYISO, Con Edison and LIPA the appropriate time to submit generator deactivation notices proposing deactivation of its small power plants by the end of 2030.

### 4.3 Transition Plan

Once NYPA completes its air emission studies, it will take the following actions:

- For small plant deactivations that would cause air pollution to increase in disadvantaged communities more than a de minimis amount, NYPA will continue to operate those plants. For those power plants, NYPA will not submit deactivation notices for the NYISO to study whether they are needed for power system reliability or for emergency power service. NYPA will continue monitoring air emissions and revisit the decision to keep operating those units every two years.
- For small plant deactivations that would not cause air pollution to increase more than a de minimis amount in a disadvantaged community, NYPA will consult with the Department of Public Service and submit deactivation notices for the NYISO, Con Edison and LIPA, as appropriate, to determine whether those plants are needed for electric system reliability or for emergency power service. If the NYISO and Con Edison or LIPA determine that those small plants are needed for electric system reliability or for emergency power service, NYPA will not retire those units. As called for in the state law, NYPA will revisit the decision to keep operating those units every two years in consultation with the local communities and stakeholders, the Department of Public Service, NYISO, Con Edison and LIPA. For all of the units that NYISO, the Department of Public Service and Con Edison or LIPA determine can be retired, NYPA will schedule the closure of those units as soon as possible thereafter.

<sup>40</sup> NYISO's Climate Change Study: Potential NYS Power System Impacts, <https://www.nyiso.com/documents/20142/16884550/Climate-Study-Factsheet.pdf/a81dd275-6640-66ec-f6aa-5d403aa44130?t=1615409002391>

<sup>41</sup> New York Climate Action Council, Scoping Plan, Appendix D; <https://climate.ny.gov/Resources/-/media/project/climate/files/Appendix-D.pdf>

- If appropriate, NYPA plans to reuse some of the sites from the small plants for battery energy storage of electricity. Power grid batteries are not a one-for-one equivalent of a power plant because, like any battery, they have a limited duration. However, such batteries could be extremely useful to electric system reliability in the communities where the small power plants are located, and they could store energy from renewable energy resources like solar and offshore wind. The energy storage facilities would have no air emissions, and NYPA would ensure that they are outfitted with state-of-the-art safety equipment that meets all New York State and federal safety standards.

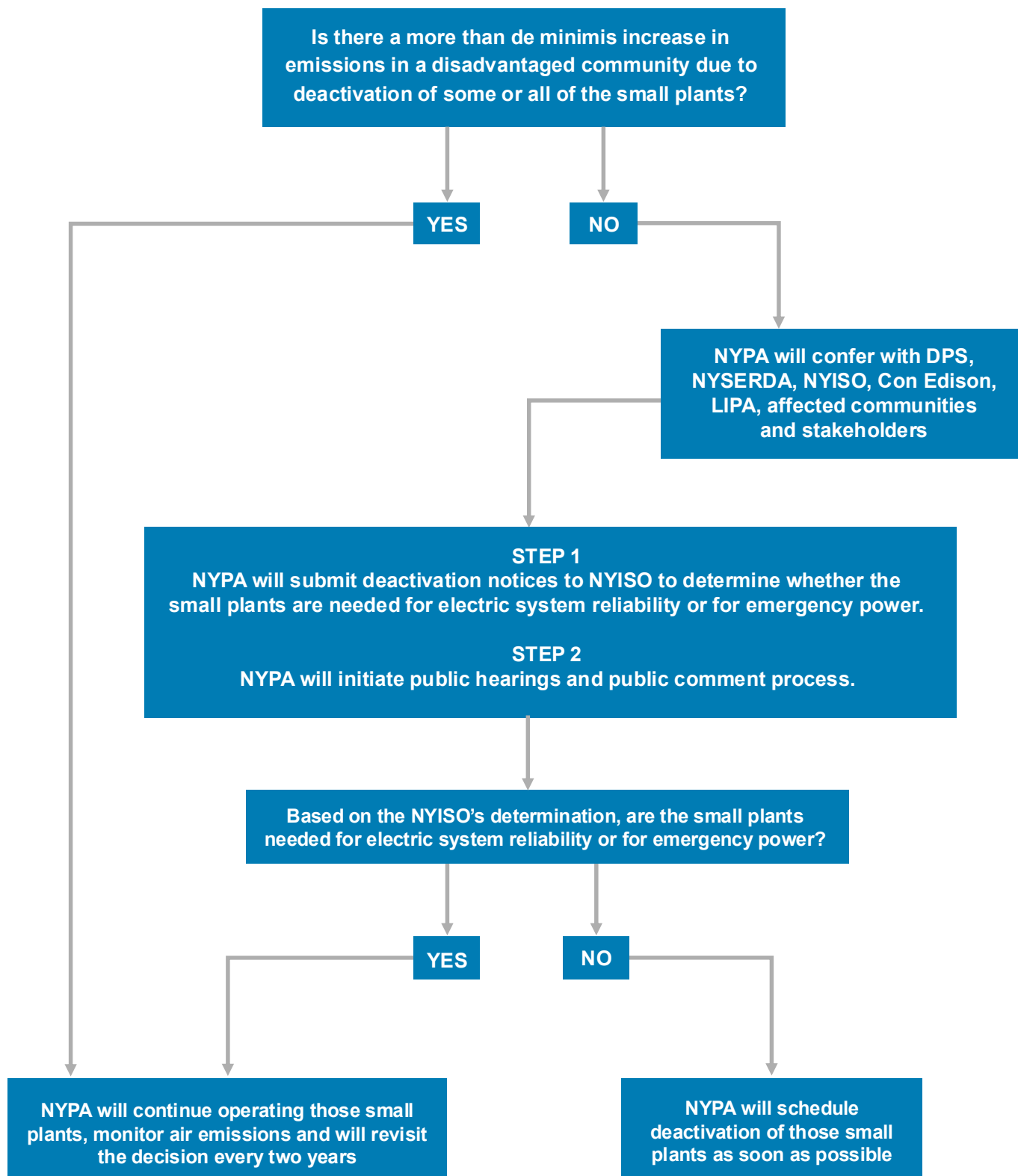
In summary, NYPA's Transition Plan, which is fully underway, consists of the following six deliberate steps:

1. NYPA will determine on a plant-by-plant basis whether each plant can deactivate without causing more than a de minimis increase in air emissions in a disadvantaged community. NYPA has entered into agreements with the NYISO and an expert consultant to verify our initial findings that net emissions in New York City, Long Island and in disadvantaged communities in New York State increase when all of the small plants retire, and to determine on a plant-by-plant basis which of the small plants could be deactivated without emissions from other older plants degrading air quality in a disadvantaged community.
2. For each plant that NYPA can retire without causing increased air emissions in a disadvantaged community, NYPA will apply to the NYISO to work with the Department of Public Service, Con Edison and LIPA to determine whether that plant is needed for emergency power or to keep the lights on, and when that plant can be deactivated without causing a reliability need on the power system.
3. For each plant that NYPA can retire consistent with air quality in disadvantaged communities, NYPA will deactivate that plant before the end of 2030, if it is determined that doing so does not result in a need for emergency power or an electric system reliability issue.
4. At the five sites where NYPA has entered into term sheets with energy storage developers, NYPA will enter into development agreements to lease those sites to developers to remove the gas turbines and build energy storage facilities in their place, again conditioned on the power plants not being needed for emergency power or electric system reliability.
5. For each small plant that NYPA determines cannot be retired due to increasing air emissions from other power plants or because the plant is needed to provide emergency power or electric system reliability, NYPA will revisit its determination on that plant every two years until that plant can be retired.
6. NYPA will continue building transmission to bring renewable energy directly to the heart of New York City to reduce reliance on the small plants and other fossil-fueled generators. These projects include completion of Smart Path, Smart Path Connect, Central East Energy Connect, Propel NY Energy, the proposed Clean Path Transmission Project and the proposed Five Boro Transmission Project.

NYPA's Transition Plan for the Small Plant deactivations is illustrated in Figure 5 on the next page.

FIGURE 5: NYPA'S TRANSITION PLAN FOR THE SMALL PLANT DEACTIVATIONS

NYPA will work with NYISO to assess changes in the air emissions in disadvantaged communities in New York State, including New York City and Long Island, if NYPA shuts down all or only some of the SNGPPs





# APPENDIX A

Public Authorities Law (“PAL”) § 1005 (27-c)(a) provides that

“Within two years of the effective date of this subdivision, the authority shall publish a plan providing for the proposed phase out, by December thirty-first, two thousand thirty, of the production of electric energy from its small natural gas power plants. The plan shall include a proposed strategy to replace, where appropriate, the small natural gas power plants with renewable energy systems, as defined in section sixty-six-p of the public service law, including renewable energy generating projects authorized pursuant to subdivision twenty-seven-a of this section provided such projects shall be included in the strategic plan established pursuant to subdivision twenty-seven-a of this section. By December thirty-first, two thousand thirty, the authority shall cease production of electricity at each of its small natural gas power plants should the authority determine that such plant or plants, or the electricity production therefrom are not needed for any of the following purposes: (i) emergency power service; or (ii) electric system reliability, including but not limited to, operating facilities to maintain power system requirements for facility thermal limits, voltage limits, frequency limits, fault current duty limits, or dynamic stability limits, in accordance with the system reliability standards of the North American electric reliability corporation, criteria of the northeast power coordinating council, rules of the New York state reliability council, and as applicable, reliability rules of the utility in whose service territory a small natural gas power plant is located. Notwithstanding any other provision of this paragraph, the authority may continue to produce electric energy at any of the small natural gas power plants if existing or proposed replacement generation resources would result in more than a de minimis net increase of emissions of carbon dioxide or criteria air pollutants within a disadvantaged community as defined in subdivision five of section 75-0101 of the environmental conservation law. The authority shall file deactivation notices with the federally designated electric bulk system operator for the state of New York for the purpose of ceasing electricity production from the small natural gas power plants in a timeframe sufficient to facilitate the cessation of electricity production pursuant to this paragraph.”

PAL § 1005 (27-c)(b) provides that

“In determining whether to cease electricity production from any small natural gas power plant, the authority is authorized to confer with the federally designated electric bulk system operator for the state, the New York state energy research and development authority, the department of public service, and the distribution utility in whose service territory such small natural gas power plant operates, in addition to such other stakeholders as the authority determines to be appropriate. Determinations shall be on a plant by plant basis, be updated no less than every two years, and be made publicly available along with the supporting documentation on which the determination was based. In making such determinations, the authority shall provide an opportunity for public comment of not less than sixty days prior to the public hearing and shall hold at least one public hearing in the affected community.”

PAL § 1005 (27-c)(c) provides that

“Nothing in this subdivision is intended to, nor shall be construed to, prohibit the authority in its discretion from using, or permitting the use of, including through lease, sale, or other arrangement, any small natural gas power plant or its site or associated infrastructure in whole or in part for electric system purposes that does not involve the combustion of fossil fuels, including, but not limited to providing system voltage support, energy storage, interconnection of existing or new renewable generation, or the use of the generator step up transformers and substations for transmission or distribution purposes provided that such use, lease, sale, or other arrangement shall comply with existing law.”

PAL § 1005 (27-c)(d) provides that

“For purposes of this subdivision, the term “small natural gas power plant” or “plant” means each of the seven electric generating power plants owned and operated by the authority located at six sites in Bronx, Brooklyn, Queens and Staten Island and one site in Brentwood, Suffolk county, which each use one or more simple cycle combustion turbine units, totaling eleven units, fueled by natural gas and which typically operate during periods of peak electric system demand.”