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NYPA Renewables Strategic Plan

January 28, 2025

NEW YORK STATE | NY Power Authority

1 Executive Summary

The Power Authority of the State of New York ("NYPA" or the "Power Authority") is pleased to publish its inaugural Strategic Plan for developing new renewable energy generation projects to supply New Yorkers with affordable, reliable, and emissions-free electricity.

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. Our expanded authority builds on the day-to-day work of NYPA staff to supply the state with reliable electricity, expand New York's transmission system, and provide clean, affordable power and innovative energy services to our customers.

This expanded authority will enable NYPA to accelerate the development of renewable energy, support workforce training for jobs in the renewable energy sector, 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.

In the time since Governor Kathy Hochul signed the State Budget into law on May 3, 2023, NYPA has made major progress toward the development of new renewable generation. This progress includes establishing the business structures, filling key personnel roles, and garnering other necessary resources to carry out our new missions, all while advancing the first tranche of projects.

With the opportunity to become a leader in responsible development of new renewable generation, NYPA aims to expeditiously build affordable projects, staying grounded in our commitment to the communities in which we operate now and in the future, all while ensuring fair and family-sustaining worker wages.

We are proud to present this inaugural NYPA Renewables Strategic Plan, which describes how the Power Authority will operationalize our new renewables work, along with our continued and critical obligations to our existing generation, transmission, customer, and community commitments.

This plan is built on the continuing efforts of NYPA staff to develop an ambitious and scalable model to build renewables, including:

- Issuing a Request for Information (RFI) in January 2024 to identify developers interested in collaborating with NYPA. More than 170 entities expressed an interest in NYPA's renewable energy activities; several indicated a willingness and desire to partner with NYPA.
- Launching a Request for Qualifications (RFQ) in early 2024 to pre-qualify renewable energy and energy storage developers and investors to ensure our ability to rapidly partner and deploy projects. To date, NYPA has pre-qualified 89 developers and investors under the RFQ for potential collaborations that may arise in the future. The Power Authority has already engaged several of these qualified developers in negotiations to enable or accelerate renewable energy generation projects that are already in development. We are continuing to engage with qualified developers to pursue new opportunities on an ongoing basis.

- Conducting two statewide conferral processes with stakeholders and community members to gather their input to inform on our renewable development priorities.
- NYPA also engaged its sister agencies and public authorities, including the New York State Energy Research and Development Authority (NYSERDA), the New York State Office of General Services (OGS), and the New York State Department of Corrections and Community Supervision, to identify public lands suitable for development.
- NYPA's legal, finance, and taxation experts and outside counsel conducted comprehensive research on financial structures to maximize renewable energy development, while limiting risk to the Power Authority and its customers.
- NYPA and the Empire State Development Corporation, through the Job Development Authority (JDA), created a local development corporation that can act as a conduit bond issuer with the ability to finance NYPA's renewable energy generating projects.

NYPA continues to move forward with steps to accelerate our ability to build renewables, including:

- In October 2024, the Power Authority's Board of Trustees approved the creation of a wholly-owned subsidiary to allow NYPA to bring in external capital more easily, as well as to protect the Power Authority against project risks, both of which increase the amount of renewable energy that NYPA can deploy. In November of 2024, NYPA incorporated its first subsidiary, the New York Renewable Energy Development Holdings Corporation, that will allow NYPA to nimbly develop new renewable generation while isolating NYPA from certain liability associated with renewable resource development.
- In October 2024, the Power Authority's Board of Trustees also approved an initial investment of $100 million in new renewable energy generation.

Since the publication of our draft plan in October 2024, NYPA conducted a robust public comment process through which we heard from over five thousand individuals and organizations. A summary of those comments can be found on our website here, a compilation of written comments can be found on our website here, a compilation of the transcripts from the public hearings can be found on our website here, and NYPA's insights in respect to these comments can be found in Section 4.4.3 of this plan.

This final plan also includes updates to individual projects where available. Our first tranche of projects has been updated to include 37 projects, in every region of New York State, for a total potential renewable growth of 3 GW which represents a change from the original 3.5 GW announced since the publication of our draft plan in October 2024 due to attrition encountered during our due diligence process. The projects represented within the decrease are still in progress by developers and should be counted toward the overall State renewable energy goal.

The Power Authority is committed to building as much renewable energy as we prudently can. It should be noted that, because NYPA's statute requires it to receive public feedback on its plans, NYPA may add projects by providing an update to this Strategic Plan after further public comment and a further public hearing. Based on that process, NYPA can and will issue an update to the 2025 NYPA Renewables Strategic Plan with more projects. The Authority expects to issue an update to the plan in the first half of 2025 and is currently evaluating up to 3 GW of additional projects for inclusion.

Until 2035, NYPA will update each biennial strategic plan at least annually as needed, after a public comment period of at least 30 days and at least one public hearing. Each update will

include a review of the implementation of projects previously included, including status in the interconnection queue. The NYPA Renewables Strategic Plan and any updates of the plan are not deemed final until they are approved by our Board of Trustees. This plan will be presented to the NYPA Board of Trustees for approval on January 28, 2025.

2 NYPA and our Expanded Mission

The 2023-24 State Budget authorized the most significant expansion of NYPA's authority under the Power Authority Act in a generation. This expanded authority builds on the day-to-day work of NYPA staff to supply the state with reliable electricity, expand New York's transmission system, and provide clean, affordable power and innovative energy services to our customers.

The enactment included four new areas of responsibility for NYPA, one of which expanded our authority to develop, own, and operate renewable energy generation projects to help meet the state's clean energy goals. The expanded authority directed NYPA– beginning in 2025 and biennially thereafter– to develop and publish a renewable energy generation strategic plan that identifies our renewable energy generating priorities for the next two years. In addition, NYPA is directed to update the plan annually and may update the plan more often than annually if needed.

Beyond directing NYPA to build renewables, the budget enactment contained several other mandates:

- NYPA will work with the New York State Public Service Commission (PSC) to establish the REACH program to provide renewable energy bill credits to low- or moderate-income New Yorkers in disadvantaged communities;
- NYPA will invest up to $25 million annually in workforce training in collaboration with the New York State Department of Labor (DOL);
- NYPA will cease fossil fuel generation at its small natural gas power plants by the end of 2030, so long as electric system reliability and environmental conditions allow.

In addition, NYPA will lead the Decarbonization Leadership Program, which calls for the development of energy and emissions profiles for state government's largest carbon-emitting facilities and decarbonization action plans that will guide state agencies on facility improvements that will reduce carbon emissions.

2.1 About NYPA

NYPA is America's largest state power organization, with 17 generating facilities and more than 1,550 circuit-miles of transmission lines. Our vision is a thriving, resilient New York State powered by clean energy. Our mission is to 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.

VISION2030, NYPA's 10-year strategic plan, guides our efforts and prioritizes investments and activities to mitigate and adapt to climate change. VISION2030 is being updated to incorporate our new mandates.

The 2019 Climate Leadership and Community Protection Act (CLCPA or "Climate Act") sets forth a plan for New York State to eliminate emissions from the state's electricity grid by 2040 and reach a carbon-neutral economy by 2050. The law aims to ensure the availability of sustainable, reliable, and affordable power for all New Yorkers and to promote growth in clean energy technology and electrification. VISION2030 aligns with and supports the achievement of CLCPA goals and reinforces our commitment to put the people of New York first, stimulating job creation and capital investment, and contributing to a stronger economy.

The Power Authority owns and operates three large hydropower generating facilities; two fossil fuel-powered generating facilities; 11 small natural gas power plants (SNGPP); four small hydroelectric facilities; and one utility-scale battery energy storage system. These assets total approximately 6,000 megawatts (MW) and generate 22% of the electricity made in New York State. In 2023, 84% of our power generation was clean, renewable hydropower. NYPA's work has been entirely self-funded.

State and federal regulations shape NYPA's diverse customer base, which includes large and small businesses, not-for-profit organizations, community-owned electric systems, rural electric cooperatives, and government entities. The Power Authority provides the lowest-cost electricity in New York State and is the only statewide electricity supplier. A complete list of our customers is available here.

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 455,000 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. The Power Authority's energy efficiency projects save electricity and taxpayer dollars while reducing greenhouse gas emissions.

2.2 Additional Components of our Expanded Authority

2.2.1 Workforce Development and Training Investment

In addition to our current work to support workforce development and training, NYPA, in collaboration with the Department of Labor (DOL), is authorized— as deemed feasible and advisable by our Board of Trustees— to make available up to $25 million annually. These expenditures may be used to fund programs established or implemented by or within the DOL, including the Office of Just Energy Transition and programs for workforce training and retraining, to prepare people for employment in the renewable energy field.[1]

In March 2024, NYPA and the DOL entered into a Cooperative Agreement for programs related to workforce training, retraining, and apprenticeship opportunities in the renewable energy field. A full list of the NYPA's Board of Trustees approved investments can be found in Section 6.7 Appendix G- Trustee Approved Workforce Development and Training Investments.

[1] PAL § 1005(27-d).

2.2.2 Renewable Energy Access and Community Help ("REACH")

In January 2024, NYPA filed a petition with the PSC to establish the REACH program to provide electric utility bill credits for low-income households in disadvantaged communities.

The bill credits will be funded from a portion of revenues from new renewable energy generating projects developed or contracted by NYPA and designated for REACH, and from other authorized contributions.

NYPA worked with NYSERDA and the New York State Department of Public Service (DPS) to prepare the petition to ensure that the program would build upon existing efforts, such as the Energy Affordability Program and Statewide Solar for All. REACH will provide meaningful benefits to low-income electricity customers in disadvantaged communities as the State transitions to a clean energy economy.

In February 2024, the PSC published a notice of the petition and requested public comments. On May 3, 2024, NYPA published a report to the Governor and State legislative leaders on the feasibility and advisability of implementing a program similar to REACH in the service territories of municipal distribution utilities and rural electric cooperatives. In June 2024, after public comments on the REACH petition were filed with the PSC, NYPA filed additional reply comments. In October 2024, the PSC issued an Order approving NYPA's petition and establishing the REACH program.

2.2.3 Decarbonization of the Small Natural Gas Power Plants

In conjunction with its expanded authority to develop new renewable resources, the 2023-2024 Enacted State Budget directed NYPA to publish a plan by May 3, 2025, to stop generating electricity with fossil fuel at its 11 small natural gas power plant (SNGPP) units located at 7 sites in New York City and on Long Island by the end of 2030, if conditions allow. NYPA plans to cease fossil-fuel generation at these sites on a plant-by-plant basis so long as plants are not needed for emergency power, to meet a reliability need, and if emissions from replacement resources do not result in more than a de minimis increase in emissions of carbon dioxide or criteria air pollutants within a disadvantaged community. Based on a prior RFP and separate from this Strategic Plan, NYPA has signed two term sheets with developers of battery energy storage projects for the Harlem River and Gowanus power plants, and is in active negotiations on two more term sheets for the Hellgate and Pouch power plants. NYPA has also issued an RFI and received responses on development options for its Kent SNGPP site, which we are currently evaluating. These battery storage facilities will provide energy to help meet the future reliability needs of New York City's electric system. NYPA will continue to solicit community views on the future of these sites and will publish the initial phase-out plan no later than May 5, 2025.

2.2.4 Decarbonization Leaders 15

As part of New York's 2023-2024 Enacted State Budget, NYPA was directed to develop decarbonization action plans for 15 of the highest carbon emitting State government facilities. The NYPA-led Decarbonization Leadership Program will address this requirement and enable state entities to identify impactful projects and programs to electrify and decarbonize these 15 facilities.

Future decarbonization projects have the potential to create significant new clean energy jobs and may include innovative new technologies, such as thermal energy networks that could connect multiple buildings to emissions-free energy sources. NYPA and OGS recently released an Energy Master Plan focused on decarbonization for the Empire State Plaza in Albany, which will serve as the prototype for other decarbonization plans. NYPA is on schedule to deliver the decarbonization action plans in January 2026.

2.3 NYPA's Additional Commitments to Energy and the Environment

NYPA's expanded authority builds on our strong track record of facilitating and implementing the Climate Act. Our VISION2030 Strategic Plan, published in 2020, included an updated mission statement to reflect a commitment to the CLCPA.

2.3.1 Existing Generation

NYPA generates 22 percent of the state's power, more than 80 percent of which is clean, affordable hydropower. NYPA's hydropower is the foundation of New York's grid—both today and in the emissions-free future.

NYPA operates three large-scale hydroelectric plants: the Niagara Power Project (opened in 1961), the St. Lawrence-Franklin D. Roosevelt Power Project (1958), and the Blenheim-Gilboa Pumped Storage Power Project (1973). To continue the safe and reliable operations of these assets, the Power Authority has committed to significant ongoing investment, including, for example, a 15-year, $1.1 billion modernization and digitization program (Next Generation Niagara) at the Niagara Power Project, the largest source of clean electricity in New York State and one of the country's largest hydroelectric projects.

The Power Authority also operates two fossil fuel-powered generating facilities and 11 SNGPPs. NYPA has committed to retiring all fossil units by 2035. As mentioned above, NYPA is directed to cease electricity production using fossil fuels at the SNGPPs by the end of 2030, as long as reliability and environmental conditions are met. NYPA will make decisions on a plant-by-plant basis after receiving public comment and holding a hearing.

2.3.2 Transmission

In addition to managing more than 1,550 circuit miles of high-voltage transmission in New York State, the Power Authority is investing in the most ambitious transformation of the state transmission system in more than 40 years. No entity—public or private—is doing more transmission work in New York than NYPA. Our direct investments of over $2 billion in the Smart Path, Central East Energy Connect (CEEC), Smart Path Connect, and Propel NY projects have enabled an additional $3.7 billion of private investment.

NYPA completed the Smart Path project in the summer of 2023, rebuilding more than 78 miles of transmission in the North Country, and we are modernizing an additional

100 miles of transmission through Smart Path Connect in Northern New York and the Mohawk Valley. NYPA's investments in Smart Path and Smart Path Connect are creating a 345-kilovolt (kV) corridor that significantly increases transmission capacity in New York State, which enables 900 MW of renewable energy to be delivered to 900,000 homes statewide. The projects will also decrease annual carbon dioxide (CO_2) and nitrogen dioxide (NOx) emissions by 1.16 million tons and 160 tons, respectively, and results in over $1.45 billion in energy system production cost savings and congestion savings for ratepayers over 20 years.

At the end of 2023, NYPA completed CEEC, an upgrade of transmission assets between Albany and Oneida counties, which had been one of the most heavily congested transmission areas in the state power grid. CEEC was one of two segments selected by the New York Independent System Operator (NYISO) in the Public Policy Transmission Planning Process, which solicited transmission solutions to unbottle the NYISO's Central East interface to allow renewable energy to flow downstate. CEEC increased the Central East transfer limit by at least 350 MW, increased voltage transfer by 875 MW, and reduces CO_2 emissions by 10.6 million tons and congestion costs by $482 million annually.

NYPA continues to invest in its existing transmission network. We are investing $85 million to reconductor the Long Island Sound Cable (also known as Y-49) transmission line and are investing approximately $350 million in the Stewart Avenue - Uniondale Hub Substation (formally East Garden City Substation) to facilitate the Propel NY project. NYPA's Transmission Life Extension and Modernization program is ongoing, and we expect to invest an additional $150 million through 2027. NYPA is also advancing additional major transmission projects.

On December 20, 2024, the Authority filed a Priority Transmission Project (PTP) petition with the PSC. The Accelerated Renewable Energy Growth and Community Benefit Act established the PTP process for constructing new and expanded transmission infrastructure needed on an expeditious basis. The petition requests the PSC to designate the Clean Path Transmission Project (CPTP) as a PTP. The CPTP includes an approximately 178-mile-long underground/submarine 400kV, 1,300 MW HVDC transmission line running between Delaware County and Queens County and two converter stations and tie-in lines. The project will be capable of delivering upstate renewable resources into the heart of New York City, where it is most needed, among other benefits. Because the Project will be controllable and capable of bidirectional operation, it will also support the upstate power grid by flowing power from downstate to upstate during periods of excess supply from offshore wind facilities that are currently under development.

2.3.3 Customer Energy Services

In addition to providing customers with low-cost hydropower, NYPA enables approximately $250 million a year in energy services investment. NYPA works with state agencies, municipalities, transit organizations, and educational institutions as a trusted advisor to help achieve their decarbonization goals.

Our energy services are focused on three key areas to best support New York State energy goals; (1) facility decarbonization through energy efficiency and electrification; (2) electric vehicle (EV) charging infrastructure to support adoption; and (3) distributed energy resources, including customer-sited renewables.

These solutions have resulted in nearly $4 billion in investments to date. NYPA's Distributed Energy Resources Advisory group has enabled 62.4 MW of solar to date, with an additional 351.23 MW in the project pipeline. Through our Smart Street Lighting NY program, we help municipalities purchase their streetlights from private utility companies and upgrade them to energy-efficient, smart-controlled LED lighting.

Additionally, NYPA enables the transition to electric transportation by expanding EV charging infrastructure for our customers and the public, including our EVolve NY program, which operates 212 direct current fast chargers at 52 sites across the State. Approximately 188 additional chargers to be located at sites throughout the state are either under construction or in the pre-construction planning stage. NYPA expects the majority of these chargers to become operational in 2025 and 2026.

NYPA's commitment and expertise in building decarbonization was further recognized in the 2023-2024 Enacted State Budget, which entrusted us to manage the Decarbonization Leadership Program on behalf of New York State. NYPA is on schedule to deliver decarbonization action plans for 15 of the highest carbon emitting State facilities by January 2026.

2.3.4 Canals

In 2017, state lawmakers granted NYPA stewardship of the New York State Canal System. NYPA and the New York State Canal Corporation (a NYPA subsidiary) seek to preserve the heritage of the Canal System and maintain it as a source of economic growth for its next century of operation.

The Canal Corporation is prioritizing safety, incorporating sustainable practices, and promoting innovation. We invest more than $140 million every year to operate and revitalize the Canal System.

NYPA also committed $300 million under our Reimagine the Canals initiative, which is an investment in resilience, regeneration, restoration, reuse, and retrofit. As we prepare to celebrate the bicentennial of the Erie Canal in 2025, NYPA is committed to enhancing the resilience and economic growth potential of the canal system.

2.3.5 NYPA Environmental Justice

NYPA has a long-standing commitment to environmental justice (EJ) and has been a leader in community-based engagement and programming in historically disadvantaged communities for more than 20 years.

In 2016, we revamped our EJ program by conducting a yearlong listening tour in underserved communities to hear their needs and priorities and to inform our work. We created a dedicated EJ department with established stakeholder relationships built on a track record of investment, mutual trust, and program success. Our goal is to ensure that EJ communities are prioritized in the transition to a clean energy economy. NYPA's EJ program leverages our expertise in generation, transmission, renewable energy, and EV technology to provide meaningful programs in four fundamental areas: public education, community energy projects, community engagement, and workforce development.

Public Education: NYPA EJ education programs are designed to increase community understanding of electricity, climate change, and the clean energy transition. We provide multi-lingual energy literacy programs delivered by NYPA environmental

educators and community-based educators. NYPA is committed to ensuring that historically disadvantaged communities are central to our planning when we invest in new projects or infrastructure.

Examples include:

- **Indoor Food Production (IFP)**: Since 2020, NYPA has participated in a multi-state research collaborative aimed at informing electric grid design and the energy consumption associated with controlled agriculture initiatives. As part of the research, shipping container farms are placed in food deserts (census tracts that experience high rates of poverty and limited access to grocery stores that offer fresh and nutritious foods) to support climate-vulnerable communities by creating a microclimate that optimizes year-round healthy food production. NYPA has invested more than $1 million in IFP programs in partnership with Black Urban Growers in Harlem and the East Side of Buffalo; projects are coupled with climate justice and urban farming training and curriculum. At the school level, NYPA's Green Classrooms program involves the creation of hydroponic science labs in New York City public schools, including teacher training and student research. NYPA supports 23 schools including a New York City Housing Authority community center.
- **Energy Storage**: NYPA's Research & Development team is engaged in long-duration energy storage research and our EJ group is developing community curriculum and workshops to promote equitable access to clean energy infrastructure and to solicit feedback on the project. We will educate communities about the careers and jobs associated with the project, including the role of energy storage in decarbonization.

Community Energy Projects: NYPA's EJ program implements community energy projects to bring new resources into disadvantaged communities and increase access to clean energy.

Examples include:

- Installation of energy-related infrastructure and educational exhibits at the Explore and More Children's Museum in Buffalo.
- Replacement of energy-intensive appliances at the Massena Housing Authority.
- LED lighting upgrades at the Niagara Falls Housing Authority, reducing operational and maintenance costs and improving public safety.
- Collaboration with academic institutions to build programs that prioritize disadvantaged communities. In 2023, NYPA funded Bronx Green Action, an environmental sustainability challenge for Bronx-based colleges to advance energy-related climate solutions and green jobs training. Bronx Community College was the inaugural winner of the $1 million award.
- A $1 million energy efficiency project at the Tuscarora Nation Elementary School in Western New York that provided energy-efficient upgrades to the school's heating and water filtration systems.

Community Engagement: NYPA has a strong legacy of community engagement. Our EJ team works as an internal advocate on behalf of communities to ensure that their concerns are prioritized and incorporated into NYPA's strategic planning. Our staff hosts

meetings and site tours between critical stakeholders, advocates, and NYPA business units to incorporate a justice lens and inform the Power Authority's program development and execution.

For example, in 2020, NYPA signed a Memorandum of Understanding with the PEAK Coalition, a group of five leading environmental justice and clean energy interests, to jointly evaluate the transition of NYPA's SNGPPs in New York City and on Long Island. The landmark agreement resulted in recommendations for clean energy technologies, such as battery storage and low- to zero-carbon emission resources and technologies, while continuing to meet the unique electricity reliability and resiliency requirements of New York City. The agreement also informed the development of our bulk energy storage RFP and is part of an ongoing monthly meeting between PEAK Coalition and NYPA.

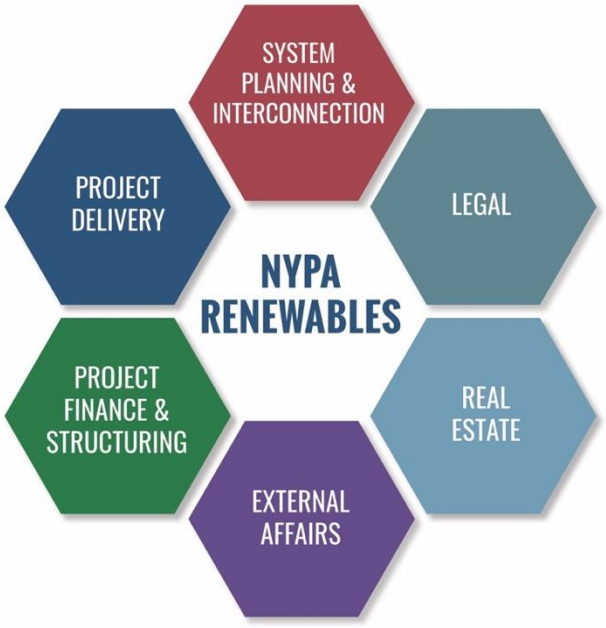
Workforce Development: NYPA recognizes the opportunities for workforce development in the clean energy transition. We are investing in robust internship programs for early career students, a fellowship for high school students, scholarships for college students interested in clean energy careers, and an EV training program. The goal of our EJ workforce development initiatives is to ensure that students in historically disadvantaged communities are equipped to participate in the transition to a clean energy economy. Our programs serve as a pipeline to break down traditional barriers to entry to careers in the utility industry and to promote a more diverse candidate pool for the growing needs of the clean energy industry.

Examples include:

- **Pathways in Technology Early College High School (P-TECH) Scholars Program**: NYPA has made a five-year commitment to serve as an industry partner by supporting students from ninth grade to the completion of a free, energy-related associate's degree. We support 16 school districts and community colleges in historically disadvantaged communities close to NYPA assets. Since 2021, we have supported 125 students with paid summer internships that include industry-recognized certifications in energy auditing, HVAC, and drone technology.
- Additionally, NYPA's **Future Energy Leaders College Scholarship** provides a $10,000 scholarship in partnership for students pursuing an energy-related college degree. We have supported 50 students with a goal of 70 students over five years. NYPA employees share expertise on entry-level skills and curriculum design, and they mentor students throughout the year.
- **NYPA EV Workforce Development Program:** NYPA supports the next generation of automotive technicians by donating electric vehicles that have been retired from our fleet. Donation recipients are Boards of Cooperative Educational Services and Career and Technical Education institutions throughout New York State. NYPA has collaborated with 16 educational institutions to provide EVs, safety equipment, and Level II chargers. NYPA is developing curriculum to train automotive instructors on hybrid and EV technology, along with community engagement workshops led by our staff. The curriculum is focused on EV careers and addresses the environmental justice and health burdens associated with transportation emissions.
- **NYCHA Clean Energy Academy:** NYPA has committed funding of $75,000 per year to support the **NYCHA Clean Energy Academy,** a two-year scalable program that

trains New York City public housing residents in clean energy careers. Funding supports curriculum development and educational bridge training for NYCHA residents who do not have the minimum qualifications to access the academy.

- **Transmission Siting Economic Development Federal Grant:** NYPA was recently selected to receive a U.S. Department of Energy Transmission Siting and Economic Development grant. NYPA will use the grant to implement the Propel NY Energy Sustainable Communities Initiative, which will make funding available to disadvantaged communities adjacent to the Propel NY transmission project. The initiative will bring new resources to advance clean energy projects and workforce development. NYPA will work with local schools, housing authorities, and community service agencies to develop clean energy education and job opportunities for residents in disadvantaged communities. The total investment includes up to $43 million of federal funding and $3 million in matching funds from NYPA.



3 NYPA Renewables: Our Inaugural Plan

3.1 Progress to Date

3.1.1 Staffing

To support our wide range of responsibilities, NYPA and Canals operate on a shared service model, where subject matter experts are supported by existing in-house resources, including Legal, Procurement, Finance, and Project Delivery. This model allowed NYPA to quickly create the NYPA Renewables function.

3.1.2 Stakeholder Engagement

This Strategic Plan has been and will continue to be informed by significant stakeholder engagement. NYPA is committed to transparency and ease of access in stakeholder engagement processes.

In addition to the public engagement process required for the NYPA Renewables Strategic Plan, NYPA is required by statute to engage in an annual conferral with stakeholders to seek their perspectives on various matters, including New York State's

advancements towards achieving the renewable energy objectives outlined in the CLCPA.

In November 2023, NYPA published its first Conferral Report (Appendix D). The report was the culmination of our inaugural conferral process in which we gathered feedback from more than 50 stakeholder groups, including state agencies and authorities, regulatory entities, climate and resiliency experts, labor organizations, and environmental justice and community organizations.[2]

NYPA's second conferral process concluded in September 2024 with the publication of the 2024 Conferral Report concurrent with the NYPA Renewables Strategic Plan draft on October 8, 2024 (Appendix E). In response to feedback regarding increased transparency and accessibility for the conferral process, the second conferral process, and all subsequent conferrals, allowed for the following:

- Conferral written comments are published in their entirety on NYPA's website.
- Public comments can be received at any time and submitted by anyone through NYPA's website or via email to NYPARenewablesConferral@nypa.gov.
- Stakeholders that received direct outreach from NYPA to request public comment were offered an option for submitting written comments in lieu of or in addition to a virtual interview with staff.

Insights from the 2023 and 2024 conferral processes are summarized in Section 4.4.1 and published in their entirety in Appendices D and E respectively.

In addition to the annual conferral process, the final version of the 2025 NYPA Renewables Strategic Plan has been enhanced by public comments and hearings. As called for by NYPA's expanded authority, public comments on this draft plan were accepted for at least 60 days. Interested parties may submit additional comment to NYPARenewablesConferral@nypa.gov for inclusion in future Conferral Reports. While the expanded authority calls for three public hearings in diverse parts of the State, we added to our open forums and held the following public hearings:

Thursday, November 7th, 2024	10am-12pm, 6-8pm	Niagara Power Vista, Niagara
Thursday, November 14th, 2024	10am-12pm, 6-8pm	Holiday Inn Downtown, Binghamton
Monday, November 18th, 2024	10am-12pm, 6-8pm	Albany Capital Center, Albany
Wednesday, November 20th, 2024	10am-12pm, 6-8pm	John Jay College, NYC
Thursday, November 21st, 2024	10am-12pm, 6-8pm	Virtual Hearing
Monday, November 25th, 2024	1-3pm, 6-8pm	Suffolk Community College, Brentwood

To help gather additional public comments, NYPA also sought community input through NYSERDA's Regional Clean Energy Hubs program. NYSERDA created the

[2] Please note that NYPA's formal annual conferral interviews will take place from June to September of each calendar year, while written comments can be received at any time. Conferral Reports will be published in October of each year and will incorporate any feedback received between September 1 of the prior year through August 31 of the year of the report. Insights for the 2025 Strategic Plan are taken from the 2023 and 2024 Conferral Reports.

Regional Clean Energy Hubs program to help New Yorkers navigate opportunities to access the benefits from the clean energy transition, including clean energy careers, home improvements, rebates for businesses, and personal transportation. NYSERDA has established 12 Regional Clean Energy Hubs, with a collective network of over 50 organizations. NYPA worked with NYSERDA to utilize these hubs to notify community members of the availability of the draft Strategic Plan in hopes of soliciting additional public input. Community members were supplied with a link to the draft NYPA Renewables Strategic Plan and encouraged to submit comments to the designated NYPA email address and to participate in a public hearing. NYPA and NYSERDA will work together, where possible, to integrate the Regional Clean Energy Hubs in future opportunities and public outreach processes surrounding the expanded authority.

3.1.3 Due Diligence

To maximize the amount of renewable energy generation projects that NYPA could prudently own, our legal, finance, and taxation experts and outside counsel conducted comprehensive research on financial structures available to the Power Authority.

3.1.3.1 Formation of Subsidiaries

NYPA analyzed the benefits and drawbacks of undertaking projects with and without subsidiaries and incorporating subsidiaries under the New York Not-for-Profit Corporation Law or the New York Business Corporation Law. NYPA reviewed alternative project financing structures and methods to limit liability and risk to our existing essential functions, such as power generation and transmission, and researched subsidiary governance requirements. Based on this analysis, NYPA established a wholly-owned subsidiary, the New York Renewable Energy Development Holdings Corporation, under the Business Corporation Law to bring in external capital more easily and to protect against project risk, both of which will increase the amount of renewable energy that the Power Authority can deploy.

3.1.3.2 Creation of a Local Development Corporation

NYPA and the Empire State Development Corporation (ESD), through the Job Development Authority (JDA), created a local development corporation (LDC) to act as a conduit issuer of bonds for energy and power projects. NYPA and/or its wholly-owned subsidiaries can utilize the LDC to issue taxable and tax-exempt bonds on behalf of renewable energy projects the Power Authority pursues, pledging the revenues and assets of these projects to secure financing.

3.1.4 Operational and Commercialization Model Analysis

In development of our operational and commercialization models, NYPA analyzed global best practices from utilities and private corporations with existing renewable energy arms. Details of our selected operational and commercialization models are summarized in Section 3.2.2 below.

3.1.5 Partner Identification and Vetting

As called for in its expanded authority, NYPA has diligently pursued “opportunities to work in partnership with private sector renewable energy developers to accelerate activity, catalyze greater scale, and spur additional market participation.”[3] In January 2024, the Power Authority released a RFI to solicit targeted information from industry stakeholders, with a focus on renewable energy and energy storage developers. The RFI sought to understand which developers may be interested in collaborating with NYPA in various capacities. More than 170 entities expressed an interest in NYPA’s

[3] [PAL § 1005(27-a)(e)(ii)(H)]

renewable energy activities, and many entities indicated a willingness and desire to partner with NYPA. The information received further advanced NYPA's growing understanding of the renewable energy market in New York.

In the spring of 2024, NYPA issued a Request for Qualifications (RFQ) seeking information from renewable energy and energy storage developers and investors that outlines their experience and qualifications.

As described in the RFQ materials, NYPA evaluated potential partners based on the following criteria:

- Experience: depth and years of experience, technical capabilities, experience working with public entities;
- Financial overview: information supporting financial strength of the company, including the company's bonding capacity and liquidity support;
- Partnership structure(s): preferred collaborative structure, typical investment strategy;
- Record of legal compliance and alignment with requirements in NYPA enabling legislation.

NYPA reviewed additionally each respondent's statement of qualification regarding:

- Demonstrated knowledge of sector history, market players, sector dynamics, financeable structures and applicable market incentives;
- Ability to customize collaborative structures to NYPA's needs and limitations;
- Biographies or resumes of all principals and key personnel, and clear identification of match between scope and qualifications;
- Relevant recent track record of project development/deployment or investments in the energy sector;
- Demonstrated engagement and activity within New York State;
- Commitment of key principals to be engaged on the NYPA assignment;
- Size of team and ability to provide dedicated professionals to work such assignments.

To date, NYPA has pre-qualified 89 renewable energy and energy storage developers and investors. Through these efforts, NYPA is building a stable of qualified developers and investors to engage and enhance our ability to mobilize projects quickly and efficiently. NYPA intends to reopen this RFQ for a certain period of time each year and provide an opportunity to add qualified developers with regularity. These efforts have also contributed to NYPA's first group of potential projects, as detailed in Section 5.

3.1.6 Project Identification and Initial Due Diligence

To maximize the amount of renewable energy deployed in New York State and accelerate its implementation, we have examined projects across the project development continuum to identify opportunities in which NYPA can provide support, including active but struggling projects, initial-stage projects in site acquisition, and ones in between. Below are examples of projects NYPA has been evaluating for renewable energy and energy storage potential.

Due diligence for renewable energy projects is not a one-time event but a continuous process that spans the entire lifecycle of the project. From initial planning and

financing to construction, operation, and eventual decommissioning, regular assessments are crucial to address evolving risks, regulatory changes, and technological advancements. Ongoing due diligence ensures that projects remain aligned with financial, economic, operational, and environmental goals, helping to mitigate potential challenges and optimize long term performance.

NYPA performs a comprehensive due diligence process through different phases of projects from project identification all the way through execution and commercial operation. This multi-phase due diligence process aligns with NYPA's internal governance and compliance framework. Such diligence spans across five multi-disciplinary areas that are applicable during different stages of project development. Each area further focuses on various aspects depending on the project phase, maturity level, and potential deal structure with NYPA:

- Strategic alignment;
- Economic considerations such as project financing and structuring;
- Technical evaluation;
- Legal and regulatory compliance;
- Operational, risk, and integration analysis.

The first step or project identification phase involves conducting a fatal flaw due diligence on projects presented by pre-qualified developers to identify critical risks that could impede the successful development, financing, or operation of the project. This step focuses on uncovering major issues that could derail the project, rather than minor risks that can be mitigated or managed later.

Such fatal flaw due diligence involved reviewing different elements from applicable due diligence areas explained above and include:

- Project status- maturity of project including but not limited to:
  - Secured site control;
  - Key permits status or clearly defined permitting plan.
- Technical evaluation:
  - High level system design;
  - Energy resource assessment;
  - Interconnection viability;
  - Major environmental considerations.
- Economic considerations:
  - Project costs;
  - Estimated levelized cost of energy;
  - Commercialization pathway or identified revenue mechanism.
- Strategic alignment:
  - Alignment with NYPA's mission and values, including alignment with the considerations and purposes identified in NYPA's enabling authority (for example, PAL § 1005(27-a) and (27-b));
  - Counterparty strength and compatibility;
  - Community benefits, social impacts, and stakeholder alignment.

Stakeholder alignment looks at multiple elements, including monitoring local community support and engagement, local government support, host community benefits including

PILOTs or other arrangements, reviewing the public comments received during project permitting phases, and how the feedback is incorporated into the project scope.

Projects that passed the fatal flaw due diligence were included in NYPA's draft strategic plan, supported by non-binding letters of intent (LOIs) with the respective developers. NYPA intends to update this plan to add more projects that pass the fatal flaw analysis later this year.

NYPA is currently conducting comprehensive due diligence on the projects identified in this plan. This comprehensive due diligence process, depending on the project status, will investigate topics required by the enhanced authority, including but not limited to:

- Strategic alignment:
  - Deep analysis of counterparty strength and compatibility[4];
  - Suitability of asset to fit into NYPA's renewable resources portfolio;
  - NYPA's competitive positioning customized for the project;
  - Stakeholder impact and alignment.
- Economic considerations:
  - Project financials and economics;
  - Commercial and off-taker contracts review;
  - Financial and economic risk assessment;
  - Tax credits/grants, other fiscal considerations.
- Technical evaluation:
  - Project designs;
  - Interconnection requirements and costs;
  - Equipment selection;
  - Contractor and partner evaluations;
  - Cost estimates.
- Legal and regulatory compliance
  - Evaluation of permitting and surveying;
  - Interconnection status and agreements;
  - Site control arrangements and terms;
  - Operation and maintenance agreements.
- Operational, risk, and integration analysis:
  - Operational readiness;
  - Operational plan.

3.1.6.1 Investigating "At-Risk" Projects

Through the RFQ, NYPA has interacted with private sector developers that have projects that are uncertain or unlikely to move forward. We can work with developers to explore whether any of the advantages brought by a partnership with NYPA or joint ownership could bring an "at-risk" project to completion.

3.1.6.2 Working to Evaluate Publicly Owned Land and Serving Publicly Owned Facilities

NYPA is exploring opportunities to utilize publicly owned land for renewable energy generation projects and to serve public facilities with the offtake from renewable generation. NYPA has opportunities to develop renewable generation on land

[4] Building on initial analysis during fatal flaw analysis, full due diligence of counterparty strength and compatibility includes credit worthiness of the developer and the asset structure, access to domestic content, and specific advantage NYPA can offer to the project including financing, operational, etc.

inaccessible to the private sector because ownership must remain with New York State, or because the land is difficult to navigate due to other risks and challenges. In furtherance of the expanded authority's call for NYPA to "serve publicly owned facilities," NYPA is exploring agreements with public facility owners to purchase the renewable energy offtake generated by new renewable energy generators.[5] Our efforts align with Governor Kathy Hochul's Executive Order No. 22, which calls for 100% of the electricity used by state agencies to come from renewable energy systems that meet the requirements of the PSC's Clean Energy Standard.

3.1.6.3 Large Scale and Distributed Generation

NYPA's inaugural strategic plan largely focuses on acquisition and development of large-scale (above 5 MW) solar generation projects. We are also exploring the deployment of smaller distributed generation (less than 5 MW of capacity) that would directly contribute to the state's 10 GW by 2030 distributed solar goal and qualify for NY-SUN incentives and the Value of Distributed Energy Resources (VDER) value stack. The PSC's recent order establishing the REACH program has resulted in new tariff mechanisms that expedite and simplify the compensation process for distributed generation resources that NYPA will be able to utilize going forward.

3.1.6.4 Community Solar in Disadvantaged Communities

With support from our Community Affairs and EJ teams, NYPA Renewables has been working with stakeholders, particularly in disadvantaged communities, to explore opportunities to deploy community solar that directly benefits these communities with clean, local electricity generation and/or bill credits. Consistent with NYPA's commitment to community-based engagement and programming in historically disadvantaged communities, NYPA plans to assist disadvantaged communities with smaller solar "community gardens" in which they have direct involvement and potentially an ownership stake, to supply renewable energy to community residents. NYPA welcomes suggestions for potential sites for these projects.

3.1.6.5 REACH Projects - Criteria and Designation

In Section 5 of this Plan, NYPA has identified and designated an initial set of projects to contribute to the REACH program, selected based on a range of key factors, including economic viability that will enable a portion of project revenues to support bill credits to low-income electricity customers in disadvantaged communities. Smaller-scale distributed energy projects have been prioritized for REACH designation due to their relative ease of implementation, the potential for earlier cash flow generation than utility-scale projects, and the recently established tariff mechanism set forth by the PSC in alignment with the Statewide Solar for All program and the Energy Assistance Program. Other considerations, such as proximity to disadvantaged communities and alignment with NYPA's environmental, equity, and environmental justice objectives, were also central to the selection process. As the program evolves, additional projects will be assessed and designated for REACH initiatives based on these criteria.

[5] [PAL § 1005(27-a)(e)(iii)(B)]

3.2 Considerations Underlying NYPA's Renewable Energy Strategy

In June 2023, immediately following the 2023-2024 Enacted State Budget that authorized NYPA to build new renewable energy generation projects, we began taking steps to define our renewables strategy, including analysis of the challenges that exist globally and locally in renewable energy deployment and lessons learned from existing market participants. That analysis, along with a review of NYPA's advantages, limitations, and financial capacity, informed NYPA Renewables' mission statement, operating, and commercial models.

NYPA Renewables

NYPA is dedicated to maximizing our deployment of renewable energy, striving to balance our commitment to affordable energy, our communities, and utilizing fair labor practices to advance a clean and sustainable future for all New Yorkers.

The Power Authority is committed to building as much renewable energy as we prudently can, as well as enabling as much renewable energy as we can in addition to what NYPA can own.

To maximize the deployment of renewable energy, NYPA is looking at all potential pathways to catalyze projects, including partnerships, greenfield development, distributed energy resources, community solar, innovative financing structures, and NYPA-enabled projects at customer or public sites. We are also cognizant of and tracking how changes at the federal level may affect the cost, permitting, timeline, and feasibility of developing new renewables.

The following sections summarize NYPA's analysis of our competitive position, operational and commercialization options, financial considerations, and potential options to bolster our ability to build renewables.

3.2.1 NYPA's Competitive Position

While NYPA Renewables provides an opportunity to develop renewable energy for New York more equitably and more affordably, there are still costs associated with this transition that will ultimately be paid by New Yorkers. To ensure this transition occurs in the most affordable manner, the Power Authority is making every effort to pursue cost-effective projects in the most efficient and lowest-risk ways.

In determining how NYPA should enter a mature and well-capitalized market to accelerate renewable deployment while limiting the cost to New Yorkers, we analyzed our competitive advantages and challenges.

3.2.1.1 NYPA Financial Competitiveness

NYPA maintains a meaningful financial advantage in developing renewables because of our high credit ratings and tax-exempt status, but the functional implications are often complex. NYPA's strong credit ratings require the maintenance of critical financial ratios, such as debt service coverage, debt to equity, and days of cash on hand.

NYPA's building and owning a significant amount of renewable energy infrastructure will require significant capital investment and borrowing. Accordingly, NYPA will need to approach the capital markets with increased debt issuances to finance this work,

which, unless carefully managed, will put downward pressure on credit metrics, credit quality and ultimately, credit ratings. NYPA needs to ensure it achieves returns that fairly compensate the Power Authority for its investment to prevent credit erosion and maintain access to low-cost financing.

If NYPA's credit were to erode, this would increase financing costs and impact the amount NYPA can invest in its renewable energy portfolio. Further, some financial advantages, such as tax-exempt financing, result in disadvantages in other places, such as a reduction in federal direct pay tax credit benefits. Below is a summary of the factors affecting NYPA's financial competitiveness.

3.2.1.1.1 Majority Ownership Requirement

One of the key provisions of NYPA's enabling statute is the requirement for us to maintain majority ownership of projects. Unlike other developers that may develop projects and then sell some or all of their interest in the assets, sometimes referred to as "selling down," the statute limits NYPA's ability to do so.

The "sell down" strategy is used to recycle invested capital to provide funds for continued investment in renewable project development. This strategy is often used to recover capital from larger projects that require significant equity commitment. This is where NYPA sees the majority ownership requirement being most limiting. Selling down at opportunistic points in a project's lifespan would better position NYPA to diversify project holdings to reduce concentration risk and exposure to projects, recapitalize itself, and redeploy the recovered capital.

Given NYPA's financial capacity, building large projects with significant capital contributions limits our ability to diversify the renewable generating portfolio, creating concentration risk in a small number of projects. Although NYPA will engineer and design projects to the highest standards, there are some circumstances that cannot be derisked, such as a *force majeure* event. Diversifying and investing in an increased number of projects reduces exposure to these types of events.

Third-party partnerships will be critical to enabling the Power Authority to pursue additional projects, and other tools discussed in this Strategic Plan that could further enhance the Power Authority's ability to build.

3.2.1.1.2 Bonding Capacity

NYPA's debt instruments provide a safe investment for our investors due to NYPA's strong credit ratings and our focus on maintaining a strong balance sheet. As a result, NYPA can issue debt in the capital markets at lower interest rates. The Power Authority Act anticipates that NYPA will manage risk responsibly to enable it to, for example, pay the costs of operation and maintenance of its projects, pay principal of and interest on any obligations issued pursuant to its bond resolutions, and maintain any reserves required by the terms of such resolutions. See, e.g., PAL §§ 1005(5); 1005(6) and 1010. As a result, NYPA consistently has had a strong credit rating, with ratings of AA or AA+ from Fitch Ratings, Moody's Ratings, and the Kroll Bond Rating Agency, reflecting NYPA's financial strength, operational success, and risk management. It is important to note that the Power Authority must adhere to legally-binding bond covenants and that NYPA does not have unlimited borrowing capability.

In 2011, NYPA's Board of Trustees (a) recognized that maintaining an AA credit rating was critical in the capital-intensive electric power industry and necessary to maintain

existing assets and invest in new energy-related infrastructure, and (b) adopted a policy to maintain such ratings as it considered various expenditures. While this policy limits our overall bonding capacity in the short term, it ensures our long-term ability to access the capital markets whenever necessary and at competitive interest rates in the pursuit of State goals, including building new renewable generation.

3.2.1.1.3 Tax-Exempt Financing

NYPA is eligible for tax-exempt financing and plans to use it where allowable and appropriate. Tax-exempt bonds must comply with private use rules as dictated by the Internal Revenue Service (IRS), which will be based on the offtake structure of the projects.

The projects must be reviewed for meeting IRS criteria, including the "private use" test as described under Internal Revenue Code 141(b) to benefit from tax-exempt financing. NYPA has analyzed the commercialization and offtake structures with external counsel and is optimistic that most projects will qualify for at least a partial tax-exemption.

While tax-exempt debt has historically been significantly cheaper than taxable debt, especially for AA-rated debt, the spreads change over time. In reviewing the interest rate spreads for taxable and tax-exempt debt, projects or the portions of projects NYPA plans to own should benefit from using tax-exempt debt.

Nonetheless, tax-exempt financing is a complex financial instrument, with implications for the rest of the project's structure. A few of those nuances are described here. When tax-exempt debt is used, Direct Pay Tax Credits must be reduced up to 15%. NYPA, as a Direct Pay-eligible entity under the Inflation Reduction Act (IRA), cannot use tax-exempt debt for portions of projects it does not own under current IRS rules and guidance. Finally, private developers monetize the Modified Accelerated Cost Recovery System (MACRS) depreciation tax shields, and the use of tax-exempt debt, if allowed, would make this benefit unavailable, possibly increasing the Levelized Cost of Electricity (LCOE). As a result of these complexities, projects must be evaluated individually to determine the best ownership structure and financing strategy.

3.2.1.1.4 Tax Equity Financing

As an Applicable Entity as defined by the IRA, NYPA is eligible for "elective pay" (also referred to as "Direct Pay") and will receive a refundable tax credit from the federal government. This means it will receive a payment, not a credit, after filing a tax return. Therefore, there is no need to pass the tax credit on to an entity with a tax liability.[6] Unlike private developers, NYPA will not need to raise tax-equity financing. Since many private developers do not have the tax liability to fully monetize federal tax credits received for owning renewable energy generation projects, tax equity financing is used to pass these benefits on to an entity that can fully monetize the tax credits and accelerate depreciation tax shields.[7]

3.2.1.1.5 The Inflation Reduction Act and Direct Pay

Direct Pay is a monumental change for public power entities to own renewable energy projects and monetize tax credits that have been available to the private sector. Direct

[6] IRS and Treasury guidance does not allow the transferability of direct pay and requires the credit to be determined with respect to the Applicable Entity, limiting the use of tax equity, even if it were practicable.

[7] Most renewable energy properties are assigned a 5-year useful life under modified accelerated cost recovery system (MACRS), allowing the recovery of investment over a short period of time, creating tax shields that improve project returns.

Pay has the theoretical ability to lower project costs to NYPA by 30% to 70%, depending on many factors and eligibility for bonus credits.

However, there are limitations to the cost reductions public power can provide as an alternative to private ownership. Importantly, using tax-exempt financing for a project receiving the Clean Electricity Investment Tax Credit (ITC) or Production Tax Credit (PTC) reduces the tax credit up to 15%. Therefore, the advantage of tax-exempt financing is at least partially offset by the reduction in tax credits. If the spread for taxable vs. tax-exempt debt is compressed, then the use of tax-exempt debt may lead to increased costs of ownership.

Additionally, because NYPA does not have a tax liability to offset, Direct Pay does not allow the monetization of MACRS depreciation tax shields, which private developers use to help reduce the overall LCOE for the project. This tax shield typically accounts for 10% to 15% of the value of a project. This loss of value, combined with the reduction in tax credits associated with tax-exempt debt, increases the cost of ownership for a public power entity.

Another challenge for a public power entity is the fact that IRS and Treasury rules only allow for the filing of Direct Pay once a year. This means NYPA may have to wait 18 months after the asset is placed in service to receive Direct Pay. Private developers can monetize this value on a quarterly basis by reducing their quarterly tax payments. This timing difference can effectively reduce the value of the Direct Pay by 7% to 10% for NYPA and requires NYPA to maintain a higher equity commitment until the funds are received.

Additionally, NYPA is tracking how changes at the federal level may affect the cost, permitting, timeline, and feasibility of developing new renewables.

3.2.1.1.6 Subsidiaries and Special Purpose Vehicles

As described earlier, NYPA has established its first renewable energy subsidiary, the New York Renewable Energy Development Holdings Corporation, to allow us to bring in external capital more easily, as well as protect against project risk.

NYPA is exploring options for the financing of renewable energy projects with non-recourse project financing through special purpose vehicles to “ring-fence” the project debt from the organization, which is an appealing risk management option. Our capacity analysis was determined based on the assumption that NYPA would use this type of finance vehicle.

3.2.1.1.7 Federal Loans and Loan Guarantees

NYPA will regularly review and consider federal loans and loan guarantees for its projects. Based on historical analysis of interest rates, the federal Department of Energy’s (DOE) Loan Program Office (LPO) may offer pathways to lower financing costs as it has a lower interest cost where NYPA is targeting a BAA-rated taxable debt issuance. However, because the average spread between the DOE LPO program and BAA taxable debt has been 1.6% since 2009, there would only be a marginal decrease in project ownership costs. For example, a 100 MW alternating current solar project with 55% debt would result in a 3% reduction in the LCOE.

3.2.1.1.8 Merchant versus Contracted Revenue

One of the elements of the NYPA Renewables Strategic Plan identified by the expanded authority is the ability to sell “the power, energy and ancillary services

provided by planned renewable energy generating projects."[8] NYPA is a founding member, transmission provider, and generation provider in the wholesale electricity markets operated by the NYISO under tariffs approved by the Federal Energy Regulatory Commission (FERC). For utility-scale projects, NYPA will sell the electric capacity, energy, and ancillary service– such as system reserves– in the wholesale electricity markets operated by the NYISO. As with the rest of its generation fleet, NYPA will bid the output of its new renewable generation to maximize revenues. Even after maximizing its revenue potential in the NYISO markets, a renewable energy project in New York cannot cover its costs by exclusively relying on merchant revenue because of the difference between expected market revenues and lifecycle project costs of ownership.

Based on modeling of merchant revenue streams (energy, capacity, and ancillary services), projects can expect to make less than $50/megawatt hour (MWh) on an annual basis for the foreseeable future. Based on NYPA's market intelligence, the levelized cost of energy (LCOE) for new solar, for example, has increased to at least $100/MWh. Therefore, new renewable energy projects cannot cover their costs just selling their outputs into the NYISO market alone.

To make up the difference, project developers look for "contracted revenue." This largely falls into two categories: selling the environmental attributes of the project (the Renewable Energy Certificates [RECs]) to NYSERDA through a competitive solicitation or selling all attributes (energy, capacity, and RECs) to an energy user through a contract using an all-in "bundled" rate. There are also alternatives to separate RECs from the energy and capacity components.

Through our expanded authority, NYPA may sell Tier 1 RECs to NYSERDA, including through bidding into NYSERDA's competitive solicitations for Tier 1 RECs. The NYSERDA Tier 1 Indexed REC is a form of contracted revenue that will help NYPA achieve the necessary financing and returns to bring about a larger buildout of renewables.

An Indexed REC acts like a contracted revenue stream whereby NYPA will receive the strike price from a NYSERDA solicitation, regardless of merchant pricing. If NYPA bids a strike price of $90/MWh and earns $50/MWh from the market, NYSERDA will pay NYPA the strike price less monthly average zonal energy and capacity prices. This type of structure can help NYPA achieve project financing leverage of 50% to 60%, which helps our equity go further.

Additionally, our strong relationships with customers offer an opportunity to contract with them for the energy benefits and potential environmental benefits. We are talking with two of our largest customers, the Port Authority of New York and New Jersey and the New York State Office of General Services (OGS), about opportunities to contract with NYPA Renewables.

3.2.1.2 NYPA Siting and Permitting Expertise

While NYPA is subject to the same siting and permitting processes as any other developer, our expertise in the regulatory landscape in New York State and at federal agencies is a competitive advantage in moving projects forward efficiently. NYPA has participated in planning New York's energy system, including rebuilding our transmission system and adding transmission to the power system through the

[8] [PAL § 1005(27-a)(e)(ii)(G)]

transmission planning and competitive selection processes conducted by the NYISO under tariffs approved by the Federal Energy Regulatory Commission (FERC).

NYPA has also worked extensively on PSC transmission siting proceedings, and we have extensive expertise in hydroelectric licensing, other generation siting and permitting, and generation interconnection to our facilities. With the advent of the Renewable Action Through Project Interconnection and Deployment Act (RAPID) signed by Governor Kathy Hochul this year, NYPA will leverage its deep knowledge of transmission, generation, and interconnection to site, build, and interconnect new renewable generation.

3.2.1.3 NYPA Reputational and Relationship Strength

NYPA prides itself on being a good neighbor and trusted advisor, forging strong relationships with the communities we serve. Our deep-rooted commitment to sustainability and economic development has positioned us as a reliable partner, helping to shape a brighter future for New York State. We do this in many ways, including support of local initiatives, enhancing grid reliability and advising on energy efficiency.

3.2.1.4 NYPA's Existing Customer Base and Public Entities

As described previously, NYPA is exploring opportunities to enter into agreements with our customers to be the beneficiaries of NYPA Renewables. Such mutually beneficial arrangements would provide customers a fixed and predictable cost of achieving their CLCPA goals and Executive Order 22 requirements (as relevant). For NYPA, signing a contract with an existing customer or other public entity to buy the "offtake" of a renewable energy project (energy, capacity, RECs) provides a stable revenue stream and predictable cash flow that makes lenders much more willing to increase project leverage. Moreover, a project is likely to be eligible for tax-exempt financing if the customer is a governmental entity.

3.2.1.5 Potential for Ratepayer Benefit

NYPA is committed to developing projects responsibly, with respect for the communities in which our projects will be located and paying fair wages through union labor and project labor agreements, which will apply to contractors and subcontractors. We are also committed to advancing projects with the strongest financial returns, because that allows us to decrease costs to the ratepayer through lower bids into NYSERDA solicitations and to maximize the amount of money we can allocate to the REACH program, which will help lower electricity bills for low-income ratepayers in disadvantaged communities.

We are mindful that NYPA's expanded authority calls for renewable energy projects to "actively benefit disadvantaged communities."[9] In January 2024, NYPA petitioned the PSC to establish the REACH program. In June 2024, after public comments on the petition were filed, NYPA submitted additional reply comments in support of a regulatory model that will build on the PSC's Energy Affordability program and the Statewide Solar for All program to provide bill credits to low-income ratepayers in disadvantaged communities. In October 2024, the PSC issued an Order approving NYPA's petition and establishing the REACH program.

One of our tools to lower costs to ratepayers is NYPA's exemption from paying real estate taxes, which could have a tax revenue impact on host communities. The Power

[9] [PAL § 1005(27-a)(e)(iii)(A)]

Authority is committed to exploring opportunities to make our host communities an active part of the transition to clean energy. This includes working with local communities in which NYPA will operate a utility-scale system to find sites where distributed-scale projects could be built for critical infrastructure, like a school or emergency center.

NYPA will also explore ways to minimize potential negative tax revenue impacts on municipalities that host renewable energy projects, including Payment in Lieu of Taxes (PILOT) and/or host community benefit agreements, where appropriate, on a case-by-case basis. As an entity dedicated solely to developing renewables to serve the public interest, we will balance the needs of host communities with the need to fund bill credits for low-income ratepayers in disadvantaged communities through the REACH program.

3.2.2 Operating and Commercialization Options

3.2.2.1 Operating Model Options

NYPA evaluated potential operating models, primarily differentiated by the time in the development process when we would become involved. A summary of those models is below.

Under a Build-Transfer Agreement, NYPA would purchase an in-development renewable energy generating project from its owner at a mutually agreeable milestone, such as the commercial operation date. The percentage of ownership in the underlying project that is transferred from the owner to NYPA may vary between 51% and 100%.

In a Co-Development scenario, NYPA would jointly develop, construct, own and operate a project in partnership with a developer. NYPA would acquire a majority stake in the development company and work collaboratively with its developer partner through the lifecycle of a project, securing permits, supporting interconnection, contracting for or directly contributing in-kind engineering, equipment procurement, construction, operations, and maintenance services. Under this scenario, NYPA would acquire its majority stake prior to the project's commercial operation date.

In addition to joining in-progress project development efforts, NYPA will also initiate its own projects, via NYPA Self-Development, that could be completed solely by NYPA or in collaboration with one or more partners.

Other options may include Purchase and Sale Agreements (PSA) and Membership Interest Purchase Agreements (MIPA). Both agreements would result in NYPA acquiring projects by purchasing the assets (PSA) or taking an ownership interest in a partnership (MIPA). Under these arrangements, NYPA would enter late in the development process, but may provide a competitive cost of capital and expertise to bring the projects to completion.

NYPA will retain flexibility within each operating model to define our specific role based on the specific project needs and partnership structure.

3.2.2.2 Commercialization Models

As mentioned previously, NYPA cannot rely solely on merchant revenues in the wholesale electricity markets operated by the NYISO to earn a return that can lead to a large buildout of renewables. Therefore, NYPA must seek contracted revenues to ensure a viable portfolio is built.

NYPA broadly has two ways to contract revenue for its projects:

- NYPA can bid into and be awarded a NYSERDA Tier 1 REC contract to help it cover costs not covered in the NYISO wholesale markets.
- As described above, NYPA may also seek to enter into power sales agreements with customers to provide their renewable energy and REC needs. NYPA may establish program agreements whereby NYPA would sell and customers would receive the energy, capacity and environmental attributes from the project, and NYPA would receive an "all-in" bundled rate from the customer.

There are ways to mix and match these approaches. For instance, NYPA may be able to sell the energy and capacity to a customer and sell the RECs under an awarded NYSERDA Tier 1 award. This approach locks in the NYSERDA Tier 1 REC price and provides the customer with fixed price energy and capacity needs.

For smaller projects (less than 5 MW), NYPA may utilize the PSC-adopted Value for Distributed Energy Resources (VDER) compensation mechanism to commercialize such projects. NYPA also has the option to utilize sales agreements with customers for behind-the-meter projects that do not participate in the VDER stack. There are situations where interconnection or other siting issues may make the private sale of the output of a smaller scale renewables projects superior to the VDER mechanism. The PSC's recent order establishing the REACH program has resulted in new tariff mechanisms that expedite and simplify the compensation process for distributed generation resources that NYPA will be able to utilize going forward.

NYPA, as a municipal power provider, can utilize electric prepay arrangements to facilitate renewable energy project development. An electric prepay arrangement is allowed under IRS regulations and utilizes tax-exempt financing to deliver savings to customers for pre-funding electricity to serve customer load. These savings can range anywhere from 8% to 12% for customers and are determined at the time of execution based on the taxable versus tax-exempt interest rate spreads at close. In eligible circumstances, NYPA plans to utilize this tool to enable a larger renewable buildout and to ensure a cost-effective transition to renewables for its customers.

In addition to project-specific commercialization options, NYPA has an option to make combined offerings to eligible customers; for example, pairing new renewable generation with energy services to decrease their demand. Additionally, we can structure our investment in projects on a portfolio level, bundling projects with different developers to analyze the financial returns of the projects in aggregate, which may allow for projects on the margins to move forward when they otherwise would not have.

3.2.3 Maximizing NYPA's Ability to Build New Renewable Generation Resources

NYPA has not received a State appropriation to build new renewable generation resources. To maximize its ability to build new renewable generation projects under its expanded authority, NYPA has undertaken or is pursuing the following:

3.2.3.1 NYPA Enabled

Building on NYPA's successful Distributed Energy Resources Advisory Services model, NYPA is looking to use the climate commitments and purchasing power of our governmental customers to enable significant amounts of renewable energy through contracted revenue streams between developers and public customers. This model,

which would be in addition to our renewable development work, can provide revenue certainty and scale to developers, which should in turn result in lower prices for renewable energy for contracted customers.

3.2.3.2 Increased NYPA Financial Capacity

As the primary limitation on the Power Authority's ability to deploy renewable generation is limited capital, NYPA is exploring ways to add to our financial capacity for the express purpose of building more new renewable generation resources.

3.2.3.3 De-risked NYPA Projects

As described in Section 3.2.1.1.8 Merchant versus Contracted Revenue, NYPA will seek contracted revenue to ensure that projects are financially viable.

Also, as shared in our comments to the PSC on the draft CES Biennial Review, NYPA has requested the ability to negotiate directly with NYSERDA to sell Tier 1 RECs for NYPA Renewables. This would facilitate faster deployment of renewable energy and substantially derisk a project and lower the acquisition costs. Both of those would translate to a lower priced project.

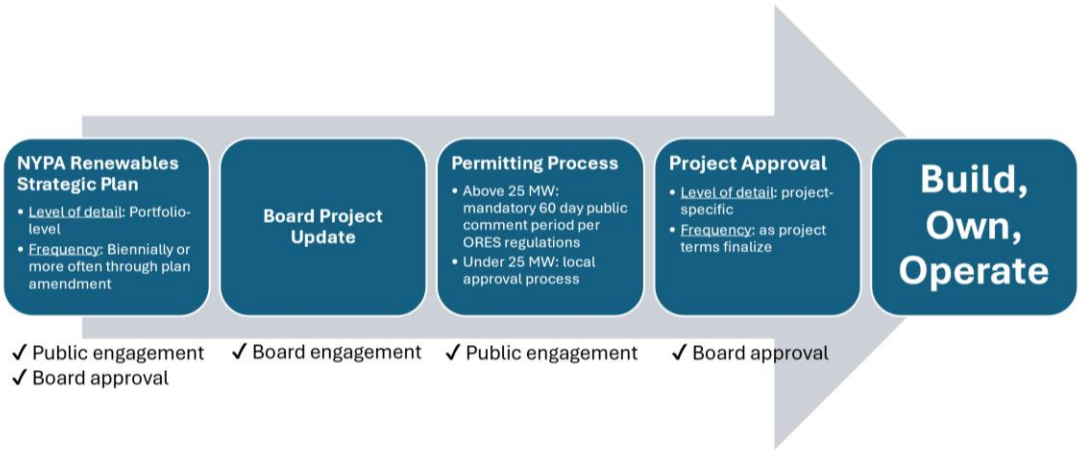
Another option for contracted revenue is through direct offtake of the project's energy, capacity, and RECs. While this opportunity was considered Section 3.2.1.1.8 of the draft plan, Governor Hochul's 2025 State of the State directive, described in Section 3.2.5 Public Power for Public Buildings, provides a path for NYPA to do this work at scale, and as a directive to agencies to acquire renewable energy supplies, thereby increasing efficiencies to do this work and lowering costs.

3.2.4 Process for Building Renewables and Additional Public Engagement

Under our expanded authority, the NYPA management team must seek public comment and Board approval through a biennial Strategic Plan or an update to the Strategic Plan prior to executing any partnership agreement.

Project details are limited in this initial phase because NYPA is currently negotiating terms with developers and therefore projects are not yet under contract. This process is the first of several opportunities for Board and public engagement on a specific project. Below is a simplified overview of the project development cycle with Board approval and public engagement overlaid for ease of review.

Additionally, NYPA will update the status of projects in prior Strategic Plans in each update to the plan, so that the status and additional public details are easily accessed and readily available.



3.2.5 Public Power for Public Buildings

In her 2025 State of the State address, Governor Hochul announced a directive for State agencies to partner with NYPA to meet their Executive Order No. 22 obligations of 100% renewable electricity by 2030. These contracts will result in at least 500 megawatts of renewable energy while creating clean energy development, 9,000 union jobs, and reduced emissions. NYPA looks forward to implementing this key initiative from Governor Hochul to supply New York State's own energy needs with green and sustainable renewable resources.

4 Conditions Underlying the 2025 NYPA Renewables Strategic Plan

4.1 Current Renewable Development Landscape

A key consideration in formulating the NYPA Renewables Strategic Plan is the "feasibility of projects, based on costs, potential benefits, and other relevant considerations."[10] The following section details NYPA's analysis of the current state of the renewable market.

4.1.1 Market data

Global investment in energy transition technologies reached a record high of $1.77 trillion in 2023, with renewable energy projects receiving $623 billion, less than 50% of the total investments.[11] Solar energy was the main driver of this growth, with $393 billion invested and total solar installations estimated at 414 GW. Investment in energy transition technologies exceeded investment in fossil fuel supply by $671 billion in 2023.[12]

Overall, global energy transition investment in 2023 is 17% higher than 2022 indicating strong recovery from the effects of the global COVID pandemic, the Ukraine war, rapid inflation, lack of clarity on solar panel tariffs, and supply chain constraints.

[10] [PAL § 1005(27-a)(e)(ii)(C)]
[11] BNEF Energy Transition Investment Trends 2024 (p. 24)
[12] BNEF Energy Transition Investment Trends 2024 (p. 18)

Interconnection and grid equipment, such as transformers and devices used to support power system voltage, continue to face market shortages, with extended lead times and price increases that negatively impact the speed and cost of renewable projects coming online.

Looking domestically, the US is experiencing substantial growth in solar installations, with an estimated 43 GW of solar capacity expected to be installed in 2024. In the Northeastern US, covered by the NYISO and the Independent System Operator - New England (ISO-NE), over 27 GW DC of utility-scale solar capacity and 14 GW of rooftop solar are expected to be added between 2024 and 2035. In addition to solar, over 18 GW of offshore wind installations and 13 GW/ 51 GWh of energy storage are also expected between 2024 and 2035, according to BNEF data.

The IRS has significantly catalyzed renewables investment by introducing new subsidies. Private tax credit sales are estimated to have reached between $4 and $9 billion in the second half of 2023. However, key provisions of the clean energy tax credits, such as the technology-neutral 45Y clean energy PTC, 48E clean energy investment credit, and domestic content bonus rules were only issued in May 2024. Solar module prices in the US remain high compared to other regions. Domestic steel prices remain the highest in the world due to trade measures and domestic preference laws.

Further, while the IRS bonuses privately-owned renewable systems that meet domestic content provisions, publicly-owned projects like NYPA's can be penalized in an "all or nothing" approach to the tax credits. While a private sector project that does not meet domestic content forfeits a 10% Investment Tax Credit (ITC) adder, a publicly-owned project that does not meet domestic content provisions will not be eligible for any ITC tax credit—a financial impact of up to 40% of the project cost.

4.1.2 High-need Areas

In formulating the NYPA Renewables Strategic Plan, our expanded authority calls upon the Power Authority to consider "high need areas where transmission and distribution upgrades will be necessary to interconnect new renewable energy generation projects." As described below, NYPA will participate in and consider the developments from the PSC on (1) Renewable Energy Zones, (2) the Comprehensive Grid Planning Process, and (3) the NYISO System and Resource Outlook (3).

4.1.2.1 Clean Energy Zones

In 2020, New York State enacted the Accelerated Renewable Energy Growth and Community Benefit Act, which directed the PSC to develop and implement plans for future investments in New York's electric grid to meet the Climate Act goals.
In January 2021, NYSERDA filed its initial report on the Power Grid Study for the PSC's consideration that included a study on local transmission and distribution upgrades needed to meet the Climate Act goals, a study of offshore and onshore bulk power transmission infrastructure scenarios, and studies of transmission, generation and storage options for achieving 70% renewable generation by 2030 and a zero-emissions grid by 2040. The Power Grid Study recommended that the PSC consider establishing local Renewable Energy Zones (REZ) where significant renewable generation potential appeared to exist in geographic areas that did not have access to sufficient transmission infrastructure, and where new transmission development could facilitate renewable generation development in those areas.

Although the PSC did not adopt the recommendation to create a REZ process in its 2022 Order, it acknowledged that the REZ concept may have value in the future. Most recently, in the Draft CES Biennial Review, DPS and NYSERDA identified the REZ as an option to offer cost efficiency and certainty of meeting milestones to align generation development and large loads related to economic development growth with transmission expansion plans.

The draft Biennial Review finds that REZ could build upon other efforts, such as New York State's Coordinated Grid Planning Process (CGPP), ongoing economic development initiatives, and several other power sector initiatives that aim at speeding the buildout of transmission and clean generation resources. NYPA filed comments on the draft CES Biennial Review supporting the REZ concept, and we will consider the PSC's determination and the delineation of any future REZ in our future biennial strategic plans and updates.

In her 2025 State of the State address, Governor Hochul proposed expanding the CGPP to identify Clean Energy Zones ("CEZs")—regional concentrations of clean electric generation paired with transmission. The proposal provides that the CEZ process will identify opportunities to integrate clean energy generation and transmission, ensuring the efficient and effective use of New York's resources to meet local demands, support the state's reliability needs, and achieve climate goals. Furthermore, the proposal provides that generation and transmission projects within a CEZ will receive priority review, with generation and transmission projects proactively coordinated to minimize development risks and reduce costs for consumers. NYPA looks forward to the CEZ process to inform efficient and impactful generation and transmission development.

4.1.2.2 Coordinated Grid Planning Process

In August 2023, the PSC approved the CGPP, which focuses on identifying the transmission and distribution system investments needed to meet the Climate Act goals. The CGPP, in close coordination with the utilities, NYISO and other stakeholders, involves data collection and scenario development, network model development, local transmission and distribution system assessment, and planning and evaluation of preferred and least-cost solutions.

The CGPP timelines will also be coordinated with the NYISO's input and bulk transmission planning processes. NYPA is participating in the CGPP and other distribution and bulk planning efforts. The Authority is considering information from the CGPP, including any CEZs that may be established, to inform the development decisions in this Strategic Plan.

4.1.2.3 NYISO System and Resource Outlook

The NYISO studies transmission system planning to relieve congestion and allow renewable energy to be deliverable to load centers. In July 2024, the NYISO issued its 2023-2042 System & Resource Outlook Report (Outlook), which provided a comprehensive overview of potential resource development over the next 20 years and highlighted opportunities for transmission investment driven by economics and public policy in New York State. The Outlook found that continued investment in the bulk electric grid will be required to accommodate the NYISO's estimated 100 GW to 130 GW of emission-free generation resources needed to accomplish New York State policy mandates.

The Outlook examined and identified regions of the state where renewable or other resources may be unable to generate at their full capability due to transmission constraints. In implementing our expanded authority, NYPA is conferring with the NYISO regarding the development and interconnection of new renewable energy generation projects. NYPA plans to consult the NYISO to understand and consider the impacts of bulk transmission congestion to assess the risk of renewable energy generation project curtailment.

4.2 Project Interconnection and New York State's Progress Toward Achieving the Climate Act's Renewable Energy Targets

As a component of our annual conferral process and the NYPA Renewables Strategic Plan, NYPA is required to complete an analysis of New York State's progress toward achieving CLCPA goals and consider the timing, characteristics and size of the renewable energy generating projects in the NYISO interconnection queue. NYPA presented these evaluations in the 2023 and 2024 Conferral Reports and has updated each since the publication of the 2024 Conferral Report on October 8, 2024. NYPA's updated analyses are provided in Appendices B and C of this Strategic Plan and are summarized below.

4.2.1 Impact of NYISO Interconnection Process and Timing of Projects in the NYISO Interconnection Queue.

NYPA participates in the interconnection and transmission planning processes at the NYISO. In formulating its NYPA Renewables Strategic Plan, our expanded authority calls for NYPA to consider "the timing, characteristics and size of the renewable energy generating projects in the interconnection queue of the federally designated electric bulk system operator for New York state."[13] The interconnection of large-scale renewables projects is supervised by the NYISO under federal tariffs approved by FERC. The NYISO has started a new interconnection process under FERC's interconnection reform Order No. 2023, effective May 2, 2024. A complete analysis of the NYISO's interconnection processes and impacts on development of renewable generation is set forth in Appendix C.

The universe of eligible projects in the NYISO interconnection queue includes projects that are participating in the Class Year 2023 process, projects that are or will apply for the Transitional Cluster Study Process, and projects that will participate in the future Cluster Study process. Seventy projects representing various technologies and sizes have been participating in the Class Year 2023 process. In September 2024, the NYISO issued the "Class Year 2023 Facilities Study System Upgrade Facilities (SUF) and System Deliverability Upgrade (SDU) Report", which identified and allocated costs to reliably interconnect these projects. On Sept. 26, 2024, the report was approved by the NYISO's Operating Committee (OC).

The OC approval initiates the decision process for the project developers to accept or reject their interconnection costs. Upon rejecting the cost allocation, certain projects may be removed from the Class Year Study. The developers' acceptance or rejection

[13] [PAL Section 1005(27-a)(e)(ii)(E)]

of the costs will require the NYISO to re-evaluate the SUFs and SDUs for the remaining projects and issue a revised report. This process will continue until all the remaining projects have accepted the interconnection cost allocation. On December 9, 2024, the NYISO presented the results of the additional SDUs Study including a description of the system upgrades and associated costs for developers to consider. The NYISO anticipates completion of this iterative process and additional system deliverability upgrade cost settlements by February 2025.

On August 1, 2024, the NYISO initiated its new Transition Cluster Study. The application window is closed on October 15, 2024. The Transition Cluster Study process is expected to expedite the interconnection process without requiring the participating project to undergo certain prerequisite studies required under the Class Year process. Following implementation of the new process in May of 2024, 255 generation projects were withdrawn from the NYISO's interconnection queue under transition rules with the option to join the new Cluster Study process.[12] As of December 31, 2024, there are 302 active projects in NYISO's Transition Cluster Interconnection Study. The Transition Cluster Interconnection Study is anticipated to be completed for all the participating projects by the end of July 2026.

Upon completion of the Transitional Cluster Study, the next Cluster Study is anticipated to begin in September 2026. According to the NYISO, the new interconnection process is expected to be faster than the 3 to 4 years that the prior Class Year process took, with completion in approximately 590 days, or about 1.6 years.

NYPA will account for these NYISO interconnection processes and expected completion dates, and for how interconnection will affect the timeframe for completing our projects and entering them into commercial operation.

4.2.2 Contribution of Projects to Achieving the Renewable Energy Targets of the Climate Act

In formulating its strategic plan, NYPA's expanded authority calls on the Power Authority to consider "the state's progress towards achieving the renewable energy goals of the climate leadership and community protection act" - PAL § 1005(27-a)(e)(iv)(J). Appendix B provides a detailed discussion of the draft Clean Energy Standard Biennial Review and the status of New York State's achievement of the Climate Act goals and has been updated with recent progress since the release of the draft Strategic Plan on October 8, 2024. When completed, the large scale solar and other renewable energy generation projects set forth in this Strategic Plan will contribute significantly to New York's achievement of its Climate Act renewable energy targets.

4.2.3 Anticipated Delays in Completing Renewable Energy Generation Projects

One of the considerations in NYPA's expanded authority is "a description of any delays or anticipated delays associated with completion of the renewable energy generating projects." [PAL § 1005(27-a)(e)(iv)(E)]. NYPA factored potential of risks to project completion and risks of projects delays into its selection of renewable energy generation projects to include in this Strategic Plan.

NYPA is taking a proactive approach in identifying issues that could potentially delay project execution including supply chain concerns for critical equipment,

interconnection and the status of necessary permits as part of its project due diligence process.

The Power Authority will consider strategies to mitigate or minimize such delays to the extent possible in accordance with NYPA's applicable enterprise project risk management standards. NYPA will continue to monitor any unforeseen issues that may arise that could further exacerbate such delays.

As needed, NYPA will account for delays in projects that we have identified for inclusion in the Strategic Plan, in the biennial plan updates and subsequent biennial plans.

4.3 Fiscal Condition of the Power Authority

NYPA's financial strength and fiscal prudence is essential to maintaining New York State's generation and transmission assets, along with our commitments to our customers and bondholders. The Power Authority's fiscal condition was most recently validated by credit agencies in September 2024, when Moody's Ratings and the Kroll Bond Rating Agency upgraded their ratings on NYPA's revenue bonds, and our transmission bonds affiliated with separately financed projects.

The rating agencies noted NYPA's strong operating performance and proactive financial management practices, including balance sheet deleveraging, which have facilitated consistently robust liquidity and General Resolution Revenue Bond debt and fixed charge coverage metrics. The rating agencies highlighted NYPA's competitive, low-cost, low-carbon generation mix, growing transmission asset base, and management's broad enterprise expertise. If NYPA's credit were to erode, this would increase financing costs and impact the amount NYPA can invest in its renewable energy portfolio.

Following two strategic legal defeasances of General Resolution Taxable Bonds in December 2023 and May 2024 totaling $348 million, ample capacity exists for NYPA's expansive, $3.1 billion 2024-2027 capital program. Funding sources are expected to include amounts on hand, internally generated funds and additional borrowings. Of this $3.1 billion plan, NYPA anticipates approximately $1.1 billion in transmission capital investment through 2027, in addition to the $1.7 billion previously expended, a portion of which is or will be financed as Separately Financed Projects (SFPs).

NYPA's upcoming investment in new renewable energy is separate from the $3.1 billion capital program. The first $100 million of renewables funding was approved by the NYPA Board of Trustees on October 8, 2024.

4.4 Stakeholder Engagement

As described in detail in Section 3.1.2, the Power Authority has and will consider stakeholder feedback through two formal methods: the annual conferral process and public comments associated with draft Strategic Plans and updates.

Stakeholders in the 2023 and 2024 conferral processes included climate and resiliency experts, labor organizations, environmental justice communities, disadvantaged community members, residential and small business ratepayer advocates, and community organizations.

Every effort was made to allow for accessibility and transparency during the stakeholder engagement processes. Comments were encouraged by any stakeholder via email or at our website for the Conferral Report and the public comment period associated with the NYPA Renewables Strategic Plan. All written conferral comments considered in the 2024 Conferral Report were published alongside the report. Additionally, public hearings associated with this Strategic Plan were transcribed.

As described in Section 3.1.2, the draft of our inaugural strategic plan was posted on NYPA's website (nypa.gov) for at least 60 days for public comments. Public hearings were held in regionally diverse parts of the state. NYPA sought further input through the NYSERDA Clean Energy Hubs. The Power Authority has considered and incorporated public comments and stakeholder feedback into this final Strategic Plan, which is published on NYPA's website and reported to the Governor and the legislative leaders.

4.4.1 Plan Updates

Until 2035, NYPA will update each biennial strategic plan annually as needed, after a public comment period of at least 30 days and at least one public hearing. Each update will include a review of the implementation of projects previously included, including status in the interconnection queue. The NYPA Renewables Strategic Plan and any updates of the plan are not deemed final until they are approved by the NYPA Board of Trustees.

4.4.2 2023 and 2024 Conferral Insights

Participating stakeholders provided NYPA with valuable insights and perspectives throughout the 2024 conferral process, which continues to underscore the needs and opportunities for NYPA to help advance New York State's progress toward achieving the renewable energy goals of the Climate Act. In 2023 and 2024, NYPA gathered feedback from a variety of stakeholder groups, including state agencies and authorities, regulatory entities, climate and resiliency experts, labor organizations, and environmental justice and community organizations. In each Conferral Report, NYPA categorized and summarized stakeholder comments and feedback, and synthesized that feedback in the form of observations and conclusions.

A summary of stakeholder feedback and NYPA's observations and conclusions from the 2023 conferral process can be found in Appendix D.

A summary of stakeholder feedback and NYPA's observations and conclusions from the 2024 conferral process can be found in Appendix E.

Stakeholder feedback and NYPA's observations and conclusions from both conferral processes has helped inform the contents of the NYPA Renewables Strategic Plan in several key respects, including the following:

First, many conferral stakeholders were concerned with issues surrounding energy affordability, especially for low-income New Yorkers in disadvantaged communities. Recognizing this concern, NYPA, in cooperation with DPS and NYSERDA, has advanced the early programmatic groundwork to establish the REACH program, discussed in Section 2.2.2.

As approved by the PSC in October of 2024, REACH will help to address energy affordability for low-income New Yorkers in disadvantaged communities by providing electric utility bill credits. The bill credits will be funded from a portion of revenues from new renewable energy generation projects developed or contracted for by NYPA and designated for REACH, and other authorized contributions.

NYPA, in collaboration with NYSERDA and DPS, has adopted valuable public feedback to help craft the proposed program, which was designed to build upon existing efforts, such as the Energy Affordability Program and Statewide Solar for All. The conferral processes have underscored the importance of REACH in helping to address energy affordability by providing meaningful benefits to low-income electricity customers in disadvantaged communities as the State transitions to a clean energy economy. Through the new renewable energy generation projects set forth in Section 5, NYPA is prioritizing renewable energy generating projects that could contribute to REACH.

Second, many conferral stakeholders expressed a preference that NYPA's downstate small natural gas power plants (SNGPP, or referred to by some as "peaker" plants) should be transitioned away from fossil fuel generation. Although there is no clear consensus yet on what should be done with these sites after plant retirement, NYPA has observed increasing interest among conferral process stakeholders in battery energy storage being deployed at these locations where feasible.

Some stakeholders want to see these plants replaced with offshore wind interconnections, renewable energy generation, green space or waterfront access. NYPA is prioritizing renewable energy-generating projects that benefit communities served by SNGPPs, and we are in negotiations with respect to battery storage at three of these sites.

NYPA has also issued an RFI to solicit ideas for development of its Kent SNGPP site. NYPA will continue to solicit community views on the future of the SNGPP sites and we will publish the initial phase-out plan required by PAL § 1005(27-c) no later than May 3, 2025.

Third, some conferral stakeholders expressed concerns that NYPA's development of renewable energy would adversely affect the low-cost hydropower rates upon which many businesses and municipalities rely. As stated in the 2023 Conferral Report, NYPA's development of renewable energy does not necessitate risks being borne by existing customers, as suggested by some stakeholders.

Along this same line of concern, one of these conferral stakeholders suggested that NYPA "silo" the risks associated with renewable development to insulate NYPA from potentially adverse financial impacts. PAL § 1005(27-a)(f) authorizes NYPA to create wholly-owned subsidiaries for this purpose, a concept that NYPA is advancing, as discussed in Section 3.1.3.1.

The Power Authority has considered this information and additional stakeholder input in the development of this inaugural NYPA Renewables Strategic Plan and implementation of other responsibilities assigned to us under our expanded authority.

4.4.3 NYPA Renewables Public Comment Period and Public Hearing Insights

During the public comment period, NYPA heard from over 5,000 stakeholders through public hearings and written comments. At our 12 public hearings, NYPA heard comments from over 170 individuals and over 450 people were in attendance. These comments reflected a broad range of perspectives, including community and environmental justice organizations, State and local government entities, universities, environmental and energy policy organizations, municipal utilities, consumer interests, labor organizations, and renewable energy and energy storage developers.

This feedback provided NYPA with valuable insights regarding not only the initial tranche of 40 projects, but also our programmatic approach to NYPA Renewables and the renewable energy transition more broadly. Following the issuance of this Strategic Plan, NYPA will continue stakeholder engagement through any updates to the plan and in the 2025 annual conferral process.

A summary of comments can be found on our website here, a compilation of written comments can be found on our website here, and a compilation of the transcripts from the public hearings can be found on our website here.

While NYPA has and will continue to consider this information and additional stakeholder input moving forward, the following section summarizes and responds to the most frequent and/or significant themes in the feedback we received.

1. **Support for New York's climate leadership and acknowledgement of the complexity of the clean energy transition**
   The vast majority of stakeholders expressed strong support for the goals of the CLCPA and for renewable energy as a means to mitigate climate change through reducing greenhouse gas emissions from the electric system.

   Some stakeholders expressed growing concern about the timeframes in which the CLCPA goals may be achieved, and the affordability of the clean energy transition. In addition, some stakeholders expressed reservations about feasibility, interconnection delays, system reliability, and environmental and land use impacts of new renewable generation.

   In contrast, other stakeholders expressed optimism with progress to date and identified a multitude of opportunities related to climate action and leadership, disadvantaged community benefits, economic development, workforce development, energy storage, biogas fuel cells, and agrivoltaics.

2. **Strong support for NYPA to build renewables**
   Most stakeholders strongly supported a foundational role for the New York Power Authority in building new renewable energy generation projects by itself or partnering with the private sector.

   There was broad recognition of NYPA's legacy, NYPA's responsible development and commitment to communities, and NYPA's competitive advantages.

   Overall, the Power Authority has an overwhelming public mandate to build public power in New York.

3. Requests for NYPA to build 15 GW of new renewable energy

The most frequent comment received during the NYPA Renewables public comment period was the request to build 15 GW of renewable energy. Of the over 5,500 written comments, over 5,300 of them followed a uniform set of recommendations primarily focused on the 15 GW goal. Further, NYPA received on November 20, 2024, a letter co-signed by 40 members of the State Assembly and State Senate requesting, among other things, that NYPA commit to building 15 GW.

Stakeholders had various explanations for the 15 GW goal. Some pointed out that 15 GW is the delta between where the State is currently tracking and the 70% renewable electricity by 2030 goal. Some stated on the public record that they were asking for 15 GW so that NYPA would commit to building a lower amount, such as 7 GW. Others argued that NYPA's expanded authority is a mandate to meet New York's entire CLCPA renewable energy goal.

NYPA's expanded authority does not direct the Power Authority to build a specific amount of generation or to backstop the CLCPA targets to reach 70 percent renewable energy by 2030 (70x30) or an emissions-free grid by 2040 (100x40). Rather, NYPA was directed to supplement private sector energy development to ensure that New York's clean energy transition is faster, more affordable, and more equitable. Many commenters in the hearings and in written comments expressed concern that NYPA might crowd out private investment in New York's renewable energy evolution.

As NYPA has shared in the Strategic Plan, this initial plan constitutes NYPA's inaugural tranche of projects. NYPA can and will add more projects to those listed in this Strategic Plan and intends to update the plan on a regular basis with new projects, following the process in our statute calling for further public comment and an additional public hearing.

Finally, as a public entity supported by public finance, NYPA has limited financing capability and must act prudently within its resources to finance and partner on new renewables projects. This balance must be undertaken while maintaining its AA credit rating, all in concert with its other core responsibilities of operating the State's hydroelectric plants, other power stations, and operating and maintaining over 1,550 miles of high voltage transmission lines and supporting our governmental customers' decarbonization goals through project implementation and construction financing. Our strong credit rating provides the pathway to performing this important role as any lowering of our credit rating caused by overextending our capacity would limit our ability to build new renewables.

In the public draft of the NYPA Renewables Plan, Section 3.2.3 Maximizing NYPA's Ability to Build New Renewable Generation Resources detailed the ways in which NYPA could extend our capacity to build renewable energy. We are delighted that the Governor has provided for one of those pathways in her 2025 State of the State Address by directing the New York State agencies to partner with NYPA to fulfill their EO22 obligations through a mixture of NYPA Renewables (de-risked NYPA projects) and NYPA-facilitated private projects (NYPA enabled). This significant policy advancement demonstrates not only Governor's leadership on climate, but also an affirmation of the Power Authority's commitment that NYPA can and will build as much as we prudently can as resources allow.

4. **Concerns about cost**
   During public comment, many stakeholders shared concerns about different aspects of cost: cost of the transition to renewable energy broadly, current and future costs to New York ratepayers, and costs to NYPA customers.

   As described in Section 3.1.3 Due Diligence, NYPA's legal, finance and taxation staff worked to ensure that NYPA Renewables would not have an adverse impact on NYPA customers. Among these efforts, NYPA notes the recent creation of its first subsidiary under the expanded authority, the New York Renewable Energy Development Holdings Corporation, that will allow NYPA to isolate certain liability associated with renewable development.

   Toward ratepayer impact, NYPA staff worked to review and implement operational and commercialization models that would allow NYPA to pursue projects with strong financial returns, thereby allowing NYPA's investment to go farther, to limit ratepayer impact, and to maximize the pool of funding available to the REACH program.

   It was suggested by some stakeholders that the Authority should consider taking on more project debt even if it meant a downgrade in credit rating.

   As stated in the draft plan in Section 3.2.1.1.2 Bonding Capacity, NYPA must maintain its AA credit rating. If NYPA were enabled to take on additional project debt, our credit rating would be downgraded which would negatively impact the rate at which the Authority can borrow, thereby decreasing the number of new renewable projects NYPA can construct.

   Moreover, higher borrowing costs would increase NYPA's overall costs and potentially limit its ability to undertake essential projects at its existing hydroelectric plants, transmission lines, and for new transmission that the Authority is building or has proposed to build to bring new renewable energy to all New Yorkers sustainably and reliably. It is also important to note that projects must generally have a positive revenue stream to support any related bond issuance.

   Finally, a few stakeholders shared that NYPA should pursue uneconomic projects, such as projects with prohibitively expensive interconnection costs. While NYPA does maintain a cost advantage in building renewables, each of these projects will ultimately be paid for by New Yorkers and NYPA takes that responsibility seriously. For example, the higher the project cost of a utility-scale project, the higher the bid price NYPA must submit to NYSERDA to attempt to secure a REC contract. The inverse is also true, the more competitive our projects are, the lower the bid price and associated ratepayer impact. Furthermore, NYPA's Board of Trustees is charged with the fiduciary responsibility to act prudently in the interests of NYPA; a significant number of uneconomic projects could impede this governing responsibility. Moreover, undertaking uneconomic projects would run directly counter to the REACH program, which will fund bill credits to low-income ratepayers using a portion of the positive net earnings NYPA gains from building and operating new renewable energy generating projects.

5. **Affordability and REACH**
   Many stakeholders recommended that NYPA work to consider ways to lessen the financial impact of electric utility service.

NYPA agrees that affordability is a key element of the State's transition to clean and renewable energy and is actively advancing the creation of the REACH program to help provide relief to low-income New Yorkers in disadvantaged communities. On October 16, 2024, the PSC granted NYPA's petition to establish the REACH program. REACH bill credits will be funded from a portion of revenues from new renewable energy generation projects developed or contracted for by NYPA and designated for REACH, and other authorized contributions. Bill credits will start to flow to low-income ratepayers who participate in the PSC's Energy Affordability Program ("EAP") when funds become available from new renewable energy generating projects and other sources.

6. **Reliability of Electric Service**
   Some stakeholders expressed concern about the continued reliability of New York's power system as it becomes increasingly reliant on intermittent resources, such as wind and solar.

   NYPA notes that challenges to electric system reliability are rising in large part due to New York's economic success as loads rise due to microchip manufacturing, artificial intelligence and data centers. The NYISO has identified reliability needs on the New York State bulk power system starting in 2033. NYPA notes the State's continued progress on multiple fronts that will help New York maintain a reliable electric system as it progresses toward achieving the CLCPA goals. This progress includes movement toward achieving the energy storage goals of the CLCPA, such as the PSC's recently issued Storage Order, the commissioning of NYPA's Northern New York Energy Storage Project, the advancement of significant transmission upgrades, including NYPA's Smart Path Connect, Central East Energy Connect, and Propel NY projects.

7. **Requests for additional transparency on the process and projects**
   While several stakeholders commended NYPA on being responsive to feedback regarding public engagement, including improving the conferral process between 2023 and 2024 to improve accessibility and transparency, the Authority heard that there is more work to do, specifically regarding project details, the selection process for projects, and the process to pre-qualify developers and partners.

   In response, NYPA has taken the following steps:

   - Project details: NYPA has added a section to the plan entitled "3.2.4 Process for Build Renewables and Additional Public Engagement," to detail the various points for Board and public engagement during the development process. Additionally, in any updates to a Strategic Plan or future Biennial Strategic Plans, NYPA will provide updated project details as they become suitable for public disclosure. The ultimate goal is to provide maximum transparency without risking that the project's viability is compromised.

   - Selection process for projects: NYPA has added additional detail to section 3.1.6 Project Identification and Initial Due Diligence.

   - Process to pre-qualify developers and partners: NYPA has added additional detail to section 3.1.5 Partner Identification and Vetting.

8. **Universal support for labor protections**

NYPA heard unanimous support for advancing projects with strong labor provisions and Project Labor Agreements (PLA). During the public comment period, the Authority also heard broad support from the labor unions themselves regarding NYPA Renewables and the statutory requirements for labor protection.

NYPA looks forward to working shoulder to shoulder with organized labor to build new renewable energy generation projects for New York State. NYPA would like to take this opportunity to affirm that PLA requirements will apply to both contractors and subcontractors alike.

9. Apprenticeship and workforce development

NYPA heard universal support from organized labor, community program leaders and workforce training programs for including apprenticeship programs in new renewable energy construction projects, and for NYPA's annual Workforce Training investment. Many organizations thanked NYPA for its workforce training programs to date and expressed interest in pursuing further partnerships.

As detailed in Section 2.1 of this Strategic Plan, in March 2024, NYPA and the DOL entered into a Cooperative Agreement for programs related to workforce training, retraining, and apprenticeship opportunities in the renewable energy field. During 2024, NYPA funded over $20 million in workforce training programs and looks forward to continuing its robust workforce training programming throughout 2025 and thereafter.

10. Feedback regarding the role of the private sector

NYPA received diverse feedback regarding the potential for NYPA Renewables to crowd out the private sector. Largely, the developer community provided public comment in support of NYPA's efforts to date and was complimentary of the Authority's efforts to work with them and to complement their work. Some distributed energy developers shared a preference for NYPA to focus on utility-scale projects, where the State has historically had less success than in the distributed renewable energy sector.

NYPA will continue to partner with the private sector to magnify and maximize its ability to develop new renewable energy generation projects for New York State.

11. Location-based feedback

Many stakeholders provided public comment in support of or in opposition to locating projects in specific locations.

There was broad support for locating more renewable projects in Zone J (New York City). This support included specific suggestions for locating solar on the rooftops of college and university buildings.

Stakeholders shared mixed views on development of renewable energy on Long Island. Some shared support due to high electric demand and the need for resiliency due to storms while others opposed offshore wind due to their concerns about environmental impact, particularly on Long Island's sole-source aquifer system and the coastal marine environment, as well as the relatively high-cost of development on Long Island.

Stakeholders also shared diverse feedback on locating renewable generation on brownfield sites, with some suggesting this was the best and highest use for contaminated land, while others shared concerns that proper remediation could or would be done.

While New York City-based projects tend to be smaller and more administratively complex than locating in other parts of the State, NYPA recognizes the importance of this work and is committed to exploring more downstate projects. Similarly, many community members in the Hudson Valley strongly supported NYPA locating more renewable energy generation projects, with some calling for 5 GW worth of projects, in the Hudson Valley. Locating available land in the Hudson Valley that is affordable and that avoids agricultural land and historic resources is challenging. We encourage stakeholders to continue to share potential opportunities with the NYPA Renewables team by emailing us at NYPARenewables@nypa.gov.

12. Technology-specific feedback

A variety of stakeholders provided feedback on the specific types of renewable technologies that NYPA ought to pursue, including offshore wind, more energy storage, and additional hydropower.

Some stakeholders also suggested that NYPA explore non-traditional sites for solar generation projects, such as floating panels on pumped storage reservoirs and solar canopies on parking areas. There was also strong interest in on-site solar, particularly in dense urban areas such as New York City.

Still other stakeholders urged NYPA to consider building nuclear power that could meet the CLCPA's target for an emission-free power grid by 2040. Interest in nuclear power has fostered a national and international revival in plans to explore traditional and advanced nuclear technologies, such as small modular nuclear power plants, to provide base load or dispatchable carbon-free electricity to meet the challenges of climate change.[14]

While NYPA can and will explore all options, it is important to flag that non-traditional and non-standardized projects often come with a price premium that would limit the amount of money NYPA can spend on additional renewable projects, along with limiting the pool of funding potentially available for the REACH program. However, NYPA does recognize the importance of diversifying both our own portfolio and the energy mix of New York State, and we will endeavor to develop a variety of technologies.

Regarding offshore wind projects, the capital costs of an offshore wind project generally range from $5-10 billion, which is approximately 50-100% the total value of NYPA's asset base. As a result, NYPA is unable to pursue projects of that size with our majority ownership requirement while maintaining a sound financial position to keep our current assets running safely.

Regarding energy storage, NYPA is pursuing energy storage as part of NYPA Renewables and expects to see additional energy storage projects in future Strategic

[14] On September 5, NYSERDA issued for public comment a "Draft Blueprint for Consideration of Advanced Nuclear Technologies" *see* https://www.nyserda.ny.gov/ny/Future-Energy-Economy-Summit,
and has issued an "Advanced Nuclear Technologies Request for Information to Gauge Market Interest", *see* https://www.nyserda.ny.gov/About/Newsroom/2024-Announcements/2024-11-15-NYSERDA-Issues-Advanced-Nuclear-Technologies-Request-For-Information

Plans as the State's incentives for bulk energy storage are finalized through the New York State Energy Storage Implementation Plan and as additional solicitations from NYSERDA materialize.

Regarding on-site solar, NYPA is interested in developing renewable energy projects in urban areas where on-site solar may be a viable option. These projects often require collaboration between multiple parties and we welcome suggestions on potential locations, which can be shared at: NYPARenewables@NYPA.gov.

Regarding additional hydropower, NYPA's expanded authority defines new renewable energy generation projects that it can build in accordance with the Public Service Law and the PSC's Clean Energy Standard, which do not allow for additional pondage hydropower to be built as part of NYPA Renewables. As a result, any investment in new hydropower would be run of the river and likely small-scale. As noted in the CES Biennial Review, small-scale hydropower projects across the State are struggling to make ends meet, and this is even more true for NYPA's small hydropower projects, which do not receive the State financial incentives as privately-owned small hydropower projects. Accordingly, NYPA will continue to evaluate opportunities to increase output from existing projects, as well as opportunities for new non-pondage hydropower, but is unlikely to pursue these projects. However, nuclear power does not meet the current definition of a renewable energy system in New York State.

13. Farmland protection

Several stakeholders, particularly in rural counties, expressed concerns regarding the potential loss of agricultural land.

The expanded authority provides that NYPA, its subsidiaries, or any entity participating in a public-private agreement or acting on behalf of the authority, shall not develop on property that consists of land used in agricultural production, taking into consideration whether the land is within an agricultural district or contains mineral soil groups 1-4, as defined by the Department of Agriculture and Markets, unless in furtherance of an agrivoltaics project. NYPA's due diligence process takes this into consideration, and projects will be reviewed to ensure they can comply with this requirement.

NYPA commits to exploring opportunities to create opportunities for farmers and renewable energy and will issue a Request for Information through NYPA Research & Development to explore potential opportunities for agrivoltaics.

14. Partnership opportunities

Many stakeholders provided public comment requesting consideration for NYPA partnership on a variety of components of NYPA's expanded authority. Several schools, colleges, and universities noted opportunities for shared initiatives. Additionally, several current NYPA energy services customers expressed optimism that NYPA's renewable projects could provide more options to meet their obligations under the CLCPA and/or Executive Order 22.

NYPA stands ready to explore partnership opportunities for renewable energy projects with entities within the scope of its expanded authority.

15. Remaining barriers

A handful of stakeholders asked NYPA about remaining barriers or doing more projects.

As shared in Section 3.2.3 “Maximizing NYPA’s Ability to Build New Renewable Generation Resources”, the Authority has limited capability to finance projects on its own and seeks to maximize the potential for its new renewable energy generation projects through public-private partnerships.

NYPA is delighted that as part of her 2025 State of the State address, the Governor has directed State agencies to partner with NYPA to meet their EO22 obligations through a mix of NYPA Renewables and private projects. This policy solution offers a two-fold benefit to New York’s clean energy transition: 1) it provides for contracted revenue for NYPA Renewables, thereby derisking the project; 2) it allows NYPA to enable even more renewable energy than we can afford to maintain a majority ownership stake in.

16. **Further, NYPA notes that stakeholders would like the Authority to continue the following:**

    - *Many stakeholders provided broad support for NYPA’s existing environmental justice and community engagement efforts, and expressed interest in the Authority continuing those investments.*

    - *A common theme throughout the public comment period from NYPA’s existing customers was an acknowledgement of the significant impact of NYPA’s low-cost hydropower on their continued operations in New York State and broad support for NYPA building renewables as long as it does not create adverse financial consequences for the Authority or its customers. The Authority heard strong support for its efforts to use financial mechanisms to derisk and enable new renewable projects, such as through creating a wholly-owned subsidiary.*

    - *Many of NYPA’s existing energy services customers that benefited from NYPA’s renewable energy advisory services before the Authority could own and operate additional renewable generation commended our expertise and prior support in renewable energy, and look forward to potential partnerships on our new projects.*

    - *NYPA observed broad support for our Workforce Training investment of up to $25 million per year, with over $20 million funded in 2024.*

Finally, NYPA would like to address a variety of significant comments that merit acknowledgement, but that were either outside of the scope of this Strategic Plan, outside of NYPA’s span of control, or already mitigated through statutory language:

17. *Many stakeholders requested that NYPA share the plan to decarbonize our natural gas peaking power plants (“peakers”) by 2030 in the NYPA Renewables Strategic Plan*. NYPA is required by statute to publish this plan separately by May 3, 2025.

18. *NYPA heard concern from a variety of stakeholders that the draft plan did not address plans to decarbonize State facilities, such as the SUNY and CUNY system, with energy efficiency, geothermal, and renewables*. While the NYPA Renewables Strategic Plan covers specifically NYPA’s efforts under our expanded authority to build new renewable energy, NYPA continues to engage with our public customers to implement approximately $250 million per year in energy efficiency and reduction work (described in Section 2.3.3), as well as our leadership of the Decarbonization Leaders

15 (DL15) program, described in Section 2.2.4. The Authority offers, and will continue to offer, a variety of options for SUNY and CUNY to pursue renewable energy projects, and NYPA Renewables represents another potential tool to decarbonize their energy demand.

19. *A common theme of the public comment period was feedback regarding permitting and interconnection, both concerns about the recently enacted RAPID Act, as well as concerns about the continued complexity and time horizon of permitting in the State.* As addressed in Section 3.2.1.2 NYPA Siting and Permitting Expertise, while NYPA's extensive history and subject matter expertise are an advantage, NYPA must follow all State and local permitting requirements and is not enabled to change any of those requirements for itself or any other project in the State. NYPA notes that the Legislature passed, and the Governor signed into law the "Renewable Action through Project Interconnection and Deployment" (RAPID) Act in the 2024-2025 Enacted State Budget. The RAPID Act consolidates the environmental review, permitting and siting of both major renewable energy facilities and major electric transmission facilities under the purview of the Office of Renewable Energy Siting ("ORES") within the Department of Public Service ("DPS"). NYPA expects the new RAPID Act to expedite transmission and generation siting in New York State.

20. *A variety of stakeholders asked NYPA to consider building new nuclear energy as part of NYPA Renewables*. Under the enabling statute for NYPA Renewables, the Authority is permitted to build, own and operate *renewable energy* generating assets, not *emissions-free* or *carbon-free* generating assets. Therefore, nuclear projects cannot be pursued under this part of NYPA's statute.

21. *Some stakeholders suggested that NYPA should redirect economic development funding from large corporations toward renewable energy development*. This is contrary to NYPA's statute, which calls for the Authority to allocate low-cost hydropower for economic development purposes to eligible businesses that commit to retain or create jobs and to make capital investments in facilities located in New York State.

22. *A few stakeholders shared that NYPA should not use powers of eminent domain to build renewable energy.* As contemplated by its expanded authority, NYPA intends to purchase real estate interests needed to develop new renewable energy generation projects from willing sellers.

4.4.4 Request for Information Insights

In January 2024, NYPA issued an RFI to solicit more targeted information from industry stakeholders, with a focus on renewable energy and energy storage developers. The RFI sought to understand which developers may be interested in collaborating with NYPA in various capacities.

The RFI generated a robust response from more than 170 entities with an interest in NYPA's renewable energy activities. Numerous entities indicated a willingness and desire to partner with NYPA. The information received further advanced NYPA's growing understanding of the renewable energy market in New York State.

In the spring of 2024, building upon the progress of the RFI, NYPA issued an RFQ that sought information from renewable energy and energy storage developers and investors that outlines their experience and qualifications. NYPA evaluated

respondents based upon their qualifications and experience and pre-qualified 89 developers and investors for potential collaborations that may arise in the future.

Through these efforts, NYPA is building a stable of qualified developers and investors to engage as projects are identified that can enhance our ability to bring such projects from concept to reality.

NYPA's value proposition is most exciting to developers who:

- Have complementary capabilities in development and delivery
- Are flexible about ownership models
- Have limited presence and relationships with stakeholders in New York State
- Want to quickly recycle capital
- Have limited access to capital at attractive terms
- See potential in long-term partnerships beyond solar PV
- Have a larger pipeline than they can develop alone.

5 2025 Proposed Projects

The projects presented below are NYPA's first tranche of renewable projects.

As this inaugural NYPA Renewables Strategic Plan will be finalized in January 2025, roughly 18 months after NYPA was granted this expanded authority, the majority of the projects presented here are undergoing project due diligence. Through this process, the Authority is actively conducting thorough reviews of detailed technical data, project economics, ownership, real estate, community impact, legal documentation, permitting and environmental impacts, and other considerations to inform negotiation of terms sheets and agreements for project development and acquisition.

Without final agreements in place, costs of the projects listed in this Strategic Plan are not known and are "to be determined" at this time. See PAL § 1005(27-a)(e)(v)(F). Disclosure of preliminary estimates of project-specific cost information during sensitive negotiations could cause developers to refuse to continue working with the Power Authority. Such outcomes would lead to the loss of these important projects or result in unfavorable price terms in individual project negotiations, undermining NYPA's ability to conclude contracts and maximize revenues from new renewable generation resources to carry out the purposes of its expanded authority.

NYPA will provide estimated project cost information to the extent available upon execution of project acquisition or development contracts, in updates to this Strategic Plan or in future reports. See PAL §§ 1005(27-a)(e)(ix), (j).

Further, NYPA cannot identify at this time which renewable energy generation projects will support REACH as NYPA's petition to establish REACH remains pending at the PSC. In addition to awaiting PSC action on NYPA's REACH petition, the Authority must also finalize contractual arrangements with partners and offtakers before determining REACH contributions for any specific project. Finally, although NYPA has provided information about how renewable projects in general will benefit New York State and its renewable energy goals, the Power Authority will furnish additional details about project-specific benefits, including benefits to disadvantaged communities, as they become available.

In aggregate, the initial 2025 portfolio below represents 37 projects, in every region of the State, with more than 3 GW of capacity, featuring solar PV and battery energy storage systems. If operationalized in its entirety, this portfolio would generate billions of dollars of public and private capital in new renewable energy generation and storage projects within the state. Through the contract negotiation of projects moving forward, the Authority expects some level of attrition from this inaugural tranche of projects. While this aggregate total of 3 GW represents a decrease from the initial 3.5 GW announced before the public hearing process due to a small level of attrition already encountered, the projects that are not moving forward in this strategic plan are still in progress by developers and should be counted toward the State's overall renewable goal.

It bears repetition that this is only the first tranche of NYPA Renewables projects. The Power Authority looks forward to building on the success of the 2025 NYPA Renewables Strategic Plan with further projects for consideration. In advance of a planned update to this Strategic Plan in the first half of 2025, NYPA is currently evaluating 3 GW of additional renewable energy generation projects.

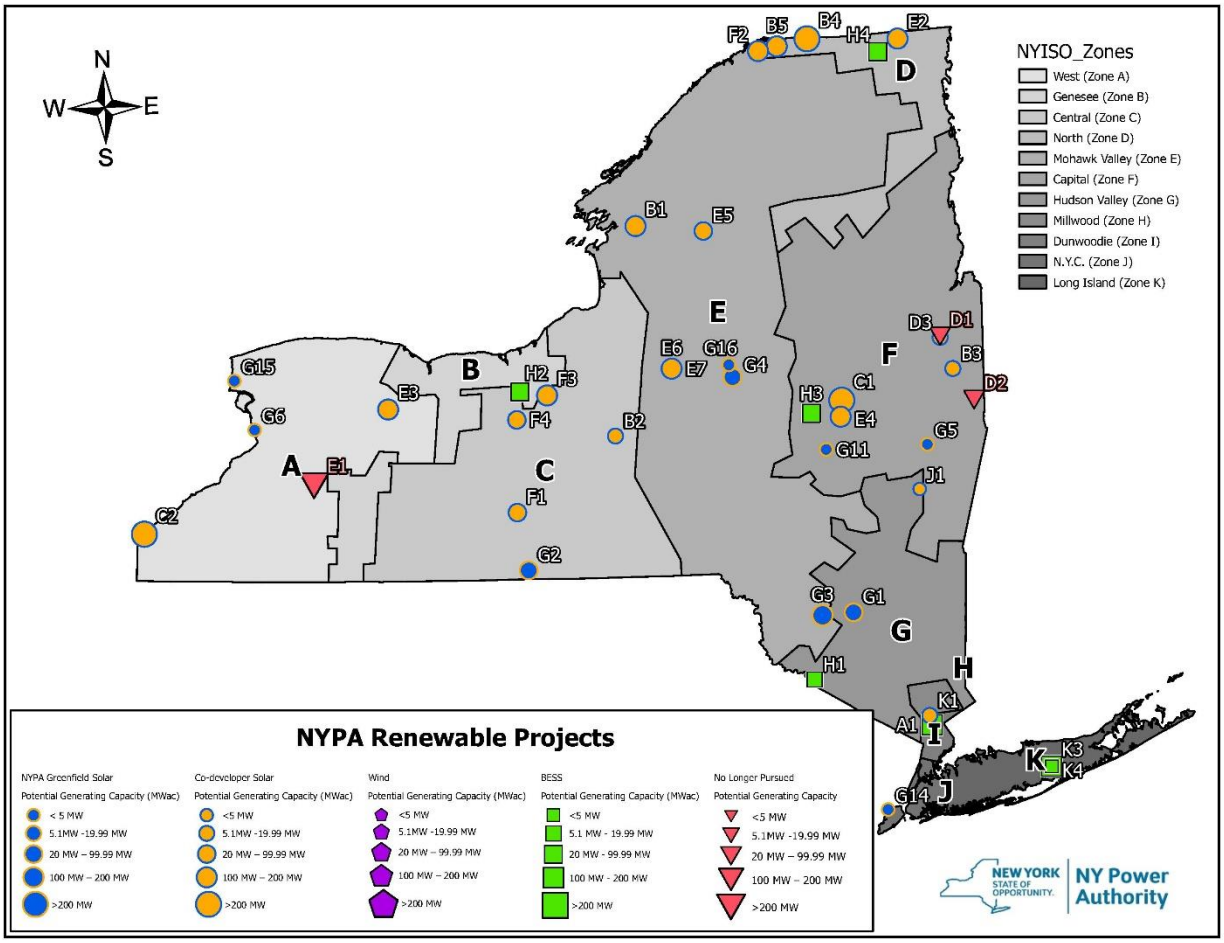
PROJECT UPDATES:

Please note that NYPA must update this plan at least once annually prior to releasing the draft 2027 NYPA Renewables Strategic Plan. PAL § 1005 (27-a)(e)(ix) requires that any such updates be subject to at least one hearing and 30-days of public comment. Based on this process, NYPA can and will issue an update to the 2025 NYPA Renewables Strategic Plan setting forth additional projects.

Adjusted Commercial Operation Dates (CODs) for certain projects: CODs for certain projects have been adjusted to reflect the most current status of each project, based on ongoing discussions with developers and updates to the permitting, interconnection processes, as well as NYSERDA contract awards and associated timelines. These adjustments are not delays, but rather a realignment with the evolving project considerations, and regulatory, policy, and market conditions.

Projects No Longer Pursued: Developers operate within their own timelines for project development, capital spending, and other key milestones, which may not always align seamlessly with the statutory requirements and procedural timelines associated with NYPA's strategic planning process. Due to these differing schedules, and the necessity to adhere to specific legislative frameworks, three projects that could not proceed in alignment with NYPA's anticipated final strategic plan have been removed from consideration and are no longer being pursued by NYPA.

NYPA Project Map



Project Name:	Project A1
Project Type	Battery Energy Storage System
Project Ownership	Co-Development
Anticipated Location	Mount Pleasant, Westchester County
NYISO Load Zone	H - MILLWD , I - DUNWOD
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	130
Purpose of Project	Support CLCPA, Resource Adequacy/Reliability
Estimated completion date	Q2 2028

Entity Undertaking the Project/Partnership Agreements	Acquest Development

Project Name:	**Project B1**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Watertown & Hounsfield, Jefferson County
NYISO Load Zone	E - MHK VL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	140
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Updated: Q4 2027
Entity Undertaking the Project/Partnership Agreements	Boralex

Project Name:	**Project B2**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Tully, Onondaga County
NYISO Load Zone	C - CENTRL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	20
Purpose of Project	Support CLCPA
Estimated completion date	Updated: Q1 2027
Entity Undertaking the Project/Partnership Agreements	Boralex

Project Name:	**Project B3**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Greenwich, Washington County

NYISO Load Zone	F - CAPITL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	20
Purpose of Project	Support CLCPA
Estimated completion date	Updated: Q1 2027
Entity Undertaking the Project/Partnership Agreements	Boralex

Project Name:	**Project B4**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Fort Covington, Franklin County
NYISO Load Zone	D - NORTH
Interconnection Status	In Progress (Class Year 2023)
Potential Generating Capacity (MWac)	250
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Updated: Q4 2027
Entity Undertaking the Project/Partnership Agreements	Boralex

Project Name:	**Project B5**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Massena & Brasher, Saint Lawrence County
NYISO Load Zone	D - NORTH
Interconnection Status	In Progress (Class Year 2023)
Potential Generating Capacity (MWac)	200
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Updated: Q4 2027
Entity Undertaking the Project/Partnership Agreements	Boralex

Project Name:	Project C1
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Glen, Montgomery County
NYISO Load Zone	E - MHK VL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	250
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Q4 2028
Entity Undertaking the Project/Partnership Agreements	ConnectGen/Repsol

Project Name:	Project C2
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	South Ripley, Chautauqua County
NYISO Load Zone	A - WEST
Interconnection Status	In Progress (2023 Class Year)
Potential Generating Capacity (MWac)	270
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	ConnectGen/Repsol

Project Name:	Project D1
No longer pursued.	

Project Name:	Project D2
No longer pursued	

Project Name:	Project D3

Project Type	Solar
Project Ownership	Build Transfer Agreement
Anticipated Location	Fort Edward, Washington County
NYISO Load Zone	F – CAPITL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	20
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2026
Entity Undertaking the Project/Partnership Agreements	CS Energy

Project Name:	**Project E1**
No longer pursued.	

Project Name:	**Project E2**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Ellenburg Depot, Clinton County
NYISO Load Zone	D - NORTH
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	100
Purpose of Project	Support CLCPA
Estimated completion date	Q2 2030
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	**Project E3**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Caledonia, Livingston County
NYISO Load Zone	B – GENESE

Interconnection Status	In Progress (Class Year 2023)
Potential Generating Capacity (MWac)	184
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2028
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	**Project E4**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Charleston, Montgomery County
NYISO Load Zone	F - CAPITL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	185
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2030
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	**Project E5**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Croghan, Lewis County
NYISO Load Zone	E - MHK VL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	75
Purpose of Project	Support CLCPA
Estimated completion date	Q3 2029
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	Project E6
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Verona, Oneida County
NYISO Load Zone	C – CENTRL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	199
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2030
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	Project E7
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Verona, Oneida County
NYISO Load Zone	C – CENTRL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	199
Purpose of Project	Support CLCPA
Estimated completion date	Q4 2030
Entity Undertaking the Project/Partnership Agreements	Forward Power

Project Name:	Project F1
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Watkins Glen, Schuyler County
NYISO Load Zone	C – CENTRL
Interconnection Status	Secured

Potential Generating Capacity (MWac)	50
Purpose of Project	Support CLCPA
Estimated completion date	Update; Q2 2028
Entity Undertaking the Project/Partnership Agreements	NextEra Energy Resources

Project Name:	**Project F2**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Massena, Saint Lawrence County
NYISO Load Zone	D - NORTH
Interconnection Status	Secured
Potential Generating Capacity (MWac)	180
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Update: Q4 2029
Entity Undertaking the Project/Partnership Agreements	NextEra Energy Resources

Project Name:	**Project F3**
Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Conquest, Cayuga County
NYISO Load Zone	B – GENESE
Interconnection Status	In-Progress (Class Year 2023)
Potential Generating Capacity (MWac)	200
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Update: Q4 2028
Entity Undertaking the Project/Partnership Agreements	NextEra Energy Resources

Project Name:	**Project F4**

Project Type	Solar
Project Ownership	Co-Development
Anticipated Location	Waterloo, Seneca County
NYISO Load Zone	C – CENTRL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	79.80
Purpose of Project	Support CLCPA
Estimated completion date	Update: Q2 2028
Entity Undertaking the Project/Partnership Agreements	NextEra Energy Resources

Project Name:	**Project G1**
Project Type	Solar
Project Ownership	Self-developed
Anticipated Location	Napanoch, Ulster County
NYISO Load Zone	G - HUD VL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	30
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities, Actively benefits DACs
Estimated completion date	Q4 2028
Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project G2**
Project Type	Solar
Project Ownership	Self-developed
Anticipated Location	Pine City, Chemung County
NYISO Load Zone	C – CENTRL
Interconnection Status	In Progress (2024 Cluster Study)

Potential Generating Capacity (MWac)	42
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities
Estimated completion date	Q4 2028
Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project G3**
Project Type	Solar
Project Ownership	Self-developed
Anticipated Location	Fallsburg, Sullivan County
NYISO Load Zone	E - MHK VL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	100
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities, Actively benefits DACs
Estimated completion date	Q4 2028
Entity Undertaking the Project/Partnership Agreements	New York Power Authority
Project will be developed under NYPA's REACH program.	

Project Name:	**Project G4**
Project Type	Solar
Project Ownership	Self-developed
Anticipated Location	Utica, Oneida County
NYISO Load Zone	E - MHK VL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	20
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities
Estimated completion date	Q4 2028

Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project G5**
Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	Menands, Albany County
NYISO Load Zone	F – CAPITL
Interconnection Status	Future
Potential Generating Capacity (MWac)	1.52
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities, Actively benefits DACs
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority
Project will be developed under NYPA's REACH program.	

Project Name:	**Project G6**
Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	Buffalo, Erie County
NYISO Load Zone	A - WEST
Interconnection Status	Future
Potential Generating Capacity (MWac)	1.00
Purpose of Project	Support CLCPA, Actively benefits DACs
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority
Project will be developed under NYPA's REACH program.	

Project Name:	**Project G11**

Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	Cobleskill, Schoharie County
NYISO Load Zone	F – CAPITL
Interconnection Status	Future
Potential Generating Capacity (MWac)	1.38
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project G14**
Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	New York City, Richmond County (Staten Island)
NYISO Load Zone	J – N.Y.C.
Interconnection Status	Future
Potential Generating Capacity (MWac)	1.50
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities, Actively benefits DACs
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority
Project will be developed under NYPA's REACH program.	

Project Name:	**Project G15**
Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	Lewiston, Niagara County

NYISO Load Zone	A – WEST
Interconnection Status	Future
Potential Generating Capacity (MWac)	4.96
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project G16**
Project Type	Solar (DER)
Project Ownership	Self-developed
Anticipated Location	Marcy, Oneida County
NYISO Load Zone	E – MHK VL
Interconnection Status	Future
Potential Generating Capacity (MWac)	1.54
Purpose of Project	Support CLCPA, Support renewables development on public-owned facilities
Estimated completion date	Q4 2027
Entity Undertaking the Project/Partnership Agreements	New York Power Authority

Project Name:	**Project H1**
Project Type	Battery Energy Storage System
Project Ownership	Co-development
Anticipated Location	Deerpark, Orange County
NYISO Load Zone	G – HUD VL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	10
Purpose of Project	Support CLCPA, Resource Adequacy/ Reliability, Actively benefits DACs
Estimated completion date	Updated: Q4 2027

Entity Undertaking the Project/Partnership Agreements	Oriden

Project Name:	**Project H2**
Project Type	Battery Energy Storage System
Project Ownership	Co-development
Anticipated Location	Galen, Wayne County
NYISO Load Zone	C – CENTRL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	50
Purpose of Project	Support CLCPA, Resource Adequacy/ Reliability, Actively benefits DACs
Estimated completion date	Q2 2028
Entity Undertaking the Project/Partnership Agreements	Oriden

Project Name:	**Project H3**
Project Type	Battery Energy Storage System
Project Ownership	Co-development
Anticipated Location	Canajoharie, Montgomery County
NYISO Load Zone	F - CAPITL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	50
Purpose of Project	Support CLCPA Resource Adequacy/Reliability
Estimated completion date	Q2 2028
Entity Undertaking the Project/Partnership Agreements	Oriden

Project Name:	**Project H4**
Project Type	Battery Energy Storage System
Project Ownership	Co-development

Anticipated Location	Clinton, Clinton County
NYISO Load Zone	D - NORTH
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	50
Purpose of Project	Support CLCPA, Resource Adequacy/Reliability
Estimated completion date	Q2 2028
Entity Undertaking the Project/Partnership Agreements	Oriden

Project Name:	**Project J1**
Project Type	Solar (DER)
Project Ownership	Co-development
Anticipated Location	New Baltimore, Greene County
NYISO Load Zone	G - HUD VL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	5
Purpose of Project	Support CLCPA
Estimated completion date	Q2 2025
Entity Undertaking the Project/Partnership Agreements	Teichos Energy

Project Name:	**Project K1**
Project Type	Solar (DER)
Project Ownership	Co-development
Anticipated Location	Briarcliff Manor, Westchester County
NYISO Load Zone	G - HUD VL
Interconnection Status	Secured
Potential Generating Capacity (MWac)	10
Purpose of Project	Support CLCPA
Estimated completion date	Q3 2026

Entity Undertaking the Project/Partnership Agreements	YSG Solar

Project Name:	**Project K3**
Project Type	Battery Energy Storage System
Project Ownership	Co-development
Anticipated Location	Brookhaven, Suffolk County
NYISO Load Zone	K - LONGIL
Interconnection Status	In Progress (2024 Cluster Study)
Potential Generating Capacity (MWac)	140.00
Purpose of Project	Support CLCPA Resource Adequacy/Reliability
Estimated completion date	Q1 2027
Entity Undertaking the Project/Partnership Agreements	YSG Solar

Project Name:	**Project K4**
Project Type	Battery Energy Storage System
Project Ownership	Co-development
Anticipated Location	Brookhaven, Suffolk County
NYISO Load Zone	K - LONGIL
Interconnection Status	In Progress
Potential Generating Capacity (MWac)	4.00
Purpose of Project	Support CLCPA Resource Adequacy/Reliability
Estimated completion date	Q3 2026
Entity Undertaking the Project/Partnership Agreements	YSG Solar

6 Appendices

6.1 Appendix A- Summary of NYPA's Expanded Authority

A. Authorizing Provisions

The enactment authorizes NYPA to, among other things, plan, design, develop, finance, construct, own, operate, maintain and improve, either alone, or jointly with other entities through the use of public-private agreements, renewable energy generating projects to:

(1) support the State's renewable energy goals established in the CLCPA;

(2) provide or maintain an adequate and reliable supply of electric power and energy in the State, including but not limited to, high need areas and communities served by small natural gas power plants as defined in this section; and

(3) support the newly-authorized REACH Program for the purpose of providing bill credits to low-income and moderate-income ratepayers in Disadvantaged Communities.

The enactment defines "renewable energy generating projects" as: "(A) facilities that generate power and energy by means of a renewable energy system; (B) facilities that store and discharge power and energy; and (C) facilities, including generator lead lines, for interconnection of renewable energy generating projects to delivery points within the State of New York."[1] The category "renewable energy system" includes: "systems that generate electricity or thermal energy through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity."[2]

NYPA may advance renewable energy generating projects either alone or through public private partnerships, provided that NYPA maintains a majority ownership of such project.[3] NYPA may also create one or more subsidiaries to perform all or part of its powers and functions to advance renewable energy generation projects under PAL § 1005 (27-a) or to implement the Renewable Energy Access and Community Help Program ("REACH") under PAL § 1005 (27-b).

To finance projects, NYPA may use (1) the proceeds of notes issued pursuant to PAL § 1009-a, (2) the proceeds of bonds issued under PAL § 1010, (3) other funds made available by NYPA, or (4) other funds made available to NYPA from non-NYPA sources, such as the State or Federal Government.[4] NYPA may sell the outputs of renewable energy generating projects identified in its Strategic Plan, including (1) RECs to NYSERDA, (2) renewable power and energy or ancillary services to, or into, markets operated by NYISO, and (3) renewable power and energy and RECs or attributes to (A) New York State load serving entities, including the Long Island Power Authority, (B) manufacturers of green hydrogen or other zero-emission technology, (C) public entities, such as state agencies and municipalities, (D) community distributed generation providers, energy aggregators, and similar entities, and (e) Community Choice Aggregation communities.[5]

[1] PAL § 1005(27-a)(i)(iv)

[2] PAL § 1005(27-a)(i)(vii) and PSL § 66-p(1)(b).
[3] PAL § 1005 27-a)(a)(i).
[4] PAL § 1005(27-a)(g).
[5] PAL § 1005(27-a)(h). The annual report must be posted on the NYPA website.

B. Strategic Planning Requirements

To implement its expanded authority, NYPA must, beginning in 2025, and biennially thereafter until 2033, develop and publish a renewable energy generation strategic plan that identifies, among other things, the State's progress towards achieving the CLCPA's renewable energy goals and renewable energy generating priorities for the two-year period covered by the strategic plan.

The enactment states that:

(ii) In developing, and updating, the strategic plan, the authority shall consider:

(A) information developed pursuant to paragraph (d) of this subdivision;

(B) high need areas where transmission and distribution upgrades will be necessary to interconnect new renewable energy generation projects;

(C) the feasibility of projects, based on costs, potential benefits, and other relevant considerations;

(D) the fiscal condition of the authority and the impacts of potential renewable energy generating projects on the authority and its subsidiaries;

(E) ways to minimize any negative tax revenue impacts on municipalities that host renewable energy generating projects, including but not limited to, PILOT and/or community benefit agreements;

(F) the timing, characteristics and size of the renewable energy generating projects in the interconnection queue of the federally designated electric bulk system operator for New York state;

(G) in consultation with the federally designated electric bulk system operator for New York state, the power, energy and ancillary services provided by planned renewable energy generating projects, taking into account the historical completion rate of similar projects; and

(H) opportunities to work in partnership with private sector renewable energy developers to accelerate activity, catalyze greater scale, and spur additional market participation.

(iii) The strategic plan shall address the purposes stated in paragraph (a) of this subdivision, and prioritize projects that:

(A) actively benefit disadvantaged communities;

(B) serve publicly-owned facilities; and

(C) support the renewable energy access and community help program established pursuant to subdivision twenty-seven-b of this section.

(iv) The strategic plan shall assess and identify at a minimum:

(A) renewable energy generating high need and priority areas;

(B) priority locations for the development of renewable energy generating projects;

(C) the types and capacity of renewable energy resources to be utilized;

(D) the estimated cost of renewable energy generating projects to the extent known;

(E) a description of any delays or anticipated delays associated with completion of the renewable energy generating projects;

(F) which of the intended purposes in paragraph (a) of this subdivision each renewable energy generating project is intended to support;

(G) any prioritization given to the order of development of renewable energy generating projects;

(H) the benefits associated with the renewable energy generating projects, including any benefits to disadvantaged communities;

(I) any benefits to rate payers;

(J) the state's progress towards achieving the renewable energy goals of the climate leadership and community protection act; and

(K) any other information the authority determines to be appropriate.

(v) The plan shall include a list of proposed renewable energy generating projects. Such list shall include projects that are planned to be commenced prior to the next update or version of the plan, and at the authority's discretion need not include any projects in the planning stage. Each proposed project listed shall include, without limitation:

(A) location of the project, to the extent that property associated with such location has been secured for the proposed project;

(B) the type, or types, of renewable energy resources utilized;

(C) the potential generating capacity of each project;

(D) the estimated project cost;

(E) the timeline for completion; and

(F) the entity undertaking the proposed project and any public partnership agreements the authority or its subsidiaries enter into for such project.[1]

[1] PAL § 1005(27-a)(e)(ii)-(v).

C. Strategic Plan Public Comments and Hearings

The Power Authority conducts public comment and public hearings on its draft NYPA Renewables Strategic Plan as follows:

The authority shall post a draft of the strategic plan on its website for public comment for a period of at least sixty days, and shall hold at least three public hearings on the draft strategic plan in regionally diverse parts of the state.[15]

NYPA, “after considering the stakeholder input” will “publish the first final strategic plan on its website no later than January thirty-first, two thousand twenty-five.”[16]

The Power Authority updates its NYPA Renewables Strategic Plan at least annually, as follows:

The authority, until two thousand thirty-five, shall update each biennial strategic plan annually, after a public comment period of at least thirty days and at least one public hearing. Such updated strategic plan shall include a review of the implementation of the projects previously included in the strategic plan with necessary updates, including status in the interconnection queue. The authority may update the plan more often than annually provided that it follows the public comment and public hearing process for updated plans prescribed by this paragraph.[17]

Following publication of this document, NYPA’s Board of Trustees will approve all renewable energy generating projects the authority plans to undertake.[18]

[15] PAL § 1005(27-a)(e)(vii).
[16] PAL § 1005(27-a)(e)(viii).
[17] PAL § 1005(27-a)(e)(ix).
[18] PAL § 1005(27-a)(q).

D. Conferral Process Requirements

To help inform NYPA's development of its biennial strategic plans, NYPA confers annually with stakeholders to solicit their views on New York State's progress on meeting the renewable energy goals of the CLCPA.[19] The enactment sets forth the manner in which NYPA consults stakeholders, stating:

In developing the strategic plan, the authority shall consult with stakeholders including, without limitation, climate and resiliency experts, labor organizations, environmental justice communities, disadvantaged community members, residential and small business ratepayer advocates, and community organizations. The authority shall also seek, where possible, community input through the regional clean energy hubs program administered by the energy research and development authority.[20]

During the conferral process, NYPA also considers the timing of projects in the interconnection queue administered by the New York Independent System Operator (NYISO), the capacity factors of such projects, and the historical completion rate of such projects in the NYISO interconnection queue.[21] Finally, NYPA publishes a report on the information developed through this conferral process on NYPA's website.

E. Reporting Requirements

NYPA will report on or before Jan. 31, 2025, and annually thereafter, to the governor, the speaker of the Assembly, and the temporary president of the Senate on the following:[22]

(i) a description of the renewable energy projects the authority has planned, designed, developed, financed, or constructed and that it owns, operates, maintains or improves, alone or jointly with other entities, under the authority of this subdivision;

(ii) a description of the acquisition, lease or other disposition of interests in renewable energy generating projects by the authority under this subdivision;

(iii) a listing of all renewable power, energy, ancillary services and related credits and attributes sold or purchased by the authority from such projects;

(iv) a listing of the entities to which the authority has supplied, allocated or sold any renewable power, energy, ancillary services or related credits or attributes from such projects;

(v) a listing and description of all subsidiaries that the authority formed, public-private partnerships the authority has joined, and the subsidiaries and public-private partnerships from and to which the authority acquired or transferred any interests;

(vi) the total amount of revenues generated from the sale of renewable energy products from such projects; and

(vii) an explanation of how each renewable energy generation project supports the purposes listed in paragraph (a) of this subdivision.[23]

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[19] PAL § 1005(27-a)(d).

[20] PAL § 1005(27-a)(e)(vi). PAL § 1005(27-a)(e)(x) provides that the "strategic plan and any update thereof shall not be deemed final until it is approved by the authority's trustees."

[21] Id.

[22] PAL § 1005(27-a)(j).

[23] Id.

F. Labor Law, Domestic Content and Environmental Requirements

The renewable energy generating projects developed pursuant to the enactment will be considered public work and will be subject to the labor standards and requirements, including the prevailing wage rates, as prescribed by articles eight and nine of the New York State Labor Law.[24]

NYPA will require each contract for a renewable energy generating project to contain a provision that such project may only be undertaken pursuant to a project labor agreement.[25] NYPA will require all contractors and subcontractors associated with the project work to utilize apprenticeship agreements pursuant to article twenty-three of the labor law.[26]

NYPA will follow the additional labor law protections and collective bargaining rights in the enactment.[27] Any person entering into a contract for a project authorized pursuant to this enactment will be considered a state agency and such contracts will be considered state contracts.[28]

NYPA will also require that any procurement or development of a renewable energy generating project will involve the components and parts to be produced or made in whole or substantial part in the United States, its territories or possessions.[29] NYPA's president and chief executive officer may waive this requirement under certain circumstances after providing notice and an opportunity for public comment.[30]

For the operation and maintenance of the renewable energy projects developed pursuant to the enactment, NYPA will enter into a memorandum of understanding with a bona fide labor organization that is actively engaged in representing transitioning employees from non-renewable generation facilities. The employees eligible for these positions will first be selected from a pool of transitioning workers who have lost their employment or will be losing their employment in the non-renewable energy generation sector.[31]

From an environmental perspective, NYPA will comply with generation siting requirements, provide host community benefits and contribute to the endangered and threatened species mitigation bank fund.[32] The Power Authority will also protect agricultural land, minimize harm to wildlife, ecosystems, public health and public safety, and not build on Native American land except on a voluntary basis.[33]

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[24] PAL § 1005 (27-a)(k)

[25] Id.

[26] Id.

[27] PAL § 1005(27-a)(m) These include civil service, collective bargaining, loss or displacement of positions, collective bargaining agreements, and transfers of existing and future duties and functions.

[28] PAL § 1005 (27-a)(0)

[29] PAL § 1005 (27-a)(l)

[30] Id.

[31] PAL § 1005 (27-a)(n). A list of potential employees will be provided by affected labor organizations and provided to the department of labor. The department of labor will update and provide such a list to NYPA ninety days prior to purchase, acquisition, and/or construction of a renewable energy project.

[32] PAL § 1005(27-a)(p).

[33] PAL § 1005(27-a)(b).

6.2 Appendix B- Climate Act Progress

A. CLIMATE ACT PROGRESS

The CLCPA requires the PSC to issue a comprehensive review of the Clean Energy Standard ("CES") no later than July 1, 2024, and to do so every two years thereafter ("CES Biennial Review"). On July 1, 2024, staff from the New York State Department of Public Service ("DPS") and the New York State Energy Research and Development Authority ("NYSERDA") filed a draft version of the inaugural CES Biennial Review for consideration by the PSC.[1] The analyses of New York's Climate Act progress in the 2024 Conferral Report and this Strategic Plan were developed using information from the draft CES Biennial Review and recent procurement information.

The draft CES Biennial Review provides both retrospective and prospective views of the State's progress towards achieving the renewable energy goals of the CLCPA. The first four sections cover progress to date, addressing the policy and regulatory background of the CES and its antecedent program, the Renewable Portfolio Standard, operational renewable energy systems that have come online prior to January 1, 2023, contracted renewables, and factors affecting progress, including inflation, interest rates, transmission congestion, interconnection delays, capacity accreditation, federal incentives, siting reforms, and the potential for growth in Statewide electric load. The final two sections set forth a prospective view on various pathways to meeting the 70% Renewable Energy Goal (discussed below) and options to reform the CES program.

B. THE 70% RENEWABLE ENERGY GOAL

To accomplish the 70% Renewable Energy Goal, the PSC relies primarily upon the CES, originally established in August of 2016.[2] The CES is administered by NYSERDA, with oversight from the PSC and DPS.

At the heart of the CES is NYSERDA's procurement of renewable and zero-emission energy attributes from generators injecting renewable or zero-emission energy into the New York State Control Area. These attributes, referred to as renewable energy certificates ("RECs") and zero-emission credits ("ZECs"), are purchased by NYSERDA as a centralized procurement agent before they are then sold to the State's voluntary market (in the case of Tier 1) and jurisdictional load serving entities in proportion to their share of the Statewide load.[3] Although the purchase of ZECs advances the 100% Zero Emissions Goal by providing support for nuclear generation, it does not contribute to the renewable energy goals of the CLCPA. In addition to the CES, the NY-Sun program (discussed below) provides incentives for distributed energy resources that also contribute significantly towards both the 10 GW Distributed Solar Goal and the 70% Renewable Energy Goal.

In the 2023 Conferral Report, NYPA reported that New York had enough operating, contracted, and under-development renewable projects to supply 79% of the State's 2030 electricity needs but that recent inflationary pressures may result in some projects failing to deliver on their contractual obligations.[4] On October 12, 2023, the PSC denied petitions requesting additional financial relief to offshore and onshore renewable energy generation projects that were previously awarded contracts by NYSERDA in order to preserve the State's competitive bidding process to procure renewable energy resources in the fairest and most cost-effective manner.[5] Shortly thereafter, Governor Hochul announced the release of a 10-Point Action Plan ("Action Plan") to expand and support the growing large-scale renewable energy industry in New York,

reaffirming the State's commitment to achieving the Climate Act goals.[6] Included within the Action Plan was a directive to NYSERDA to launch accelerated procurements to help backfill any renewable energy project contracts that are terminated. Ultimately, renewable energy developers terminated contracts for 88 projects.[7]

In accordance with the Action Plan, NYSERDA launched an accelerated procurement process for both Tier 1 and offshore wind resources on November 30, 2023.[8] After conducting an expedited procurement process, on February 29, 2024, NYSERDA announced the results of the expedited offshore wind procurement, awarding contracts totaling 1.7 GW of planned generation capacity anticipated to reach commercial operation by 2027.[9] Then, on April 29, 2024, NYSERDA announced 24 provisional Tier 1 awards to wind and solar projects totaling nearly 2.4 GW of renewable energy capacity.[10] On June 20, 2024, NYSERDA launched the 2024 Tier 1 solicitation, seeking additional renewable energy projects on an expedited basis.[11] In addition, on July 17, 2024, NYSERDA launched its fifth offshore wind solicitation.[12]

Statewide electric load is also a key factor in achieving the 70% Renewable Energy Goal. The draft CES Biennial Review load forecast includes a significantly higher estimate of load, relative to the 2020 CES Order,[13] reflecting anticipated load growth that was not previously foreseen, from 151,678 GWh as estimated in 2020, to 164,910 GWh as estimated in July of 2024.[14] Factors contributing to this forecasted load growth are (1) new large loads from manufacturing, datacenters, and cryptocurrency mining facilities, (2) increased electrification of buildings, and (3) increased electric vehicle usage.[15]

As reported in the 2024 Conferral Report, issued on October 8, 2024, NYSERDA and DPS estimated that New York has enough operating and contracted projects to supply 73,292 GWh of renewable energy by 2030, out of an estimated 2030 statewide load of 164,910 GWh.[16] Subsequently, on December 3, 2024, NYSERDA announced that 23 contracts were executed as a result of its 2023 Tier 1 solicitation, for projects totaling more than 2.3 GW of nameplate capacity. The pipeline also experienced attrition of future projected renewable energy since that time, due to the mutual termination of the Tier 4 Agreement previously entered into by NYSERDA and Clean Path New York.

NYSERDA has ongoing solicitations for both land-based renewables and offshore wind. On the land-based side, NYSERDA's eighth annual solicitation under the Clean Energy Standard, RESRFP24-1, was issued on June 20, 2024. The RESRFP24-1 solicitation garnered competitive interest; NYSERDA received Bid Proposals from 38 projects, comprising 3.5 gigawatts (GW) of capacity and 6.5 terawatt hours (TWh) of generation. The evaluation of Bid Proposals concluded in October 2024 and NYSERDA will publicly disclose the results of the RESRFP24-1 solicitation following completion of contracting.

NYSERDA's fifth competitive offshore wind solicitation, ORECRFP24-1, was launched on July 17, 2024. Subsequently on September 9, 2024, NYSERDA received 25 proposals in response to ORECRFP24-1 from four offshore wind developers representing 6,870 MW in total offer capacity. On October 18, 2024, NYSERDA received Offer Pricing for 21 proposals, with one proposer withdrawing its 4 proposals. NYSERDA will publicly disclose the results of the ORECRFP24-1 solicitation upon the completion of contracting.

Going forward, additional contracted projects from CES solicitations will continue to add to the renewable energy supply each year as indicated in the draft CES Biennial Review.[17]

As of January 28, 2025, it is estimated that New York has enough operating and contracted/pipeline projects to supply approximately 80,000 GWh of renewable energy by 2030, out of an estimated 2030 statewide load of 164,910 GWh. As previously mentioned, this total will continue to grow as ongoing and future procurements result in additional projects with up-to-date totals shown on the Climate Act Dashboard. The State continues to progress towards the 70% Renewable Energy Goal, with recent estimates from NYSERDA and DPS laying out various scenarios and pathways to reaching that goal, one of which illustrates a potential path to achieving the goal by 2033 assuming a base load forecast scenario that projects significantly higher load growth than was anticipated in the 2020 CES Modification Order to implement the CLCPA.[18]

C. EXPANSION TO THE 10 GW DISTRIBUTED SOLAR GOAL

To accomplish both the 6 GW Distributed Solar Goal and the expanded 10 GW Distributed Solar Goal, New York State relies primarily upon the NY-Sun solar incentive program,[19] coupled with the Value of Distributed Energy Resources ("VDER") compensation mechanism.[20] In addition, NYSERDA estimates that there are significant contributions from projects outside of the NY-Sun portfolio, some originating in the service territory of the Long Island Power Authority ("LIPA").[21] Together, these programs have achieved the 6 GW Distributed Solar Goal. As of October 31, 2024, New York State had 6,184 MWDC of installed solar photovoltaic generating capacity.[22]

With achievement of the 6 GW Distributed Solar Goal, the discussion turns to the expanded 10 GW Distributed Solar Goal. In the 10 GW Order, the PSC noted that the 10 GW Distributed Solar Goal is likely to be met within the existing budget. Accordingly, the PSC required NYSERDA to submit a plan on how best to utilize the excess funds to achieve the development of additional distributed solar projects while leveraging federal incentives and maximizing benefits to low-income customers. In recent compliance filings, NYSERDA, as the NY-Sun program administrator, was confident that not only can the 10 GW Distributed Solar Goal be met, but potentially exceeded.[23] According to recent filings, and the most recent NY-Sun Operating Plan, the NY-Sun Program has enough available funding to meet its goal of 8,363 MW, with projects funded outside of NY-Sun making up the remaining 1,637 MW.[24] As of July 31, 2024, there are 3,412 MWDC of solar projects at an advanced stage of development that are slated to receive NYSERDA incentive awards.

D. THE 6 GW ENERGY STORAGE GOAL

On January 5, 2022, Governor Kathy Hochul announced in her State of the State address an intention to double the State's 2030 energy storage deployment target from the legislated 3 GW to 6 GW of storage capacity by 2030. At its June 2024 Session, the PSC approved an order expanding New York's energy storage target to 6 GW by 2030 with an interim goal of 1.5 GW by 2025 (the "Storage Order").[25] The Storage Order approved the Energy Storage Roadmap entitled "New York's 6 GW Energy Storage Roadmap" as filed by NYSERDA and DPS in December 2022 and updated in March 2024 to account for inflation-related cost increases.[26] The Energy Storage Roadmap included a tally of contracted and awarded energy storage projects totaling 1.3 GW.[27]

To achieve the 6 GW Energy Storage Goal, the PSC directed NYSERDA to procure an additional 4.7 GW of storage consisting of 3 GW of bulk storage (resources above 5 MW), 1.5 GW of retail/community storage (resources up to 5 MW), and 200 MW of residential/behind-the-meter storage to be in service by December 31, 2030.[28] For the bulk storage program, the Storage Order directed NYSERDA to conduct at least three solicitations of one GW each to

achieve these targets, and to issue the first RFP no later than June 30, 2025.[29] The Storage Order included some specific procurement requirements, including a requirement that 35% of projects be in NYISO Zones G-K, with at least 30% in Zone J, to maximize benefits to disadvantaged communities, and that 20% of bulk storage awards go to long duration (greater than 8 hours) storage projects.[30] In the Storage Order the PSC noted that "[c]ertain regions, such as Long Island and New York City, are especially ripe for the replacement of peaker plants with energy storage resources and the associated emission reduction directly benefiting those communities."[31]

E. THE 9 GW OFFSHORE WIND GOAL

The draft CES Biennial Review summarizes the challenges faced by the offshore wind industry as follows:

> The offshore wind industry has experienced interest rate, inflation, and supply chain vulnerabilities and constraints. Due to the magnitude of offshore wind projects and the upfront capital required to finance such projects, changes to the costs of capital and the costs of inputs can significantly impact financing models across the industry. Similarly unique to offshore wind projects is the need for suitable ports, installation vessels, and equipment such as turbines, substructures, cables, and electrical components. This includes the offshore wind projects requiring high-voltage direct current (HVDC) transmission equipment, which is in limited supply and shortages of which may impact timelines for projects. Due to the magnitude and complexity of each project, delays in one project can result in a cascading delay to other projects, or even a loss of access to one or more of these resources necessary for construction, which can further extend delays.[32]

As of the date of the 2023 Conferral Report, NYSERDA had awarded contracts to 8,392 MW of offshore wind generation capacity. Since that time, the economic headwinds discussed above led to the attrition of these awarded offshore wind contracts, allowing the offshore wind developers to bid into additional NYSERDA solicitations.

As mentioned above, on November 30, 2023, NYSERDA launched its fourth offshore wind solicitation.[33] On February 29, 2024, NYSERDA announced the results of this fourth offshore wind procurement, awarding contracts totaling 1.7 GW of planned generation capacity.[34] In addition, as noted above, on July 17, 2024, NYSERDA launched a fifth offshore wind solicitation with public award notifications expected in the first half of 2025.[35]

In June 2023, the PSC declared a Public Policy Transmission Need (PPTN) to support the integration of an additional 4,770 megawatts of offshore wind into New York City. On December 18, 2025, NYSERDA launched a Request for Information (RFI) seeking feedback to better understand how NYSERDA should design the next OREC solicitation (NY6) to maximize the value of the PPTN. Feedback to the RFI was due on January 18, 2025. These recent developments will help New York progress towards achievement of the 9 GW Offshore Wind Goal.

[1] Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Draft Cean Energy Standard Biennial Review (filed July 1, 2024).

[2] Case 15-E-0302, et al., Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (Issued August 1, 2016).

[3] See Case 15-E-0302, et al., Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Modifying Clean Energy Standard Tier 1 Obligations (Issued April 20, 2023).

[4] See Conferral Report Prepared by the Power Authority of the State of New York Pursuant to Public Authorities Law § 1005(27-a)(d) for Conferral Year 2023, pages 5-7 (Published November 2023).

[5] Case 15-E-0302, et al., Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Denying Petitions Seeking to Amend Contracts with Renewable Energy Projects (October 12, 2023).

[6] New York State's 10-Point Action Plan to Expand a Thriving Large-Scale Renewable Industry, NYSERDA, October 2023. https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/Offshore-Wind/10-point-plan.pdf.

[7] Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Draft Clean Energy Standard Biennial Review, page 47 (filed July 1, 2024).

[8] See RESRFP23-1, available at https://www.nyserda.ny.gov/All-Programs/Large-Scale-Renewables/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts/2023-Solicitation-Resources. See also ORECRFP23-1, available at https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Offshore-Wind-Solicitations/2023-Solicitation.

[9] Two Offshore Wind Project Awards Announced, To Deliver Clean Power In 2026, Available at: https://www.nyserda.ny.gov/About/Newsroom/2024-Announcements/2024_02_29-Governor-Hochul-Announces-Two-Offshore-Wind-Project_Awards.

[10] See RESRFP23-1 Landing Page, available at: https://www.nyserda.ny.gov/All-Programs/Large-Scale-Renewables/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts/2023-Solicitation-Resources.

[11] See RESRFP24-1, available at https://www.nyserda.ny.gov/All-Programs/Large-Scale-Renewables/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts.

[12] See ORECRFP24-1, available at: https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Offshore-Wind-Solicitations/2024-Solicitation.

[13] Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting Modifications to the Clean Energy Standard (Issued October 15, 2020).

[14] Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Draft Clean Energy Standard Biennial Review, page 53 (filed July 1, 2024).

[15] Id.

[16] Id. at 56.

[17] Id. at 58.

[18] Id. at 58.

[19] Case 03-E-0188, Retail Renewable Portfolio Standard, Order Authorizing Funding and Implementation of the Solar Photovoltaic MW Block Programs (Issued April 24, 2014).

[20] Case 15-E-0751, et al., In the Matter of the Value of Distributed Energy Resources, Order on New Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (Issued March 9, 2017).

[21] Case 21-E-0629, In the Matter of the Advancement of Distributed Solar, Report: Impacts of the Inflation Reduction Act and the Incremental Distributed Solar Capacity that Could be Procured Within the Currently Authorized Budget, footnote 28 (filed January 5, 2024).

[22] Statewide Distributed Solar Projects, available at https://www.nyserda.ny.gov/All-Programs/NY-Sun/Solar-Data-Maps/Statewide-Distributed-Solar-Projects.

[23] Case 21-E-0629, In the Matter of the Advancement of Distributed Solar, Report: Impacts of the Inflation Reduction Act and the Incremental Distributed Solar Capacity that Could be Procured Within the Currently Authorized Budget (filed January 5, 2024).

[24] Id. See also, Case 21-E-0629, In the Matter of the Advancement of Distributed Solar, NY-Sun 2020-2030 Operating Plan, page 9, footnote 16 (Effective July 31, 2023).

[25] Case 18-E-0130, In the Matter of Energy Storage Deployment Program, Order Establishing Updated Storage Goal and Deployment Policy, at 3 (June 20, 2024).

[26] In the Storage Order the PSC also provided its triennial review of the state of storage program implementation (pages 10-24) and acknowledged NYPA's 20 MW storage project in Chateaugay (page 18).

[27] Id. at 6.

[28] Id. at 41, 47, 60.

[29] Id. at 33.

[30] Id. at 58-59.

[31] Id. at 34.

[32] Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Draft Clean Energy Standard Biennial Review, pages 14-15 (filed July 1, 2024).

[33] See ORECRFP23-1, available at https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Offshore-Wind-Solicitations/2023-Solicitation.

[34] Two Offshore Wind Project Awards Announced, To Deliver Clean Power In 2026, Available at: https://www.nyserda.ny.gov/About/Newsroom/2024-Announcements/2024_02_29-Governor-Hochul-Announces-Two-Offshore-Wind-Project_Awards.

[35] See ORECRFP24-1, available at: https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Offshore-Wind-Solicitations/2024-Solicitation.

6.3 Appendix C- NYISO Generator Interconnection

A. INTRODUCTION

In developing its Strategic Plan, NYPA considers "the timing, characteristics and size of the renewable energy generating projects in the interconnection queue of the federally designated electric bulk system operator for New York state."[1] In addition, the Strategic Plan will reflect information developed during the conferral process, which includes "consideration of the timing of projects in the interconnection queue of the federally designated electric bulk system operator for New York state, taking into account both capacity factors or planned projects and the interconnection queue's historical completion rate."[2]

In the 2023 and 2024 conferral processes, NYPA engaged with the New York Independent System Operator ("NYISO") to accurately characterize projects in the NYISO generator interconnection queue and how the interconnection process relates to the State's progress on meeting the renewable energy goals established by the Climate Act. NYPA also discussed with the NYISO the timing of projects in the NYISO's interconnection queue, considering both capacity factors of planned projects and the interconnection queue's historical completion rate. Further, NYPA analyzed numerous public documents to gather additional information about these matters, including the current and ongoing queue reform process.

B. BACKGROUND

The NYISO, operating under the oversight of the Federal Energy Regulatory Commission ("FERC"), administers interconnection of new generation to ensure that electric system resources (*e.g.*, generation, storage) are supported by the infrastructure necessary to transmit the generated and stored electricity and support reliable operation of the State's electric grid. The process aims to interconnect resources in a manner that meets minimum interconnection standards that are established by reliability standards organizations and at the least cost.[3]

The NYISO's interconnection processes are regulated by FERC and are set forth in tariffs that are approved by FERC.[4] Generators that seek to interconnect to the transmission system in New York State and to make wholesale sales of electricity must receive approval and an interconnection agreement signed by the NYISO and the connecting transmission owner. Generators sized up to and including 5 MW, and that do not involve federal-jurisdictional transmission or wholesale electricity sales, interconnect to the power system under PSC procedures, which are not part of the NYISO's interconnection queue.

C. NYISO'S INTERCONNECTION PROCESS THROUGH CLASS YEAR 2023

Proposed generation projects have been processed by the NYISO according to a first-come, first-served process. Developers who submit a complete application to the NYISO have their generation projects placed in an interconnection queue. Prior to the recent reforms discussed below, the NYISO interconnection process utilized a series of increasingly specific studies: (1) Feasibility Studies, (2) System Impact Studies or System Reliability Impact Studies, and (3) Facilities Studies, which analyze projects together in a Class Year study for a group of projects. The study processes required the cooperation of the project developers, the NYISO, the connecting transmission owner, affected transmission owners, affected system operators outside New York, and other stakeholders. At the conclusion of the studies, developers knew their interconnection facilities and costs. If they chose to proceed, developers posted collateral

to cover their interconnection costs, and signed an interconnection agreement with the NYISO and the Connecting Transmission Owner.[5]

D. HISTORICAL COMPLETION RATE OF THE NYISO INTERCONNECTION QUEUE

The surge in proposed renewable resource and transmission projects together has created a significant backlog in the interconnection of renewable generation projects to the New York transmission system. In 2018, the NYISO interconnection queue contained approximately 120 projects. As of May 2024, over 500 projects were in the NYISO interconnection queue.[6] Based on 2022 data, the median time to complete the NYISO interconnection study process and execute an interconnection agreement was three to four years.[7] Processing time in the interconnection process has varied among projects and has been affected by a number of factors.

Some delays are caused by generation developers. These include:

- Insufficient data: Developers may fail to provide the NYISO necessary data to study proposed projects or may fail to provide required updates to their interconnection requests and supporting data.
- Timing of election: Developers had the flexibility to make certain elections under the NYISO process through Class Year 2023, which could have extended the timeline for the study process depending upon the developers' elections. For example, developers could choose to wait in the queue for months or years before they enter the final required interconnection study.
- Project modifications: Under the NYISO process through Class Year 2023, developers could propose modifications to their projects during the interconnection study process. Such modifications typically created delays, sometimes significant, in the interconnection study process.

Generation interconnection delay is a national phenomenon and is not unique to New York. In its interconnection reform order, Order No. 2023, the FERC found that:

- As of the end of 2022, there were over 10,000 active interconnection requests in interconnection queues throughout the United States, representing over 2,000 GW of potential generation and storage capacity. This potential generation is the largest interconnection queue size on record, more than four times the total volume (in GW) of the interconnection queues in 2010, and a 40% increase over the interconnection queue size from just the year prior. These trends are not exclusive to any one region of the country. Instead, every single region has faced an increase in both interconnection queue size and the length of time interconnection customers are spending in the interconnection queue prior to commercial operation in recent years. Interconnection customers are waiting longer in the interconnection queues nationwide.[8]

The Class Year 2019 group of projects seeking to connect to New York's electric grid contained over 8,000 MW of nameplate capacity, which included 38 solar projects totaling 1,738 MW, 12 wind projects totaling 3,108 MW, and 26 energy storage projects totaling 1,069 MW.[9] The Class Year 2021 group included over 50 proposed projects, consisting of over 7,000 MWs of renewable energy generating projects, including two offshore wind projects.

In Class Year 2023, the NYISO is studying a group of 70 proposed projects, consisting of over 14,000 MWs of renewable energy. The projects under review consists predominately of wind and solar, which will have capacity factors determined by the number of hours a generator is expected to produce energy over a year compared to its nameplate capability. In September 2024, the NYISO issued the Class Year 2023 Facilities Study System Upgrade Facilities (SUF) and System Deliverability Upgrade (SDU) Report, which identified and allocated costs to reliably interconnect these projects. On Sept. 26, 2024, the report was approved by the NYISO's Operating Committee (OC). On December 9, 2024, the NYISO presented the results of the additional SDUs Study including a description of the system upgrades and associated costs for developers to consider. Developers can withdraw from the study process or decide whether to move forward with their projects after the interconnection studies are completed. The NYISO anticipates completion of this iterative process and additional system deliverability upgrade cost settlements by February 2025.

E. NYISO INTERCONNECTION PROCESS REFORMS PRIOR TO FERC ORDER 2023

Prior to FERC Order No. 2023, the NYISO made some changes to speed up interconnection reviews. These include eliminating certain duplicative study requirements, allowing some projects needing additional study to do so outside the class year process so as not to slow down review of other projects, and lowering milestone permitting requirements that must be completed to proceed through the process.

To address the significant surge in proposed interconnections as part of the historic transition that is underway on the electric grid, the NYISO initiated a comprehensive interconnection queue reform initiative with its stakeholders in late 2022.[10]

F. FERC'S 2023 INTERCONNECTION REFORM ORDER

On July 28, 2023, FERC issued a landmark order on reforming the generator interconnection process nationwide. The order included changes to weed out projects that are not viable and that otherwise delayed the interconnection process. Entitled "Improvements to Generator Interconnection Procedures and Agreements" ("Order No. 2023"), FERC described its reforms as primarily falling into three categories:

(1) creating a first-ready, first-served cluster study process;

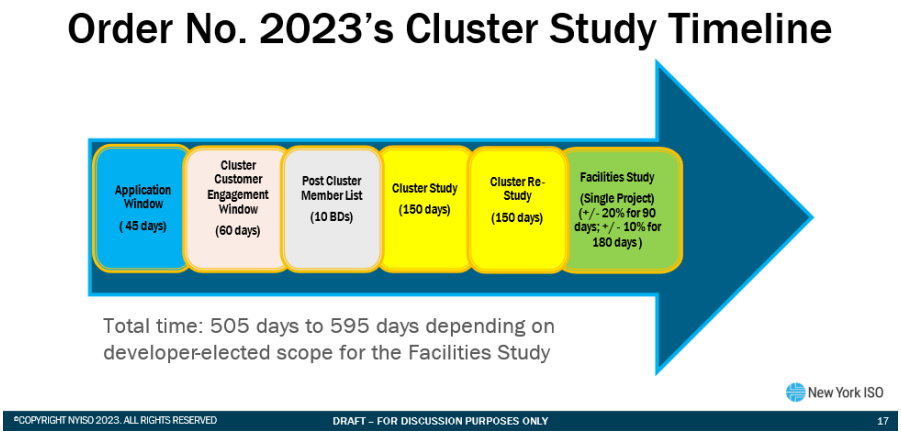
(2) increasing the speed of the interconnection processes of transmission providers for new transmission and generation projects; and

(3) incorporating advanced technologies, such as energy storage and transmission devices, into the interconnection process.[11]

On May 1, 2024, the NYISO submitted its Order No. 2023 compliance filing and asked FERC to makes it effective the next day in order to begin implementation right away, in parallel with the completion of its final Class Year Study for 2023 under its prior procedures. The NYISO established a cluster study process that groups projects for a preliminary physical infeasibility screen followed by a two-phased evaluation of the reliability impacts of the projects' interconnections. The first phase assesses the local impacts of proposed interconnections, while the second phase assesses the broader systemwide impacts. Based on the results of the first phase, developers will decide whether to enter the second phase. The cluster study ultimately identifies necessary system upgrade facilities and allocates the costs of those facilities among participating generators.

The NYISO began implementation of procedures to transition to its new interconnection process on May 2, 2024. It commenced a Transitional Cluster Study Process under its new standard interconnection procedures on August 1, 2024. Following implementation of the new process in May, 255 generation projects were withdrawn from the NYISO's interconnection queue under transition rules with the option to join the new Cluster Study Process .[12] As of October 31, 2024, the NYISO received 352 active Transitional Cluster Study Interconnection Requests. As of December 31, 2024, there are 302 active projects in NYISO's Transition Cluster Interconnection Study. The Transition Cluster Interconnection Study is anticipated to be completed for all the participating projects by the end of July 2026.

The NYISO expects the study process to be completed for all projects in the Transitional Cluster Study by the end of July 2026. The next Cluster Study would then commence in September 2026. According to the NYISO, the new interconnection process is expected to be faster, completing in 590 days or about 1.6 years, compared to the previous process that took between three and four years. The timeline below depicts the NYISO's new generation project interconnection Cluster Study Process:



The NYISO's new interconnection process incorporates a myriad of changes in over one thousand pages of new tariff provisions. In summary, the new process seeks to implement the following reforms in Order No. 2023:

- shorten the timeframe for the NYISO's interconnection process in line with the timeframe established in Order No. 2023, by establishing a two-phase Cluster Study Process that incorporates the NYISO's longstanding "first-ready, first-served" clustered Class Year Study into the FERC's new framework and eliminates the stand-alone feasibility and system impact studies;

- establish a pre-application process and a "heatmap," which shows available transmission capability and constraints, to provide interconnection customers with the opportunity to obtain additional information prior to the submission of their interconnection requests;
- screen out projects that are not physically feasible early in the Cluster Study Process to identify physically infeasible interconnections, and permit penalty free withdrawals due to physical infeasibility;

- establish enhanced submission requirements, including more stringent study deposit, technical data and site control requirements, and strict deadlines to cure deficiencies;
- establish several decision periods within the Cluster Study Process with commercial readiness deposits and withdrawal penalties, along with a mechanism for distributing any collected withdrawal penalty funds;
- establish rules to limit project modifications during the Cluster Study Process and provide additional mechanisms for requesting extensions to a project's commercial operation date;
- establish a penalty framework for missed deadlines in the performance of the Cluster Study or an Affected System Study, which would apply to the NYISO take effect in its third Cluster Study Process;
- retain or otherwise incorporate into the Cluster Study Process technology advancement requirements identified in Order No. 2023 related to co-located resources, generator additions, alternative transmission technologies, and modeling and ride-through requirements for non-synchronous generating resources;
- revise operating procedures used to mitigate reliability impacts under the NYISO's Minimum Interconnection Standard so that upgrades are less likely to be required for resources such as energy storage resources;
- address requirements for affected systems located in the New York Control Area and neighboring systems;

  align the treatment of small generating facilities (20 MW or less) with the Cluster Study Process for large generators, incorporating all generation facilities into a single, standardized process;
- establish a transition Cluster Study Process available to all interconnection customers that satisfy the process entry requirements to enable interconnection customers to immediately make use of the new study process without prerequisite studies; and
- provide for additional pro forma forms and agreements to expedite the interconnection process, the negotiation of required agreements, and the construction of required upgrades.[13]

The NYISO summarized its proposed reforms as follows:

These compliance reforms will collectively drive substantial efficiencies and improvements in the NYISO's interconnection process and are directly targeted at enabling the increasing number of projects seeking to interconnect in New York to do so in a reliable, efficient, transparent, and timely manner. In addition to complying with [FERC] directives, the NYISO's proposed reforms will assist New York State in satisfying its ambitious climate goals.[14]

In sum, the NYISO's reforms of its generator interconnection process are expected to lead to fewer delays and faster completion of the generator interconnections in New York. The success of the NYISO's new interconnection process depends on FERC granting its approval and on the outcome of federal court appeals of FERC Order No. 2023. Monitoring the progress of the new process will be important to determining whether the timing of the interconnection queue meets

the expected timeline, and if projects that New York needs to fulfill its climate change targets complete interconnection and enter into service on a timely basis.

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[1] PAL § 1005(27-a)(e)(ii)(F).

[2] PAL § 1005(27-a)(e)(ii)(A) (citing to PAL § 1005(27-a)(d)).

[3] The NYISO's interconnection processes are regulated by FERC and are set forth in tariffs approved by FERC and posted on the NYISO's website: https://www.nyiso.com/regulatory-viewer.

[4] The interconnection provisions were previously housed in the NYISO's Open Access Transmission Tariff ("OATT") Attachments P, S, X and Z. In its Order No. 2023 compliance filing, the NYISO revised and relocated these provisions in a new OATT Attachment HH.

[5] Federal Energy Regulatory Commission, Docket No. RM22-14-000, Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC ¶ 61,054 (July 28, 2023), at ¶¶ 38-39.

[6] NYISO, 2024 Power Trends Report, available at https://www.nyiso.com/documents/20142/2223020/2024-Power-Trends.pdf/31ec9a11-21f2-0b47-677d-f4a498a32978?t=1717677687961.

[7] According to the Lawrence Berkeley National Laboratory, the NYISO was one of four independent system operators with study times over three years. *See* Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection | Electricity Markets and Policy Group (lbl.gov); PowerPoint Presentation (lbl.gov) at slide 27.

[8] Federal Energy Regulatory Commission, Docket No. RM22-14-000, Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC 61,054 (July 28, 2023), at 38-39.

[9] *See* Smith, Zachary G. "A new class year: the changing nature of power generation in New York State, and how NYISO is accommodating it," Power Grid International, February 17, 2020, available at https://www.power-grid.com/solar/a-new-class-year-the-changing-nature-of-power-generation-in-new-york-state-and-how-nyiso-is-accommodating- it/?source=email#gref.

[10] *See* Improvements to Generator Interconnection Procs. & Agreements, Reply Comments of the New York Independent System Operator, Inc., Docket No. RM22-14-000 at 2 (Dec. 14, 2022).

[11] FERC Order No. 2023. FERC affirmed its interconnection reforms in Order No. 2023-A, including its stance on the treatment of network upgrades, allocation of upgrade costs, and the cCuster Study Process, emphasizing a proportional impact method for network upgrades cost allocation, and denying requests to revise or eliminate feasibility studies from the interconnection process. FERC reaffirmed that it will impose penalties for late studies, including on ISOs/RTOs, after initial implementation, starting at $1,000 per study per day and increasing to $2,000 per study per day.

[12] NYISO Interconnection Queue, July 9, 2024, at line 284.

[13] NYISO's new standard interconnection procedures are consolidated in a new section HH of its Open Access Transmission Tarff, available at: https://www.nyiso.com/regulatory-viewer.

[14] NYISO Compliance Filing, at 4.

[1] PAL § 1005(27-a)(e)(ii)(F).

[2] PAL § 1005(27-a)(e)(ii)(A) (citing to PAL § 1005(27-a)(d)).

[3] The NYISO's interconnection processes are regulated by FERC and are set forth in tariffs approved by FERC and posted on the NYISO's website: https://www.nyiso.com/regulatory-viewer.

[4] The interconnection provisions were previously housed in the NYISO's Open Access Transmission Tariff ("OATT") Attachments P, S, X and Z. In its Order No. 2023 compliance filing, the NYISO revised and relocated these provisions in a new OATT Attachment HH.

[5] Federal Energy Regulatory Commission, Docket No. RM22-14-000, Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC ¶ 61,054 (July 28, 2023), at ¶¶ 38-39.

[6] NYISO, 2024 Power Trends Report, available at https://www.nyiso.com/documents/20142/2223020/2024-Power-Trends.pdf/31ec9a11-21f2-0b47-677d-f4a498a32978?t=1717677687961.

[7] According to the Lawrence Berkeley National Laboratory, the NYISO was one of four independent system operators with study times over three years. *See* Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection | Electricity Markets and Policy Group (lbl.gov); PowerPoint Presentation (lbl.gov) at slide 27.

[8] Federal Energy Regulatory Commission, Docket No. RM22-14-000, Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC 61,054 (July 28, 2023), at 38-39.

[9] *See* Smith, Zachary G. "A new class year: the changing nature of power generation in New York State, and how NYISO is accommodating it," Power Grid International, February 17, 2020, available at https://www.power-grid.com/solar/a-new-class-year-the-changing-nature-of-power-generation-in-new-york-state-and-how-nyiso-is-accommodating- it/?source=email#gref.

[10] *See* Improvements to Generator Interconnection Procs. & Agreements, Reply Comments of the New York Independent System Operator, Inc., Docket No. RM22-14-000 at 2 (Dec. 14, 2022).

[11] FERC Order No. 2023. FERC affirmed its interconnection reforms in Order No. 2023-A, including its stance on the treatment of network upgrades, allocation of upgrade costs, and the Cluster Study Process, emphasizing a proportional impact method for network upgrades cost allocation, and denying requests to revise or eliminate feasibility studies from the interconnection process.

FERC reaffirmed that it will impose penalties for late studies, including on ISOs/RTOs, after initial implementation, starting at $1,000 per study per day and increasing to $2,000 per study per day.

[12] NYISO Interconnection Queue, July 9, 2024, at line 284.

[13] NYISO's new standard interconnection procedures are consolidated in a new section HH of its Open Access Transmission Tarff, available at: https://www.nyiso.com/regulatory-viewer

[14] NYISO Compliance Filing, at 4.

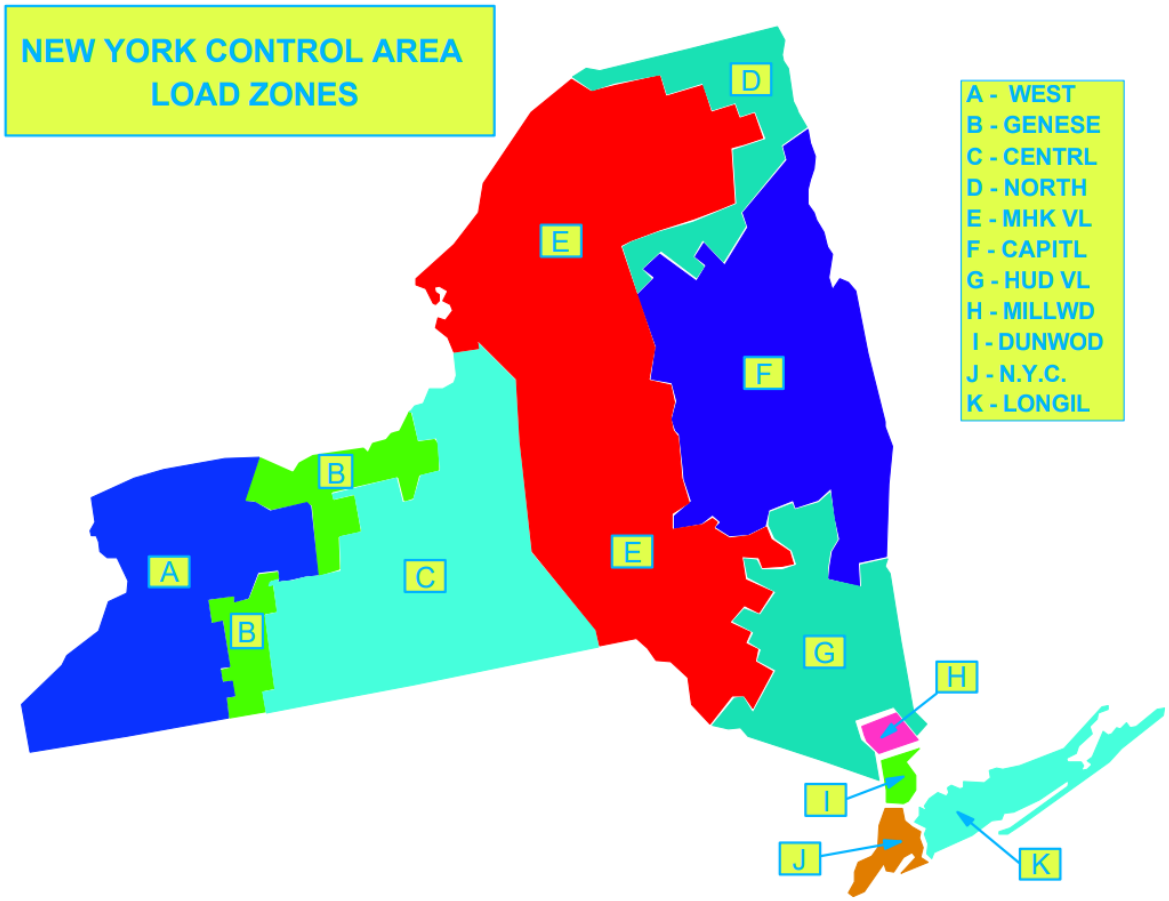
6.4 Appendix D- 2023 Conferral Report

Please note, this document was moved due to file size and readability and can be found here.

6.5 Appendix E- 2024 Conferral Report

Please note, this document was moved due to file size and readability and can be found here.

6.6 Appendix F- NYISO New York Control Area Load Zones



Source: NYISO NYCA Load Zones

6.7 Appendix G- Trustee Approved Workforce Development and Training Investments

DOL Workforce Training Initiative

$5 million was authorized for this DOL initiative to expand or create statewide clean energy training programs and pre-apprenticeship opportunities, including the provision of wraparound services for participants.

DOL Support Services Funds

$4 million was approved for this DOL initiative to create two separate $2 million funds to be distributed to local workforce development boards. Local workforce development boards will use these funds to support transitioning workers in reskilling from fossil fuel work for the renewable energy field, as well as residential worker support in the fields of weatherization and building performance. Each DOL fund includes a supportive services component that includes assistance with childcare, transportation, housing stability, food, mental health services, substance use treatment, and life-skills training.

NYPA Clean Energy Workforce Training Initiative

$2.55 million has been authorized for this NYPA initiative to partner with training providers to develop technical training opportunities, hands-on experience, paid internships, and full-time jobs for people entering the workforce. The funds will also advance training opportunities for traditional utility workers to ensure that new and current employees have the requisite skills and qualifications to participate in New York's clean energy transition now and in the future. This initiative is regionally focused, providing training and employment opportunities for residents in disadvantaged communities located in the vicinity of NYPA generation assets.

The ITEC Training & Education Center (ITEC) Workforce Training Initiative

ITEC is a stand-alone training facility that grew from two decades of Isaac University – a training program for Isaac Heating and Cooling to supply trained technicians to the Rochester area. ITEC Training and Education Center offers coursework at no-cost to participants. With the $114,000 funding award from NYPA, ITEC intends to offer an optional two-week course to its students at the conclusion of the Construction Class. Students will receive the EPA 608 Certification to enable them to work with refrigerants. The new class will include heat pump installation as well as theory of heating and cooling.

The NYC District Council Carpenters Training Center (CTC) Workforce Training Initiative

The NYC District Council Carpenters Training Center (CTC) received $182,000 in funding to train incumbent workers focusing on construction skills needed for clean energy work. All apprentices are active workers assigned to work on projects with CTC signatory contractors, and they spend four weeks throughout the year taking apprentice courses at the CTC. The project will include apprenticeship training for several specialties within the carpentry trade including millwrights, dock builders, timbermen, pile drivers and divers. There are currently 150 active apprentices in these specialties who will participate in the proposed project. Over the two-year program, they will receive advanced apprenticeship training including the specific skills necessary for work on energy efficiency and clean technology projects and building performance.

RETI Center Workforce Training Initiative

The RETI Center is a non-profit organization founded in 2016 in response to Superstorm Sandy. The RETI Center is dedicated to building urban climate resilience in communities through resiliency-focused economic development. Their mission is to educate, train, and collaborate with historically marginalized populations, local youth, experts, professionals, and community members to transform their coastal city from one reliant on fossil fuels to one that balances equity, ecology, and economy. The RETI Center was awarded $432,000 in funding to support the expansion of the EV & Battery RETI program. In 2024, RETI was awarded a three-year prize from Consolidated Edison to support their holistic green energy training program. The funding received from NYPA will contribute to the cost share to ensure they successfully meet their training, graduation and job placement goals for 2025.

Soulful Synergy LLC.'s Workforce Training Initiative

Soulful Synergy is a minority-owned workforce development agency dedicated to creating equitable and sustainable communities. Since 2013, Soulful Synergy has successfully administered tailored recruitment and training programs that tap into the soul of communities and upskill local workforces for clean energy and other high-demand jobs in green construction, clean energy, government, and more. The funding will support training designed to equip participants with essential skills in weatherization and electrification. The program, which received $857,000 funding from NYPA, will deliver specialized training to equip 40 participants with training on advanced weatherization techniques, and another 40 participants with skills in building and transportation electrification with a focus on New Rochelle and Mount Vernon. All participants will receive industry-recognized certifications such as BPI Building Science Principles, Green Professional (GPRO) Fundamentals of Building Green, OSHA 30-Hour and Site Safety Training Cards, while leveraging funding from the DOL programs to enhance training provided via this proposal.

St. Nick's Alliance Workforce Training Initiative

St. Nick's Alliance is a 50-year-old community-based organization that seeks to transform the lives of low-and moderate-income people through education, housing, employment and healthcare, delivering impactful services with measurable outcomes. In partnership with Solar One, NYPA funding of $325,000 will support a 7-week, 200-hour credentialed, employer linked, HVAC training program combining classroom and hands-on training in high-efficiency HVAC, including heat pumps. Technical training includes green construction skills and green building maintenance and operations.

The United Way of Long Island Workforce Training Initiative

The United Way of Long Island received $253,000 in funding to support their Green Construction Energy Efficiency Technician Training Program. The training program targets special populations who have missed or been denied opportunities for education and job training to prepare them for careers with family-sustaining wages. The Green Construction Energy Efficiency Technician Training Program will prepare 50 participants to perform comprehensive, whole-home assessments to identify problems and prescribe prioritized solutions based on building science. Graduates of the program work closely with homeowners and building owners, including not-for-profit housing providers, to design plans for homes that consume less energy while ensuring building durability and the health and safety of occupants.

The Urban Green Council Workforce Training Initiative

The Urban Green Council was awarded $387,000 in funding to deliver Green Progressional Training (GPRO) training to a targeted 960 individuals in partnership with Solar One. Solar One will provide a skills development curriculum in basic construction, electrical, solar panel installation, and maintenance of high efficiency heating and cooling systems. The proposed training responds to the critical need for building decarbonization by upskilling the qualified workforce, preparing them to implement energy efficiency strategies. The second core component of this work is professionalizing and uplifting green building career paths for new workers from diverse and underrepresented backgrounds. Each trade-specific GPRO course is tailored to a subset of the construction and building industry, equipping students with specialized green-building knowledge, and the expertise needed to navigate increasingly integrated building systems that affect their work every day. By providing subsidized training in targeted areas for both new and incumbent professionals in construction and building, they aim to close the gap in green building skills.

Institute for Workforce Advancement (IWA) Workforce Training Initiative, Long Island

IWA, which is a nonprofit in Melville, Suffolk County, serves workers in career transition and college- and non-college-bound high-school graduates, with its focus on lower-income communities. The NYPA funding of $975,000 will support a training program for up to 220 participants, centered on clean energy manufacturing, offshore wind and drone technologies. Vaughn College of Aeronautics and Technology in Queens will provide industry-certified instructors.

Oneida County Office of Workforce Development (OCOWD) Training Initiative, Utica

NYPA funding of $820,000 will support clean energy readiness apprenticeships of the OCOWD for young adults, rural residents, single mothers, individuals with disabilities, and historically marginalized populations. Approximately 200 residents of Oneida, Madison and Herkimer counties are participating, with special attention to Utica. The training programs include construction, remediation, manufacturing, operations and occupations involved with renewable energy and battery energy storage systems. Mohawk Valley Community College is providing the technical training.

Public Community Housing Fund (PCHF) Workforce Training Initiative, New York City

The initiative serves residents of New York City Housing Authority (NYCHA) buildings. PCHF is partnering with Solar One, a non-profit that specializes in green workforce training, and Andromeda Community Initiative, a not-for-profit that provides workforce development programs for the construction and building restoration industry. The PCHF initiative will provide eight-week classroom and hands-on training for 60 NYCHA residents, in carpentry, electricity use, plumbing, building operations, maintenance, energy efficiency, solar, HVAC, and building decarbonization. The NYPA funding of $1.055 million will also support a three-month paid internship for the students.

State University of New York (SUNY) Clean Energy Microcredential Initiative

The NYPA trustees' funding approval of $5 million for this initiative stemmed from a joint proposal with DOL for supporting the SUNY Clean Energy Microcredential Initiative to

expand enrollment in existing clean energy microcredentials and increase the number of SUNY campuses engaged in this work. SUNY will also launch a first-of-its kind pilot microcredential program at P-Tech high schools. SUNY microcredentials are tightly focused academic credentials, developed in partnership with industry, that quickly move skilled individuals into in-demand fields. At the same time, learners receive academic credit that can be applied to related certificates and degrees. NYPA is working with SUNY and its statewide campuses to identify the technical skills in clean energy that are most needed in specific regions of the state.

WVI Dolphin Foundation, New York City

This New York City not-for-profit foundation serves economically disadvantaged high-school students and children of active-duty military members ("blue star") and of those killed in action ("gold star"). The NYPA funding of $150,000 will support WVI Dolphin's Leadership Mentor Program, consisting of four clean energy training modules for 65 mentees. The program assists students to obtain internships, college- and trade-school admissions and jobs.

NYPA Say Yes Buffalo Youth Apprenticeship Program

A $600,000 grant to Say Yes Buffalo Scholarship, Inc. will partially fund an effort known as the "Say Yes Buffalo/CareerWise Greater Buffalo Modern Youth Apprenticeship Program." This apprenticeship program places recent public high school graduates in one- to three-year structured work-based learning apprenticeships at committed industry partners in high-demand sectors.

Renaissance Technical Institute

This $500,000 joint initiative between NYPA and DOL provides a grant to the Renaissance Technical Institute (RTI) in New York City to partially fund a six-month paid internship program. Students who successfully complete the program will be offered jobs with participating companies in the clean energy field. RTI's mission is to inspire at-risk youth in disadvantaged communities by providing them with all-inclusive, free vocational training/education and provide them a pathway to career opportunities in the renewable energy field. RTI has several vocational programs, but this grant is for a paid internship program involving plumbing, carpentry, electrical, HVAC, and solar panel installation. This grant will allow the program to cover the cost to enroll approximately 100 to 120 students.