

Conferral with NYPA: NYS Renewables Progress

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DEAR FELLOW NEW YORKER:

As President and CEO of the New York Power Authority, I write to you regarding a unique conferral process codified in law this spring as part of the 2023-24 Enacted State Budget. As part of this process, we at the Power Authority welcome your views on how we can most effectively and equitably build new renewable resources to support the State's efforts to advance its ambitious renewable energy goals provided for in the Climate Leadership and Community Protection Act, known as the CLCPA or the Climate Act. We would be grateful if you would consider the following topics in advance of our upcoming discussion so that you can be prepared to share your views and ideas that you want NYPA to consider as we define our role in driving New York's clean energy economy forward.

CLIMATE LEADERSHIP AND COMMUNITY PROTECTION ACT

Enacted in 2019, the Climate Act establishes pioneering objectives and requirements aimed at addressing climate change and guiding the State towards a sustainable, clean energy-based economy. The CLCPA codified several targets, enhanced through executive action by Governor Kathy Hochul, intended to reduce greenhouse emissions and facilitate integration of new renewable resources and energy storage into New York's electric grid, notably:

- > Generate 70% renewable energy on the grid by 2030, and a 100% zero emission electric system by 2040.
- > Install 6,000 MW of solar capacity by 2025. Governor Hochul recently established an even more ambitious target of 10,000 MW of solar capacity by 2030.²
- > Integrate 3,000 MW of energy storage capacity by 2030. Governor Hochul has now established an even more ambitious target of 6,000 MW by 2030.³
- > Build 9,000 MW of offshore wind generation by 2035.

NYPA AND EXPANDED AUTHORITY TO BUILD NEW RENEWABLES

NYPA is the largest state public power organization in the nation, operating 16 generating facilities and more than 1,400 circuit-miles of transmission lines. More than 80 percent of the electricity NYPA produces is clean renewable hydropower. NYPA is a leader in promoting energy efficiency and the development of clean energy technologies and expanding electric vehicle charging infrastructure.

The 2023-24 State Enacted Budget gives NYPA new authority to 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; and (3) support the Renewable Energy Access and Community Help ("REACH") Program authorized by the 2023 Enactment for the purpose of providing bill credits to low-income and moderate-income ratepayers from renewable energy systems developed or contracted by NYPA for REACH.⁴

JOB TRAINING FOR THE RENEWABLE ENERGY FIELD

The 2023 Enacted Budget also authorized NYPA to make available up to \$25 million annually to the New York State Department of Labor (DOL) to fund programs established or implemented by the DOL, including the Office of Just Energy Transition programs for workforce training and retraining. These programs will prepare workers for employment in the renewable energy field, supporting New York's economy and meeting our green energy objectives. We welcome views you have on this topic that we can consider as we begin working with the DOL to develop these programs.

NYPA'S APPROACH: OUR STRATEGIC PLAN AND CONFERRAL PROCESS

The 2023 Enactment requires NYPA, beginning in 2025, and biennially thereafter, to develop and publish a renewable energy generation strategic plan. The plan will identify, among other things, the State's progress towards achieving the CLCPA's renewable energy goals, renewable energy generating priorities based on the purposes for the two-year period covered by the Strategic Plan, projects NYPA intends to develop, project benefits, and the purposes the projects are intended to address.

To help inform development of the first Strategic Plan, the 2023 Enactment instructs NYPA to confer with stakeholders at the outset to solicit their views on the State's progress on CLCPA goals, the generation interconnection process administered by the New York Independent System Operator ("NYISO"), and the historical completion rate of the NYISO interconnection queue. NYPA will use input from the conferral process to consider how it can exercise its new statutory authority to develop new renewable energy resources and take other actions to contribute to New York's clean energy future.

The results of this conferral process will be summarized in a public report posted on the Power Authority's website. Public input received as part of the conferral process will be available to the public through this report.

This first conferral process is just the beginning of many stakeholder and public engagement opportunities between the Power Authority and interested members of the public under the 2023 Enactment. The Power Authority will conduct further public and stakeholder engagement as we formulate our strategic plans, starting in 2024. Each year, and as we progress, the Power Authority will solicit views of interested parties to make sure its efforts to bring more renewables to New Yorkers are well-informed, effective and transparent.

We sincerely thank you for your willingness to share your valued input and for your continued cooperation and collaboration as we together shape New York's clean energy future.

Justin E. Driscoll

President & Chief Executive Officer

CONFERRAL MEETING: TOPICS OF DISCUSSION

Please Note: The Conferral meeting agenda may encompass the following topics. Your perspective on a multitude of relevant items is greatly appreciated.

CLCPA GOALS

- > Discussion of State's progress on meeting CLCPA Goals.
 - Generate 70% renewable energy on the grid by 2030, and a 100% zero emission electric system by 2040.
 - Install 10,000 MW of solar capacity by 2030.
 - Integrate 6,000 MW of energy storage capacity by 2030.
 - Build 9,000 MW of offshore wind generation by 2035.
- > Opportunities and challenges in meeting these goals.
- > Your suggestions in developing our strategic plan to assist New York State in meeting these goals.

NYPA RENEWABLE GENERATION

- > Locations and types of renewable generation projects:
 - a. To ensure adequate and reliable supply of electric power in the State.
 - b. To support the REACH program.
 - c. For development of energy storage.
- > Your specific requirements/proposals/ideas for renewable generation projects.

NYISO INTERCONNECTION PROCESS AND QUEUE

- > Recommendations for improvement to the NYISO interconnection process to avoid delays that could potentially impact ability to reach the State's goals.
- > Your suggestions for taking the NYISO interconnection process into account while formulating our strategy.

TRAINING THE WORKFORCE OF THE FUTURE

> Recommendations for developing clean energy jobs, retraining programs, and careers for unemployed or displaced workers, as well as those in underserved communities.

APPENDIX A

STATUTORY LANGUAGE ESTABLISHING THE CONFERRAL PROCESS

To help inform development of the first Strategic Plan, the 2023 Enactment provides for NYPA to undertake the following conferral process:

No later than one hundred eighty days after the effective date of this subdivision, and annually thereafter, the authority shall confer with the New York state energy research and development authority, the office of renewable energy siting, the department of public service, climate and resiliency experts, labor organizations, and environmental justice and community organizations concerning the state's progress on meeting the renewable energy goals established by the climate leadership and community protection act. When exercising the authority provided for in paragraph (a) of this subdivision, the information developed through such conferral shall be used to identify projects to help ensure that the state meets its goals under the climate leadership and community protection act. Any conferral provided for in this paragraph shall include consideration of the timing of projects in the interconnection queue of the federally designated electric bulk system operator for New York state, considering both capacity factors or planned projects and the interconnection queue's historical completion rate. A report on the information developed through such conferral shall be published and made accessible on the website of the authority.⁵

APPENDIX B

EXPEDITING THE NYISO INTERCONNECTION PROCESS

Understanding Generator Interconnection in New York

The New York Independent System Operator ("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 interconnects resources in a manner that meets minimum interconnection standards that are established by reliability standards organizations and at the least cost.⁶

The NYISO's interconnection processes are regulated by FERC and are set forth in tariffs that are approved by FERC, primarily in the NYISO's Open Access Transmission Tariff ("OATT") Attachments P, S, X and Z. 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. Proposed large generators (greater than 20 MW), including storage and loads, interconnect to the NYISO through the Large Facility Interconnection Process. Small generators (20 MW or less) have their own interconnection process under the FERC tariff, which is somewhat less involved. Generators sized up to and including five MW, and that do not involve federal-jurisdictional transmission or wholesale electricity sales, interconnect to the power system under New York State Public Service Commission procedures, which are not part of the NYISO's interconnection queue.

Proposed generation projects are currently 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. The interconnection processes utilize a series of increasing 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 require 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 will know their interconnection facilities and costs. If they choose to proceed, developers post collateral to cover their interconnection costs, and sign an interconnection agreement with the NYISO and the Connecting Transmission Owner. ⁷

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. Some delays are caused by developers themselves.

In 2018, the NYISO interconnection queue contained approximately 120 projects. As of July 2023, 467 active projects were under evaluation in NYISO's queue.⁸ Based on 2022 data, the median time to complete the NYISO interconnection study process and execute an interconnection agreement was three to four years.⁹ Processing time in the interconnection process varies among projects and is impacted by a number of factors. Developers have the flexibility to make certain elections under the NYISO's current process that may extend the study process. For example, developers often propose modifications to their projects during the interconnection study process. Developers can also choose to wait in the queue for months or years before they enter the final required interconnection study. In early 2023, the NYISO completed the grouped interconnection study process for over 50 proposed projects, consisting of over 7,000 megawatts of renewable energy generating projects, including two offshore wind farms, completing the NYISO interconnection process in 2023¹⁰ The NYISO is currently studying a group of over 80 proposed projects, consisting of 12,000 megawatts of renewable energy. The NYISO estimates that the study of these projects will be completed next year. Developers can decide whether to move forward with their projects even after the interconnection studies are completed.

Generation interconnection delay is a national, not only a New York, phenomenon. In its recent interconnection reform order, Order No. 2023 (summarized below), 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 gigawatts (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.¹¹

NYISO Interconnection Process Reforms So Far

The NYISO has 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. Completed in 2023, Class Year 2019 contained over 8,000 MW of nameplate capacity, consisting of 38 solar projects totaling 1,738 MW, 12 wind projects totaling 3,108 MW and 26 energy storage projects totaling 1,069 MW, all seeking to connect to New York's electric grid. 12

The NYISO has stated that further reforming its interconnection processes consistent with maintaining electricity system reliability is its highest priority. At the same time, the NYISO is competing with utilities and other private and public sector employers in a shrinking labor pool for skilled professionals whose expertise is necessary for the NYISO to perform the technical analyses for interconnections. To address the significant surge in proposed interconnections as part of the historic transition that is underway on the electric grid, NYISO initiated a comprehensive interconnection queue reform initiative with its stakeholders in late 2022.¹³ This initiative is ongoing, and the NYISO has indicated that its reforms under development will be further enhanced by many of the process enhancements adopted in FERC Order No. 2023.

FERC's Recent Interconnection Reform Order

In the midst of this, on July 28, 2023, FERC issued a landmark order on reforming the generator interconnection process nationwide. These include changes to weed out projects that are not viable and holding up the interconnection process. Entitled "Improvements to Generator Interconnection Procedures and Agreements" (Order No. 2023), FERC describes its reforms as primarily falling into three categories:

- 1. First-Ready, First-Served Cluster Study Process:
 - Amends the process from a first-come first-served individual project queue and study regime to a first-ready
 first-served cluster study process that it designed to move generators that are ready to proceed more quickly
 through interconnection.
 - · Sets strict timeframes for completion of studies.
 - Establishes project readiness, site control, and financial commitment requirements for generators to participate in a cluster study that groups analysis of interconnection of those generators together, with limited opportunities to make project changes.
 - Increases developers' study deposits and makes them non-refundable.
 - Requires more publicly available interconnection information, including a "heatmap" to provide "an interactive visual representation of available interconnection capacity" so developers can identify fruitful points of interconnection for their generation projects.
- 2. Reforms to increase the speed of interconnection queue processing by independent system operators and other transmission providers:
 - Penalizes developers that withdraw from cluster studies, with increasing levels the later in the process a developer withdraws.
 - Eliminates the "reasonable efforts" standard that excused late studies and delays in the interconnection process.
 - Penalizes the NYISO and connecting transmission owners for late studies, beginning after a few cycles of the cluster study process, with the ability to appeal penalties to FERC.
- 3. Reforms to Incorporate Technical Advancements in the Interconnection Process:
 - Requires transmission providers to use operating assumptions in interconnection studies that reflect the proposed charging behavior of electric storage resources.
 - Requires transmission providers to evaluate alternative transmission technologies in its cluster studies (e.g., advanced power flow control devices).
 - Establishes modeling and performance standards for non-synchronous generating facilities.

NOTES

- 1. Chapter 106 of the Laws of 2019.
- On September 20, 2021, Governor Hochul announced on the first day of Climate Week the expansion of the NY-Sun program to achieve at least 10,000 MW of distributed solar installation by 2030. The PSC adopted this goal in a subsequent order.
- 3. The CLCPA provided for 3,000 MW of energy storage by 2030. On January 5, 2022, Governor Hochul announced in her State of the State address an intention to double the State's energy storage from the legislated 3,000 MW to 6,000 MW of storage by 2030. The Public Service Commission adopted this goal in New York's 6 GW Energy Storage Roadmap.
- 4. Part QQ of Chapter 56 of the Laws of 2023. Public Authorities Law §§ 1005(27-a)-(27-d); Public Service Law § 66-p.
- 5. Public Authorities Law § 27-a(d) of the Public Authorities Law.
- 6. The NYISO's interconnection processes are regulated by the Federal Energy Regulatory Commission (FERC) and are set forth in tariffs approved by FERC and posted on the NYISO's website: https://www.nyiso.com/regulatory-viewer primarily in the Open Access Transmission Tariff ("OATT") Attachments P, S, X and Z.
- 7. 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.
- 8. NYISO, Fact Sheet: Integrating NY's Clean Energy Resources, available at https://www.nyiso.com/documents/20142/35688159/Interconnection-Process-Fact-Sheet.pdf/255e4a40-34a2-ffdc-3121-7fce2279b4b6.
- 9. According to the Lawrence Berkeley National Laboratory, the NYISO was one of four independent system operators with study times over three years. See <u>Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection | Electricity Markets and Policy Group (lbl.gov); PowerPoint Presentation (lbl.gov) at slide 27.</u>
- 10. New York State Office of the Comptroller, Renewable Electricity in New York State; Review and Prospects (August 2023), at 13, available at: https://www.osc.state.ny.us/files/reports/pdf/renewable-electricity-in-nys.pdf.
- 11. 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.
- 12. 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.
- 13. 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) ("NYISO Reply Comments").