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VIA E-MAIL

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Zachary G. Smith
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10 Krey Boulevard
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Re: Transmission Needs Driven by Public Policy Requirements for the 2022-2023
Transmission Planning Cycle

Dear Mr. Smith:

Rise Light & Power, LLC (“Rise”) submits this letter in response to the New York Independent System Operator, Inc.’s (“NYISO”) August 31, 2022 *Request for Proposed Transmission Needs Being Driven by Public Policy Requirements for the 2022-2023 Transmission Planning Cycle* (“PPTN Request”). Rise respectfully requests that the proposal identified herein – a need for additional zero-emission transmission solutions interconnecting into New York City – be considered in accordance with the Section 31 of the NYISO’s Open Access Transmission Tariff (“OATT”).

Proposal: Transmission Need in Zone J

Rise submits that a need for additional transmission capacity into NYISO Zone J (New York City) persists despite the pending development of the Champlain Hudson Power Express (“CHPE”) Project and Clean Path NY (“CPNY”) Project, and that this continuing need should be addressed through the NYISO’s competitive Public Policy Transmission Planning Process (“PPTPP”). Therefore, the 2022-2023 PPTPP should result in the issuance of a solicitation for an additional transmission line from the upstate market (NYISO Zones A – E) into NYISO Zone J.



I. *Public Policy Requirements*

As defined in OATT Section 31.1.1, a Public Policy Requirement (“PPR”) is

[a] federal or New York State statute or regulation, including a [New York State Public Service Commission (“Commission”)] order adopting a rule or regulation subject to and in accordance with the State Administrative Procedure Act, any successor statute, or any duly enacted law or regulation passed by a local governmental entity in New York State, that may relate to transmission planning on the [New York State Bulk Power Transmission Facilities].

Several PPRs drive the need for additional zero-emission transmission capacity into Zone J.¹

First, in 2019, the New York State Legislature enacted the Climate Leadership and Community Protection Act (“CLCPA”),² which established several overarching mandates to combat anthropogenic climate change, including that 70% of the state’s electricity consumption would be from renewable energy by 2030 (“70 x 30”) and that 100% of the state’s electricity consumption come from zero-emission sources by 2040 (“100 by 40”). To achieve these goals, the CLCPA also established resource-specific targets, including, *inter alia*, the installation of 6,000 megawatts (“MW”) of distributed solar energy by 2025 (which the Public Service Commission (“Commission”) has since increased to 10,000 MW), 3,000 MW of energy storage by 2030 (which the Commission has since increased to 6,000 MW), and 9,000 MW of offshore wind by 2035. Importantly, the CLCPA set a requirement for all state agencies, authorities, and entities to design programs so that disadvantaged communities (“DACs”) receive at least 35% (with a goal of 40%) of overall benefits of spending on clean energy and energy efficiency programs, projects or investments.³ To help effectuate the CLCPA, the legislature enacted the Accelerated Renewable Energy Growth and Community Benefit Act (“AREGCBA”) in 2020.⁴ Among other provisions, the AREGCBA

¹ Rise recognizes that there are myriad efforts underway at the federal, state, and local levels to combat climate change, and, as such, the list of PPRs contained herein is not meant to be exhaustive but rather demonstrative of those efforts that are likely to most impact the state’s bulk transmission system.

² L. 2019, Ch. 106.

³ The CLCPA defines Disadvantaged Community as, “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate-income households.” *See* L. 2019, Ch. 106, § 2.

⁴ L. 2020, Ch. 58.



directed the Commission and Department of Public Service (“DPS”) to take actions to prioritize and accelerate the planning and buildout of bulk and local transmission and distribution infrastructure to facilitate the interconnection of renewable energy.

Second, the State has undertaken several actions to facilitate the retirement of fossil-fired resources. For example, in early 2020, the New York State Department of Environmental Conservation (“NYSDEC”) enacted the Peaker Rule,⁵ which set stringent standards for simple-cycle combustion turbines during the summer ozone season, and will impact the operating ability of peaking facilities in New York City once they are fully phased in by May 1, 2025. Similarly, Governor Kathy Hochul stated in her 2022 State-of-the-State materials that she would direct the creation of a blueprint to guide the retirement and redevelopment of New York’s oldest and most-polluting fossil fuel facilities and their sites by 2030, many of which are located in Zone J. In addition, the recently issued New York State Energy Research and Development Authority (“NYSERDA”) 2022 Offshore Wind Renewable Energy Certificate Request for Proposals (“ORECRFP22-1”) includes optional eligibility criteria for a project’s ability to repurpose existing fossil-fuel fired generation infrastructure in Zones J and K.⁶

Finally, the City of New York (“City”) has enacted several of its own decarbonization goals and policies. For example, in 2019 the City enacted the Climate Mobilization Act,⁷ which is a collection of local laws that aim to reduce greenhouse gas (“GHG”) emissions in New York City. Among these are Local Law 97, which requires significant GHG emissions reductions from large buildings.⁸

II. *Identification of Need*

Taken together, the cited PPRs demonstrate that the State is strongly committed to transitioning away from fossil fuel-fired generation facilities in Zone J and significantly increasing the proliferation and transmission of renewable energy to meet the expected increase in electricity demand. The resulting transformation of the State’s generation mix will have significant effects, which need to be anticipated and managed in a coordinated manner through the deployment of not

⁵ 6 NYCRR Subpart 227-3 (“Peaker Rule”).

⁶ NYSERDA, *Purchase of Offshore Wind Renewable Energy Certificates Request for Proposals ORECRFP22-1* (released July 27, 2022) at 30, available at <https://portal.nyseda.ny.gov/servlet/servlet.FileDownload?file=00P8z000001i1yzEAA>.

⁷ See, New York City Council, *The Climate Mobilization Act*, available at <https://council.nyc.gov/data/green/>.

⁸ The New York City Department of Buildings released the proposed rules for implementing Local Law 97 on October 6, 2022. See, https://www1.nyc.gov/assets/buildings/pdf/proposed_greenhouse_gas.pdf.



only renewable resources, such as wind and solar, but also complementary dispatchable, emissions-free resources (“DEFRRs”) (such as energy storage) that can help ensure reliability and provide year-round and around-the-clock benefits to Zone J. In its 2021 Comprehensive Reliability Plan, the NYISO stated:

Generation resources in New York have already seen significant changes in the last two years with the retirements of 1,000 [megawatts (“MW”)] of coal and 2,000 MW of nuclear from 2019 to 2020 . . . [Peaker Rule] compliance plans indicated that over 1,500 MW of peaker capability, mostly in New York City, will either retire or not operate during the summer ozone season by 2025, with a little over half impacted starting in 2023. All of these deactivations add up to almost 5,000 MW generation. An additional 25,000 MW of fossil fuel generation will need to deactivate over time to hit the targets in the CLCPA. These resources will need to be replaced by resources that are emission free and largely renewable.⁹

The NYISO has continually reiterated this need for DEFRRs. The recently released *2021-2040 System & Resource Outlook* states, “To achieve an emission-free grid, [DEFRRs] must be developed and deployed throughout New York. DEFRRs that provide sustained on-demand power and system stability will be essential to meeting policy objectives while maintaining a reliable electric grid.”¹⁰

However, adding new resources without corresponding transmission is insufficient. The NYISO concluded that if 9,500 MW of new generation resources are added to the grid, such new resources will, “. . . exacerbate existing transmission congestion and will encounter new local transmission constraints throughout New York State.”¹¹ The NYISO found that, “[w]ithout any major transmission upgrades planned to specifically address this large influx of contracted

⁹ NYISO, *2021-2030 Comprehensive Reliability Plan* (issued December 2, 2021) at 41, available at <https://www.nyiso.com/documents/20142/2248481/2021-2030-Comprehensive-Reliability-Plan.pdf> (“Comprehensive Reliability Plan”).

¹⁰ NYISO, *2021-2040 System & Resource Outlook* (issued September 22, 2022) at 12, available at <https://www.nyiso.com/documents/20142/33384099/2021-2040-Outlook-Report.pdf/a6ed272a-bc16-110b-c3f8-0e0910129ade?t=1663848567361> (“NYISO Outlook”).

¹¹ NYISO Outlook, *supra*, at 5-6.



renewables, transmission congestion increases. When the contracted renewable projects are added, several additional constraints appear, causing a 23% increase in congestion statewide by 2030.”¹²

Due to high costs and real estate constraints downstate, utility-scale renewable resources and corresponding DEFERs are most likely to be constructed upstate (NYISO Zones A-E). However, the NYISO’s latest *Power Trends* report demonstrates that the overwhelming majority (92%) of the generation mix in these regions is already made up of zero-emissions resources, while the downstate (NYISO Zones F-K) generation mix is still comprised of only 8% of the same (this persistent problem is colloquially known in New York as the “Tale of Two Grids”).¹³ Moreover, there are significant, well-documented constraints to interconnecting new generation downstate. As the Joint Utilities noted in their T & D Report,

. . . the transmission system in New York City offers limited available points of interconnection for new generation to connect. Of those interconnection points that are available today, many would require substantial upgrades to make the interconnecting generation deliverable to loads. Due to the dense population in New York City and the locations of high voltage transmission lines, there are limited locations to build new transmission substations.¹⁴

These constraints have the potential to negatively impact, among other things, the state’s ability to integrate 9,000 MW of offshore wind, and so NYSERDA is completing a cable corridor constraint analysis to understand the scope of these issues and identify a path forward to resolving them.¹⁵

¹² *Id.*

¹³ NYISO, *The Path to a Reliable, Greener Grid for New York: 2022 Power Trends Report* (issued June 8, 2022) at 8, available at <https://www.nyiso.com/documents/20142/2223020/2022-Power-Trends-Report.pdf/d1f9eca5-b278-c445-2f3f-edd959611903?t=1654689893527>.

¹⁴ Case 20-E-0197, Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Utility Transmission and Distribution Investment Working Group Report (filed November 2, 2020) at 21 (“T & D Report”).

¹⁵ Case 20-E-0197, *supra*, Order on Power Grid Study Recommendations (issued January 20, 2022) at 19-20 (“While the OSW Study concluded that 9,000 MW of offshore wind generation could be feasibly integrated using the interconnection points it identified, the Initial Report points out that one major issue that is unresolved is whether the [points of interconnection] selected in the base case for New York City have the physical space necessary to accommodate the upgrades for the planned injections. Citing the Utility Study, the Initial Report states that “reliability needs and space limitations for adding necessary interconnection equipment to existing Con Edison substations” might be an obstacle to implementing the OSW Study’s recommendations”). See also NYSERDA, *Request for Information*



Therefore, there continues to exist – and will continue to exist for many years – a significant need to transmit the growing capacity of renewable electricity generated upstate to the downstate load centers in a coordinated manner through the addition of another transmission line instead of through the *ad hoc*, one-off interconnection of resources.

Further, action must be taken to ensure that not only New York State as a whole achieves 70 x 30 and 100 x 40, but that such goals are achieved in a manner that justly and equitably prioritizes DACs. As observed in the Climate Action Council’s Draft Scoping Plan,

. . .the most severe harms from climate change fall disproportionately upon underserved communities that are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other impacts. [An analysis performed by the Environmental Protection Agency] indicates that racial and ethnic minority communities are particularly vulnerable to the greatest impacts of climate change.

Due to the strong correlation between negative health outcomes, such as high incidences of asthma and cardiovascular disease, and proximity to fossil-fired generating facilities, the Draft Scoping Plan places special emphasis on those DACs that are disproportionately pollution-burdened.¹⁶ NYSERDA’s Draft List of Disadvantaged Communities shows that a majority of the State’s DACs are located in Bronx, Kings, New York, Queens, and Richmond counties.¹⁷ Residents of these DACs and environmental justice areas would directly benefit from the addition of additional reliable, zero-emission transmission capacity into Zone J.

Moreover, the PPRs identified above are anticipated to significantly increase electrification levels in the State, which will, in turn, increase load, particularly downstate. Indeed, in the Power Grid Study, the Department of Public Service determined that, “. . .to meet the CLCPA’s zero emissions grid standard, statewide electric generation would need to increase from about 150 [terrawatt hours (“TWh”)] in 2019 to 208 TWh in 2040 – to accommodate the projected

5166 *Offshore Wind Cable Corridor Constraints Assessment*, available at https://portal.nyserdera.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0r8z00000099o1AAA.

¹⁶ Climate Action Council, *Draft Scoping Plan* (issued December 30, 2021) at 4, 28 (“Draft Scoping Plan”).

¹⁷ NYSERDA, *Disadvantaged Communities Criteria* (last accessed October 14, 2022), available at <https://climate.ny.gov/Our-Climate-Act/Disadvantaged-Communities-Criteria>.



electrification of the transportation and building sectors.”¹⁸ The Climate Action Council’s Draft Scoping Plan anticipates even more significant load increases to between 236 and 251 TWh by 2040, with Zone J load ranging from 78-81 TWh in the same time period.¹⁹ For comparison, the NYISO anticipates that the maximum statewide load for 2022 will be approximately 150 TWh, with approximately 48 TWh in Zone J.²⁰

Notably, this increase in load will not necessarily correspond to the availability of onshore wind resources upstate. Terrestrial wind-farm output is often highest at night, when electricity demand is lowest. However, offshore wind output is highest during peak times – mid-afternoon and early evenings. Once 9,000 MW of offshore wind is interconnected into New York City, there may be times when it is not fully utilized locally but could help to serve load upstate – reinforcing the need for additional transmission between Zone J and the upstate market.

III. *Facilitation of PPR and Resolution of Need*

The need for additional transmission into Zone J has been identified many times over by the NYISO, DPS, and other stakeholders, such as the City of New York.²¹ Additional transmission, particularly controllable lines, can reduce congestion, improve reliability, and reduce the output necessary from DEFRs.²² In response to this need for additional transmission, the Commission established Tier 4 of the Clean Energy Standard (“CES”) in 2020 on the grounds that, “. . . absent new transmission capacity, the addition of new upstate renewable developments will fail on its own

¹⁸ Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and Clean Energy Standard, Order Approving Contracts for the Purchase of Tier 4 Renewable Energy Certificate (issued April 14, 2022) at 46 (“Tier 4 Order”), citing Case 20-E-0197, *supra*, Initial Report on the New York Power Grid Study (filed January 19, 2021) at Figure 21.

¹⁹ Climate Action Council, *Draft Scoping Plan* (issued December 30, 2021) at Appendix G, Annex 2, tab Elec Load and Peak by Scenario (“Draft Scoping Plan”).

²⁰ NYISO, *2022 Load and Capacity Data* (issued April 2022) at Table I-1a, Table I-2.

²¹ See, e.g., NYISO Outlook, *supra*, at 4-5; See also Case 15-E-0302, *supra*, White Paper on Clean Energy Standard Procurements to Implement New York’s Climate Leadership and Community Protection Act (issued June 18, 2020) at 45; See also Case 15-E-0302, *supra*, Comments of the City of New York on CLCPA Whitepaper (filed August 31, 2020).

²² NYISO Outlook, *supra*, at 52 (“Transmission build-out across New York would not reduce the necessary amount of installed dispatchable resource capacity within the New York Grid, but it would decrease the amount of annual energy production required from dispatchable resources”).



to increase the penetration of renewable energy consumed in New York City to a level that enables statewide compliance with the 70 by 30 Target.”²³

Following a solicitation and award by NYSERDA, the Commission approved the CHPE Project – a 375-mile, 1,250 MW high-voltage, direct current (“HVDC”) transmission line from the Hertel Substation in La Prairie, Québec to the Astoria Annex Substation in Queens – and the CPNY Project – a 174-mile, 1,300 MW HVDC transmission line between the Fraser Substation in Delaware County and the Rainey Substation in Queens.²⁴

While 2,550 MW of transmission from the CHPE and CPNY projects is an important step toward addressing the issues described above, even if successfully brought on-line on schedule, the two projects together do not satisfy the full 3,000 MWs authorized by the Commission and are insufficient to address the need created by the PPRs. In its Tier 4 Order, the Commission stated, “. . . compared to the load projections from the Power Grid Study that underpinned the determination of an expected need of 3,000 MW of Tier 4 capacity in the CES Modification Order, the latest Scoping Plan analysis suggests a further additional need of 14-17 TWh of clean generation in New York City by 2040, itself an amount almost equal to the generation from the two proposed Tier 4 projects.”²⁵

Moreover, it is possible that even more generation will need to be delivered into New York City to maintain reliability. In its Comprehensive Plan for 2021-2030, the NYISO stated: “. . . the margin to maintain reliability over the next ten years will narrow or could be eliminated based upon changes in forecasted system conditions,” finding that, “[r]isk factors such as delayed implementation of projects in [the Comprehensive Reliability Plan] additional generator deactivations, unplanned outages, and extreme weather [that] could potentially lead to deficiencies in reliable electric service in the coming years.”²⁶

As such, an additional controllable transmission line between the upstate zones and Zone J will provide significant statewide benefits. Not only would this line help to unbundle upstate renewables and complementary DEFRRs and allow for diversified energy supply into Zone J, it would

²³ Case 15-E-0302, *supra*, Order Adopting Modifications to the Clean Energy Standard (October 15, 2020) at 78 (“CES Modification Order”), *citing* 15-E-0302, *supra*, White Paper on Clean Energy Standard Procurements to Implement New York’s Climate Leadership and Community Protection Act (issued June 18, 2020) (“CES White Paper”).

²⁴ Tier 4 Order, *supra*, at 11-13.

²⁵ *Id.* at 47-48.

²⁶ Comprehensive Reliability Plan, *supra*, at 5-7.



also play an important role in reliability. A controllable line can provide capacity to Zone J, significantly bolstering reliability. Further, in the event that there were any issues on one or both of the CHPE and CPNY transmission lines, a third line would provide for a diversified supply option, providing even more reliability benefits.

IV. *Potential Evaluation Criteria*

Rise submits that the following criteria, which reflect the state policy needs described herein, should be among those used to evaluate responses to this proposed need:

- (i) cost effectiveness on a dollar per megawatt-hour basis;
- (ii) ability/likelihood to facilitate orderly fossil plant retirement/site repurposing;
- (iii) ability to minimize environmental impacts;
- (iv) demonstration of site control;
- (v) financial viability of the project and developer;
- (vi) ability to improve system reliability and resiliency;
- (vii) disadvantaged community benefits; and
- (viii) anticipated commercial operation date.

Conclusion

For the reasons described herein, Rise respectfully requests that the NYISO submit the proposal described herein to the Commission pursuant to Section 31.4.2 of the OATT and that this proposal be designated as a PPTN.

Sincerely,

/s/ Jim D'Andrea
James (Jim) D'Andrea
General Counsel