
February 21, 2023

VIA ELECTRONIC MAIL

Hon. Michelle L. Phillips
Secretary
New York State Public Service Commission
3 Empire State Plaza
Albany, New York 12223-1350
secretary@dps.ny.gov

Re: Case 22-E-0633 – In the Matter of New York Independent System Operator, Inc. Proposed Public Policy Transmission Needs for Consideration in 2022.

Dear Secretary Phillips:

AES Clean Energy Development, LLC (“AES”), submits these comments in response to the notice published in the State Register on December 21, 2022 regarding the New York Public Service Commission’s (“Commission”) consideration of transmission needs that are driven by the State’s public policy requirements. AES respectfully requests that the Commission declare public policy transmission needs in certain areas of the North Country and Southern Tier and in New York City. The existence of these needs is broadly recognized. First, the majority of the public policy transmission need (“PPTN”) proposals submitted last October to the New York Independent System Operator, Inc. (“NYISO”) and subsequently forwarded by the NYISO to the Commission identify these areas as being in need of reinforcement. Second, the Final Scoping Plan adopted by the Climate Action Council identified the need for additional transmission in order to achieve the goals of the Climate Leadership and Community Protection Act (“CLCPA”).¹

AES respectfully urges the Commission to take swift action to identify public policy-driven transmission needed, thereby establishing a pathway to alleviate the transmission challenges associated with the renewable energy development underway in New York. In addition to offering these comments, AES supports the comments submitted concurrently by the Alliance for Clean Energy-New York (“ACE NY”) in this proceeding.

I. Background on AES Clean Energy

AES was founded in 1981 and is a U.S.-based Fortune 500 global energy company with headquarters in Arlington, Virginia and offices in many locations in the U.S., including New York City. AES owns and operates a portfolio of more than 4.4 GW of renewable energy projects

¹ New York State Climate Action Council. “New York State Climate Action Council Scoping Plan.” December 2022; available at climate.ny.gov/ScopingPlan. (“Final Scoping Plan”)

including more than 400 utility-scale and community solar, wind, energy storage and hybrid projects across 21 states. With more than two decades of experience working in New York, AES operates 60 projects with approximately 852 MW of nameplate capacity. AES's development portfolio in New York includes more than 2 GW of utility-scale solar, 50 MW of community solar, and 400 MW in storage capacity. AES owns and operates Valcour Wind, a portfolio of 612 MW of operating wind projects. AES is motivated to lead the industry in developing and growing solutions that will enable the transition to carbon-free sources of energy and achieving the CLCPA goals of 70% renewable energy by 2030 and 100% zero emission energy by 2040.

II. Introduction

AES is committed to the success of the CLCPA in New York. To achieve the goals of the CLCPA and ensure that customers receive the full benefit of current and future renewable generation, it is imperative that New York ensure that there is sufficient transmission capacity to deliver the renewable generation to load centers.

According to the NYISO's *2021-2040 System & Resource Outlook* report ("Outlook"), New York will need between 111 GW and 124 GW of installed generation capacity by 2040, with 95 GW from new projects or modifications to existing projects, to reliably operate the grid.² The Outlook also concluded that the New York State bulk and local transmission system, at present, will not be able to achieve the State's policy objectives.³

Similarly, the Final Scoping Plan contains the following assessment:

given the large amounts of renewable energy that must be procured and developed to reach the Climate Act requirements, the State needs to incorporate load flexibility and controllability into the electric grid as sectors electrify in order to create a more manageable system. New and upgraded transmission and distribution systems will be needed statewide, including specific transmission and distribution investments that will be necessary to deliver energy from where the generation is located to where the load demand exists.... [the PPTN process] is the primary mechanism that ensures the bulk transmission grid can enable New York State's climate policies, which includes transmission upgrades that connect and transport renewable generation and energy storage resources to load centers.⁴

The Commission's February 16, 2023 *Order Approving Phase 2 Areas of Concern Transmission Updates* ("Phase 2 Order") provides much needed relief in priority areas in New York. Additional support will be needed across the state to meet the goals of the CLCPA. AES appreciates being able to provide meaningful input to the Commission on the PPTN process.

² Outlook at p. 58.

³ Outlook at p. 5.

⁴ Id. at pp 221, 242

III. Transmission Needs driven by Public Policy Requirements

There are urgent transmission needs in three areas of the State to support renewable resource development: A) the North Country in an area designated as the Watertown/Oswego/Porter Renewable Generation Pocket X3 in the Outlook, B) the Southern Tier in the areas designated as Renewable Generation Pockets Z1 and Z2 in the Outlook, and C) New York City. These needs are based on the following public policy requirements: 1) curtailments and constraints on renewable electricity generation; 2) system reliability; 3) the potential failure to meet the goals of the CLCPA as a result of inadequate transmission; and 4) public health, safety, and welfare of all New Yorkers (particularly those living in the major load center of New York City).

a. North Country: Watertown/Oswego/Porter Renewable Generation Pocket

The current 115 kV system in the North Country, identified as Renewable Generation Pockets X2 and X3 in the Outlook, limits the ability of wind and solar projects that are in-service and under development (and which have Tier 1 contracts) to sufficiently transmit their renewable energy output to the bulk transmission system.⁵ The recently approved utility Phase 2A solutions are expected to provide much needed relief to meet the “Near-Term CLCPA Need”, or the incremental transmission capacity needed to ensure the renewable energy capacity from the “advanced development” projects would be “unbottled.”⁶

However, since the Phase 2A solutions were proposed, the projects qualifying now as “in advanced development”⁷ have grown significantly from what was assumed for utility Phase 2A upgrades. According to Table 3 of the Phase 2 Order, the “Near-Term CLCPA need” was 1,404 MW in the North Country, and the “Long-Term” need is projected to be 3,058 MW. This projected need substantially exceeds the stated Phase 2A incremental capacity headroom expansion of 1,080 MW in the North Country.⁸ Thus, the additional approximate 1,600 MW of generation will need transmission solutions in order to provide a strong connection from the North Country to the bulk system for future projects.

AES respectfully requests that the Commission declare a PPTN for the North Country.

⁵ Outlook at p. 16

⁶ New York Public Service Commission, *Order Approving Phase 2 Areas of Concern Transmission Upgrades*, Case 20-E-0197, Order (February 16, 2023) Order p. 34.

⁷ Id.

⁸ Id. at p. 29.

b. Southern Tier: Renewable Generation Pockets Z1 and Z2

The second urgent PPTN is the Southern Tier along the Pennsylvania border and in the Finger Lakes region, identified as Renewable Generation Pockets Z1 and Z2 in the Outlook. There, NYISO concluded that portions of the Southern Tier “will experience persistent and significant limitations to deliver the renewable power from these pockets to consumers in the upcoming years.”⁹ In other words, there will be a need to be able to transfer large quantities of energy from the Southern Tier to the State’s load centers.

Invenergy stated in its PPTN submission that the Southern Tier has the most wind and solar potential but is the most constrained.¹⁰ As well, Transource demonstrated a need for a PPTN in the Southern Tier, consistent with AES’ concerns about transmission congestion and curtailment in the area that puts achieving the CLCPA goals at risk¹¹ and inhibits realization of the full health, societal and general welfare benefits of renewable energy generation.

While the utility Phase 2A solutions in the recently approved Phase 2 Order are expected to provide much needed relief to meet the “Near-Term CLCPA Needs”, in the Southern Tier,¹² AES believes bulk transmission solutions are still needed to ensure all projected renewable electricity generation does not face curtailment or congestion limitations. According to Table 3 of the Phase 2 Order, the Long-Term projects in the Southern Tier (Z1) area have grown since the Phase 2A solutions were proposed from “Near-Term CLCPA Need” of approximately 1,944 MW to 2,789 MW of updated “Long-Term Need.”¹³ In addition, the approved Phase 2A solution assumed a 70% dispatch solution. This solution will not address the key system conditions when wind exceeds 70% dispatch.¹⁴ Thus, given the additional renewable energy generation expected to come online, the Commission should continue to look for bulk transmission solutions that would solve the deliverability issues in the Southern Tier.

The Southern Tier has been identified by a broad range of stakeholders as a priority region for a PPTN. AES respectfully requests that the Commission declare a PPTN.

⁹ Outlook at pp. 14, 66, and 74.

¹⁰ Request for Proposed Transmission Needs Being Driven by Public Policy Requirements for the 2022-2023 Transmission Planning System, Invenergy, <https://www.nyiso.com/documents/20142/34292084/2022-PPTN-Invenergy.pdf/7abdad64-50ce-f78c-7719-8810153b127b> at p. 4.

¹¹ NYISO 2022-2023 PPR Transmission Planning Cycle August 31, 2022 Request for Proposed Transmission Needs Transource New York Response, <https://www.nyiso.com/documents/20142/34292084/2022-PPTN-Transource-Energy-LLC.pdf/2bec1fd8-a457-6f83-e353-302c0eb4a428>, at p. 9.

¹² Phase 2 Order at p. 10.

¹³ Phase 2 Order at p. 26.

¹⁴ Phase 2 Order at p. 28.

c. New York City

The NYISO’s 2022 Reliability Needs Assessment (“RNA”) determined that there is an urgent PPTN in New York City.¹⁵ The NYISO’s reliability analysis concluded that “[a]pproximately 6,300 MW of existing gas-fueled generation was identified as potentially at-risk under gas shortage conditions” (e.g., during winter peak conditions).¹⁶ This gas shortage condition would not meet statewide system reliability margins. Further, extreme conditions, such as heatwaves or storms, could result in transmission security deficiencies in New York City.¹⁷ Within New York City, the margins are very narrow for several hours of the mid-afternoon under expected weather conditions. Some generation affected by the New York Department of Environmental Conservation’s “Peaker Rule” may need to remain in operation if the forecasted demand in New York City were to increase by as little as 60 MW or if there are additional unplanned generator deactivations.¹⁸ Without emergency assistance from neighboring regions, there would not be sufficient resources to serve demand within New York City throughout the planning horizon.¹⁹

In its PPTN submission, Avangrid Networks, Inc. (“Avangrid”) concluded that a bulk transmission solution into New York City “would complement currently planned projects and reduce system-wide GHG emissions while improving system reliability and also reducing or eliminating dependence on local, high cost, high-emission resources in Zone J.”²⁰ AES agrees with Avangrid’s assessment and conclusion.

Furthermore, the City of New York’s (“City”) PPTN submission identified urgent transmission needs in New York City.²¹ The City cited the decreasing and small transmission security margin, as well.²² The City also noted the importance of transmission in fighting the effects of climate change.²³

Added support for a declaration of a PPTN in New York City can be found in Rise Light & Power, LLC’s (“Rise”) PPTN submission. Rise explained that despite the Champlain Hudson Power Express (“CHPE”) Project and Clean Path NY (“CPNY”) Project, there is still a great transmission

¹⁵ 2022 Reliability Needs Assessment, NYISO, <https://www.nyiso.com/documents/20142/2248793/2022-RNA-Report.pdf/b21bcb12-d57c-be8c-0392-dd10bb7c6259>

¹⁶ Id at pp 10, 70.

¹⁷ Id at p. 54.

¹⁸ Id at p. 54.

¹⁹ Id at p. 61.

²⁰ Comments of Avangrid Networks, Inc. on Public Policy Transmission Requirements for the 2022-2023 Transmission Planning Cycle. <https://www.nyiso.com/documents/20142/34292084/2022-PPTN-Avangrid-Networks.pdf/d53247f5-a10b-6ebe-cc37-796963b160f5> at p. 2.

²¹ NYISO Solicitation of Transmission Needs Driven by Public Policy Requirements, The City of New York. <https://www.nyiso.com/documents/20142/34292084/2022-PPTN-City-of-New-York.pdf/fc87b01f-19a9-7a82-8401-0341b5987206> .

²² Id. at pp. 3-5.

²³ Id.

capacity need that justifies the Commission declaring a PPTN for an additional transmission line from upstate into New York City.²⁴

For the foregoing reasons, AES respectfully requests that the Commission declare a PPTN within New York City.

IV. Conclusion

Achieving the CLCPA's goals will require a substantial expansion of the transmission system throughout New York State. The specific areas in which this expansion is needed have been extensively examined by the NYISO, an entity with specialized experience and expertise in transmission planning. The PPTN submissions by AES and others, as well as the Final Scoping Plan, provide additional evidence of the PPTNs discussed herein. The urgency of taking action is clear – the CLCPA mandates that 70% of the State's electricity in 2030 come from renewable sources. There are only seven years left to achieve this goal, and it could take most of that time to design, obtain siting permits, and construct major new transmission projects. AES applauds the Commission for the recent Phase 2 Order approving much needed near-term relief and argues that additional transmission solutions are needed. Accordingly, the Commission cannot delay identifying the transmission needs discussed herein as being driven by public policy requirements.

AES respectfully urges the Commission to immediately declare PPTNs in the North Country, Southern Tier and New York City and direct the NYISO to proceed expeditiously with the selection of solutions for these needs. In doing so, the Commission should direct the NYISO to select the most cost-effective, efficient, and forward-looking solutions and to consider non-transmission solutions equally with transmission solutions if they satisfy these parameters.

²⁴ Transmission Needs Driven by Public Policy Requirements for the 2022-2023 Transmission Planning Cycle, Rise Light & Power. <https://www.nyiso.com/documents/20142/34292084/2022-PPTN-Rise-Light-and-Power.pdf/0687de1a-236b-3738-47dc-26627a69d77c> at p. 1.