



February 21, 2023

Hon. Michelle L. Phillips Secretary Department of Public Service 3 Empire State Plaza Albany, NY 12223-1350

RE: Proposed Public Policy Transmission Needs Docket No. 22-E-0633

Dear Secretary Phillips,

On behalf of the Alliance for Clean Energy New York ("ACE NY") and the New York Offshore Wind Alliance ("NYOWA"), please accept these comments in response to the Public Service Commission's ("PSC") December 21, 2022 State Register Notice requesting comments on whether it should designate a Public Policy Transmission Need ("PPTN").

As described more fully below, ACE NY and NYOWA strongly recommend that a PPTN be designated for offshore wind ("OSW") in the downstate area. This will help bring forth transmission solutions for integrating the full amount of OSW into New York's grid that is necessary to achieve the Climate Leadership and Community Protection Act ("CLCPA") goals. Designating an offshore wind PPTN will de-risk overall project cost, deliverability and scheduling and generate a wide range of consumer, environmental and social benefits. PPTN designation should be carefully coordinated with the New York State Energy Research and Development Authority's ("NYSERDA") OSW procurement process, and transmission projects selected through the PPTN process should be made available to projects competing in future Offshore Wind Renewable Energy Certificate ("OREC") bid rounds.

A. New Transmission Investment to Support Offshore Wind Development is Driven by New York's Public Policy Mandates Under the Climate Leadership and Community Protection Act.

The CLCPA sets forth New York's ambitious requirement of 9 GW OSW by 2035. Accomplishment of the full CLCPA mandates will require growing amounts of offshore wind over this planning horizon. This is due to, among other factors, this resource's technical and economic potential, scale, high capacity factor, and proximity to New York's downstate load centers. Indeed, the Climate Action Council's Final Scoping Plan, laying out a recommended path for achieving the CLCPA targets, contemplate from 16-19 GW of offshore wind by 2050

under all scenarios.¹ Meeting these CLCPA targets through a massive OSW build-out will also require significant new investment in additional offshore and onshore grid infrastructure and constitutes a classic case of policy-driven transmission needs under the New York System Operator's ("NYISO") Open Access Transmission Tariff ("OATT").

This was most recently recognized in the 2020 PPTN Biennial Review. In its Order on the 2020 biennial Public Policy Transmission Planning Process ("PPTN Order"), the Public Service Commission concluded that the recently enacted CLCPA - mandating that a minimum of 70% of New York's energy supply be derived from renewable energy sources, and that of this, at least 9,000 MW of offshore wind be procured by 2035 - "squarely fits within the definition of a Public Policy Requirement." By extension, any incremental OSW capacity and concomitant transmission needed to meet the CLCPA's 2040 and 2050 targets similarly constitute public policy driven needs.

B. The Long Island PPTN is a Necessary but Not Sufficient Step to Integrate New York's Projected Need for Increasing Amounts of OSW Capacity.

In the most recent biennial PPTN cycle, the Commission concurred with the Long Island Power Authority (LIPA) and several other parties that New York's offshore wind procurements in satisfaction of the CLCPA targets were driving an "impending need for upgrades to onshore transmission facilities to assure that the offshore wind energy expected to be injected into New York City and Long Island can be distributed to the State at large." Accordingly, the Commission concluded that there was a pressing public policy and technical imperative for increasing the export capability of the interfaces among the LIPA and Con Edison territories (Zones K and J, respectively) and the rest of the State to "ensure the full output from at least 3,000 MW of offshore wind is deliverable from Long Island to the rest of the State."

On the basis of this finding, the NYISO issued a solicitation on August 12, 2021 seeking proposals to address the LI PPTN.⁵ The grid operator subsequently received eighteen separate PPTN project proposals, as well as one Other Public Policy Project,⁶ of which sixteen proposals and the Other Public Policy Project were deemed viable and sufficient.⁷ On September 21, 2022,

⁴ Id. at 22. The Commission also found a public policy need for the development of associated local transmission facilities in support of the new intertie capability. *See also* Final Scoping Plan at 244 ("The state should conduct further planning and pursue system upgrades on Long Island and in New York City to facilitate 9,000 MW of offshore wind.")

¹ Climate Action Council Final Scoping Plan at Table 13, p. 221, and Appendix G < https://climate.ny.gov/resources/scoping-plan/ > (hereinafter "Final Scoping Plan").

² Case No. 20-E-0497 and Case No.18-E-0623, Order Addressing Public Policy Requirements for Transmission Planning Purposes (March 19, 2021) at 21.

³ Id. at 20.

⁵ NYISO, *available at* < https://www.nyiso.com/documents/20142/22968753/Long-Island-Offshore-Wind-Export-Public-Policy-Transmission-Need-Project-Solicitation.pdf/51b8fdeb-1a66-2938-f116-38f1be486e0d> (August 12, 2021).

⁶ See https://www.nyiso.com/documents/20142/22968753/LI-PPTN-Project-Summary-Public-20211018.pdf/1b36c8b6-6df5-510e-44bc-a2c970d04390 for a listing of these projects.

⁷ See Long Island Offshore Wind Export Public Policy Transmission Need Viability and Sufficiency Assessment Report, (hereinafter "Viability and Sufficiency Assessment"), available at <

the Commission issued a notice seeking comment pursuant to the State Administrative Procedures Act (SAPA) as to whether the NYISO should proceed to select a solution to the LI PPTN.⁸

As demonstrated by the most recent NYISO System and Resource Outlook ("Outlook"), covering the period 2020-40, while the investment in the LI PPTN will ameliorate congestion, it is not a sufficiently large enough solution to address expected constraints on OSW generation constructed to meet the 2035 targets⁹ – let alone the OSW generation that must come on-line in response to the CLCPA's 2040 and 2050 imperatives, especially in downstate New York where onshore renewable potential alone cannot provide full decarbonization of the grid.

The Outlook "provides a comprehensive overview of potential resource development over the next 20 years in New York and identifies and quantifies the existing and pending constraints revealed throughout the New York transmission system." The Outlook looks at the plausible trajectory of renewable resource development, and examines its impact on system performance, most specifically around potential congestion, and associated curtailment. The Outlook offers several key findings bearing on OSW development and associated policy-driven transmission needs.

- The Outlook finds that the introduction of large amounts of renewable generation will exacerbate existing deliverability challenges, resulting in growing levels of resource curtailment. This disproportionately impacts new offshore wind development. As the report concludes, "Most of the curtailments are experienced by offshore wind projects connected to Long Island due to inadequate transmission capacity." 11
- Among the "most significant and urgent needs" that are driven by recent public policy mandates, the Outlook identifies the Long Island Public Policy Transmission Need, a tieline designed to increase the export capability of the interfaces among the LIPA and Con Edison territories (Zones K and J, respectively) and the rest of the State. The Outlook concludes that the selection of a viable and cost-effective solution pursuant to the ongoing solicitation would reduce congestion of OSW resources "significantly". 12
- While the Outlook concluded that the LI PPTN will mitigate congestion associated with already contracted renewables, the Outlook points to active discussions to increase the

3

https://www.nyiso.com/documents/20142/22968753/LI-OSW-Export-PPTN-Viability-Sufficiency-Assessment Report.pdf/0cb56d37-5e5a-de47-1f59-b49a8a00a5aa>, at 20.

⁸ New York State Register, September 21, 2022, at 7. The Open Access Transmission Tariff provisions governing consideration of PPTN projects explicitly reserve to the Commission the discretion to determine at any juncture up to NYISO board resource selection that a PPTN no longer exists, or that a modified PPTN exists such that the NYISO should suspend consideration and selection of the most cost-effective solution to meeting the identified need. OATT, §31.4.6.7.3.

⁹ NYOWA would note that NYSERDA's third OSW solicitation indicates that it may procure up to 1,330 MW of generation interconnecting in Zone K. ORECRFP22-1 at §2.1.7. Assuming this amount of generation into Zone K is fully contracted, this would put the total amount of capacity well above the 3,000 MW threshold.

¹⁰ NYISO, 2020-2040 System & Resource Outlook (Draft Report), available at <

https://www.nyiso.com/documents/20142/32663964/2021-

²⁰⁴⁰_System_Resource_Outlook_Report_DRAFT_v15_ESPWG_Clean.pdf/99fb4cbf-ed93-f32e-9acf-ecb6a0cf484I>, issued August 8, 2022, at 4.

¹¹ Outlook at 6.

¹² Outlook at 18.

OSW procurement to up to $20~{\rm GW^{13}}$ as potentially necessitating additional transmission to ensure deliverability.

Indeed, should the LI PPTN process ultimately result in the selection of a viable and cost-effective solution to the bottling of offshore wind resources interconnecting to Zone K, this is a necessary but not sufficient step. As the Outlook recognizes, "Even with the potential benefits provided by these bulk system projects, several renewable generation pockets across the state are projected to persist, which could constrain output from renewable resources, including production from offshore wind." ¹⁴

C. An OSW PPTN Should be Responsive to the Scope and Timing of the Integration Challenge.

ACE NY and NYOWA contend that the 2022 PPTN review cycle should prioritize new transmission investment to facilitate the proposed integration of approximately 6,000 MW of fully deliverable offshore wind into and out of Zones J and K. This is consistent with recent Commission findings highlighting the urgency and magnitude of the need. Given potential barriers to the integration of offshore wind and the threat to the achievement of the CLCPA's OSW targets, the Commission has recently concluded that further action is warranted: "Because of the need to act expeditiously to meet CLCPA mandates, and the timeframes involved in both transmission and offshore wind development, it is incumbent upon the Commission to address the feasibility challenges as soon as practicable." ¹⁵

Specifically, the Commission identified "a potential solution" in the form of the Con Edison Brooklyn Clean Energy Hub ("BCEH"). The BCEH was first advanced by Con Edison in its Utility Report filed pursuant to the Renewable Growth Act, and contemplates *inter alia*, the construction of a new, dedicated substation in the Vinegar Hill section of Brooklyn for the interconnection of up to 6,000 MW of offshore wind. In its OSW Order, the Commission invited the company to flesh out this project concept.

¹⁵ Case 20-E-0197 et. al., *Order on Power Grid Study Recommendations* (issued and effective January 20, 2022) (hereinafter "OSW Order") at 23. The OSW Order reviewed in detail the findings of the 2021 Power Grid Study ("Study") and accompanying DPS Staff and NYSERDA-led analysis, and recommendation set. The Study concluded that the integration of 6,000 MW of offshore wind into Zone J (NYC), and 3,000 MW injection into Zone K (Long Island), respectively, would be "achievable" within the current system. OSW Order at 20. However, the Study was predicated on optimistic baseline assumptions, which the Commission itself has more recently recognized as "questionable". OSW Order at 20-22.

¹³ The Outlook references the Climate Action Council's Draft Scoping Plan to support this proposition. Outlook at 18

¹⁴ Outlook at 32.

¹⁷ See 20-E-0197, Order on Local Transmission and Distribution Planning Process and Phase 2 Project Proposals (issued September 9, 2021) (Phase 2 Order).

¹⁸ Phase 2 Order, p. 2 (citing Utility Transmission and Distribution Investment Working Group Report (filed November 2, 2020)).

On April 15, 2022, Con Edison duly filed a petition further describing the BCEH, its potential benefits and costs, and seeking cost recovery. Over the course of several months, an extensive record was developed on the potential advantages and challenges of the BCEH, and alternatives thereto, as a point of interconnection for future offshore wind projects. However, on December 13, 2022, Con Edison made a supplemental filing shifting the primary justification and purpose of the BCEH from one first and foremost devoted to the integration of offshore wind to one predicated on enhancing reliability in the face of accelerating load growth. According to the supplemental filing, the project has been redesigned by Con Edison to meet reliability needs forecast for the summer of 2028. While not abandoning the offshore wind-related purpose of the BCEH, "Con Edison plans to make a filing, no later than one year prior to the project's inservice date, to inform the Commission whether offshore wind or potentially other clean energy project developers have expressed interest in connecting at the Hub." On the H

While the BCEH may not ultimately be the anticipated "silver bullet" for OSW integration with the downstate grid, the urgency expressed by the Commission is not misplaced. The development cycle for major system upgrades, particularly for long-range bulk transmission solutions, is notoriously lengthy and perilous. It can take up to a decade or more to site, permit and construct bulk transmission facilities, meaning that PPTN projects identified in the current cycle will be available to serve projects slated to achieve COD in the early to mid 2030 timeframe at the earliest. The Commission should act promptly to designate a PPTN, and work with the NYISO, Con Edison, and other stakeholders to identify opportunities to streamline the solicitation process.

Nor should the concept of an OSW Hub be dismissed. While the challenges of bringing power to the BCEH have been well documented by NYOWA and other parties,²¹ the broader concept of a single, or multiple, OSW Hub(s) has merit. The PPTN process provides a vehicle for Con Edison and other proponents to bring this concept forward, including for alternative locations (e.g., Staten Island, southern Brooklyn) using a competitive process to reduce the overall cost to ratepayers.

D. An OSW PPTN May Yield Significant Consumer, Environmental and Electric System Benefits.

Creating a more certain, cost-effective, and defined route to market for offshore wind production may have significant and wide-ranging benefits for ratepayers, industry participants and New Yorkers at large. ²²

¹⁹Case 20-E-0197, Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Petition of Consolidated Edison Company of New York, Inc. for Approval to Recover Costs of Brooklyn Clean Energy Hub, filed April 15, 2022.

²⁰ Consolidated Edison Company Petition Supplemental Petition to Propose and Alternate Brooklyn Clean Energy Hub at 2.

²¹ See Section D.3., infra.

²² For a comprehensive summary of recent studies quantifying the benefits of long-range transmission planning. See The Brattle Group, *The Benefits and Urgency of Planned Offshore Transmission: Reducing the Cost of and Barriers to Achieving U.S. Clean Energy Goals*, February 2023.

1. Ratepayer Benefits

Well-planned grid investments aimed at the coordinated integration of OSW into and out of Zones J and K will likely generate significant consumer savings. The precise extent of the savings will depend upon the scope, magnitude, and timing of the PPTN, but will generally derive from the following value sources.

First, "transmission first" development specifically aimed at the cost-effective integration of offshore wind will likely mitigate risk premiums associated with transmission interconnection uncertainty within developers' OREC bids. These risk premiums are necessitated by the uncertainty surrounding the developers' ultimate cost obligation and Local Transmission Owners' construction timeframes for system upgrades revealed through interconnection cost studies undertaken by the distribution utility and the NYISO. Because the construction costs estimates are typically only solidified by the distribution utility and NYISO with a larger unknown around the number of participants in the Class Year Facilities Study accepting their cost allocations after OREC bids are submitted, developers must hedge against the possibility of higher than anticipated costs.²³ Lower project risk for OSW developers will translate into New York ratepayer savings in a competitive solicitation environment.

Second, planned investment in grid system upgrades to accommodate offshore wind generation connecting to Zones J and K could avoid duplicative expenditures that would otherwise be made by individual developers and that would be passed on to ratepayers through OREC bid prices. Given the disconnect between the NYISO interconnection process and OREC bid timings, multiple developers may maintain multiple interconnection requests with at-risk capital based on the assumption of certain grid upgrades being required for their individual projects without knowing what other developers are also seeking to interconnect in the same area, or at the same POI. It should be noted that transmission interconnection does not only depend on offshore wind projects alone, so each offshore wind developer will need to factor in a risk premium in their ORECs for offshore wind projects potentially getting a large deliverability upgrade cost allocation or NYISO study delays for much smaller interconnection requests within any POI's vicinity.

A PPTN could result in greater efficiencies through optimizing project sizing based on agreed upon increments in support of efforts to meet decarbonization objectives, and through scale economies that may not be available if system upgrades are made on a piecemeal, project-specific basis.

• If a PPTN were to focus on onshore upgrades for OSW integration purposes only, it could facilitate the identification of POIs that are most capable of accepting large injections of new OSW generation while minimizing interconnection costs (e.g., grid system upgrades and attachment facilities). This includes potentially developing new

_

²³ The third OSW solicitation includes a "savings sharing" mechanism that returns much of the value to ratepayers any lower realized interconnection costs; and an optional "cost sharing" arrangement whereby the developers and consumers share an elected portion of the downside risks of interconnection costs exceeding benchmark values within a certain uncertainty band; and the upside benefits of interconnection costs being lower than benchmark values. See ORECRFP22-1 at §4.2.1.

POIs that are suitable for the connection of offshore wind while also being strategically developed to enhance system resiliency.

• If a PPTN had an expanded scope to include offshore "wet-transmission" investment as well, a more coordinated transmission planning effort could be undertaken that enables access to strategic onshore POIs, again at a more economical cost, rather than the typically isolated nature in which each OSW developer tries to identify the route to its preferred POI. As the New Jersey Board of Public Utilities recently found in undertaking its variant of the FERC Order 1000 mechanism for identifying public policy driven transmission needs under the so-called State Agreement Approach ("SAA"), "a proactively planned transmission system to accommodate new OSW generation saves ratepayers billions of dollars, compared to the costs of upgrading the transmission grid on a piecemeal basis." In point of fact, the BPU estimated that this proactive planning effort, aimed at facilitating the interconnection of 6.4 GW of OSW, yielded approximately \$900 million in ratepayer savings, or 13% of transmission related costs. 25

Depending upon the ultimate scope of the PPTN, a similar order of magnitude in savings can be expected should New York pursue transmission first development. Apart from a reduced level of investment in cable and other physical plant, project "soft costs" such as geophysical and geotechnical ("G&G") analysis and project permitting could be reduced on an aggregate basis if the scope of any PPTN included the development of offshore open-access transmission that minimizes the OSW developers' scopes of export corridor surveys. G&G survey costs are significant and multiple routes are generally surveyed to provide some optionality. Permitting should be simpler and require less resources and, in some cases, fewer permits. There may also be a better opportunity for synergies between projects, saving from bulk orders or shared construction or infrastructure.

Third, as the NYISO Outlook documents, absent further development in transmission to support planned OSW development, there remains a heightened deliverability risk resulting in project curtailment and inefficient system dispatch. Prudence dictates that this risk be addressed and accounted for by developers in their OREC bid prices. Correspondingly, timely grid investments to provide sufficient incremental headroom for OSW will shrink this risk premium, redounding to the benefit of New York ratepayers.

Fourth, a PPTN will likely elicit a market response from experienced developers of offshore and overland transmission. The Commission and NYISO have used competitive procurement in past PPTN's to effect in identifying least cost, high value solutions. ACE NY/NYOWA would note that, in the context of the Commission's consideration of the BCEH, several developers of transmission have stepped forward with proposed alternatives for accommodating the integration of varying amounts of OSW into Zone J. These concepts were presented at a September 28,

_

²⁴ BPU Docket No. QO20100630, *Order on the State Agreement Approach SAA Proposals*, issued and effective October 26, 2022 ("SAA Order"), at 16.

²⁵ Id. at 2.

2022, technical conference hosted by NYSERDA.²⁶ Declaration of a PPTN downstate will likely elicit additional proposals.

2. Environmental and Community Benefits

The siting of offshore wind facilities requires the development of transmission corridors, landfall locations, offshore and onshore substations, converter stations and associated infrastructure. The environmental, technical and stakeholder challenges of the development of these rights-of-way are thoroughly documented in the NYSERDA-led *Cable Corridor Constraint Assessment*.²⁷ Forward planning can maximize the beneficial use of identified corridors and, correspondingly, minimize the community and environmental impacts of meeting specified OSW deployment targets.²⁸ Studies have demonstrated that advanced planning and coordination across multiple offshore wind projects can reduce the total number of cable miles, landfall crossings, and corridors that must be developed.²⁹ This not only provides opportunities for cost savings, as noted above, it also limits development within environmentally sensitive habitat and/or environmental justice communities that could trigger public opposition or require extensive mitigation.

Uncoordinated onshore transmission for OSW might lead to developers choosing injection points whose onshore transmission corridors are cumulatively disruptive to local communities and the environment. Coordinated onshore transmission development, however, could minimize impacts of OSW to local communities that host transmission facilities. For example, multiple projects could use a single, optimal landfall location for cables, and conduct all major onshore construction works in a coordinated fashion, minimizing repeated road closures or disruptions at preferred landfall locations.

A coordinated transmission effort may also realize benefits to the owner/operator of existing utilities in OSW projects' onshore transmission corridors. If a single route were to be capable of housing multiple projects, the existing utilities will only be relocated once rather than multiple times based on each developer's independent dry-transmission routes.

Furthermore, coordinated transmission in constrained onshore or offshore corridors like on routes off barrier islands, or through The Narrows, could allow the state to maximize the amount of capacity utilizing the favorable routes and corridors. A single project, thinking only of its goals, may occupy a scarce route or landfall, onshore, or offshore route without maximizing its benefit to New York's goals at-large.

²⁶ NYSERDA, *New York Offshore Wind Public Technical Webinar on Proposed Interconnection Projects*, September 28, 2022, available for viewing at https://www.youtube.com/watch?v=xEt-GcDJ6-8.

²⁷ NYSERDA et.al., *Draft Offshore Wind Cable Corridor Constraints Assessment*, < https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000auUd0EAE> (undated) (hereinafter "Cable Assessment").

²⁸ The NJBPU cited similar factors in selecting the Larabee Tri-Collector Solution" as the awarded SAA project noting, among other things, that the project "provides the least environmental, permitting, and community impact risks. These risks are critical in the evaluation as they can pose significant cost and delay overruns, as well as jeopardize the project altogether. "SAA Order at 63.

²⁹ See, e.g., National Grid ESO, Cost-Benefit Analysis of Offshore Transmission Network Designs, 2020.

3. Optimizing Use of Finite Transmission Routes

The NYSERDA-led *Cable Corridor Constraints Assessment* ("Cable Assessment") draft report comprehensively documents the challenges of siting transmission corridors for OSW in the complex and dynamic near-shore and onshore downstate New York environment.³⁰ The Cable Assessment identified significant routing constraints for OSW generation connections in New York City, including navigation, existing infrastructure (e.g., piers and bulkheads), and physical constraints such as the limited distance between shorelines, especially in The Narrows.³¹ Similarly, the narrow portion of the East River in the vicinity of the Manhattan Bridge and Brooklyn Bridge presents a significant pinch point.³²

Overland approaches are no less challenging in the densely populated urban environment characterizing the entirety of Zone J. Land use, including the density of residential areas and the high concentration of environmental justice and disadvantaged communities represents some of the greatest constraints to cable routing. Other significant constraints include but are not limited to limited space in crowded roads, competing utilities and infrastructure, limited land availability, New York City permitting complexity.³³

In short, the ability to site transmission corridors will not be unbounded. From the standpoint of maximizing offshore wind development, critical approach routes such as The Narrows need to be protected and optimized. Designating a PPTN to facilitate the integration of offshore wind is the most effective means of realizing efficiencies across multiple projects. Similarly, PPTN planning that takes into account future upgrades (e.g., uprating transmission voltage or adding additional lines) could help maximize the efficient use of limited and constrained transmission corridors.

4. Timely Realization of CLCPA Goals and Associated Benefits

As the NYISO Outlook reveals, the timely development of additional transmission headroom in the downstate region is a lynchpin in unbottling additional OSW and meeting the state's ambitious CLCPA goals. As well-documented by NYSERDA, apart from its central role in keeping New York State on a downward carbon emission trajectory achieving the state's 9 GW target will have significant economic development and job benefits. New York's five contracted offshore wind projects will support 6,800 jobs statewide and yield over \$12 billion in economic activity.³⁴ These numbers will naturally grow as New York expands its portfolio under ORECRFP22-1.

³⁰ WSP Consulting, Draft Offshore Wind Cable Corridor Constraints Assessment, prepared for NYSERDA, https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00P8z000001shD0EAI, October 2022.

³¹ For a comprehensive taxonomy of the technical, environmental, and social constraints of undersea and land-based constraints, see Cable Assessment *at* Table 2-1 and Table 2-3, respectively.

³² Id. at 2-15.

³³ Id. at 2-15.

³⁴ https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/NY-Offshore-Wind-Projects

E. The Commission Should Work with the NYISO to Define the PPTN Scope.

A PPTN for downstate OSW should be informed by a rigorous analysis, jointly specified by the PSC and NYISO, provisionally identifying optimal solutions for integrating in the range of 6,000 MW or more of offshore wind generation. As part of this analysis, an update to the 2021 Power Grid Study should be performed to screen potential POIs capable of supporting New York's offshore wind target. As noted previously, the transmission topology has changed since the Power Grid Study, such that it may no longer be feasible for 6,000 MW to inject into Zone J. Similarly, additional POIs not studied in the 2021 Power Grid Study (e.g., Staten Island) should be included in the updated analysis. Additionally, further exploration is required to determine if new transmission lines should be assumed one-way or two-way flows to avoid/minimize curtailment. Given this, and the pending award of the LI PPTN, the study should be renewed to capture the latest system conditions.

The preliminary analysis grounding the New Jersey SAA process is instructive. As described in the SAA Order:

PJM's Phase 1 analysis was based on standard linear first contingency transfer capability analyses using 2025 RTEP base cases for summer, winter, and light load conditions...PJM's Phase 1 results included desktop-level cost estimates for onshore Cable Routes from Shore Crossings to the POIs studied, using generic cost-per-mile values for overhead lines and underground cables. PJM also performed a single generator deliverability analysis to determine required transmission system upgrades and their costs. PJM's Phase 1 results identified a suite of potential POIs capable of enabling New Jersey's 7,500 MW goal.

In order to narrow the identified POIs into a single default case necessary for a potential SAA solicitation, Staff selected three scenarios of multiple POIs, deemed preferred from PJM's Phase 1 analysis, for further study. These Phase 2 studies provided sufficient information for Staff to recommend that the Board initiate the SAA process, and enabled identification of violations that would be necessary for PJM to initiate a competitive transmission solicitation under its approved RTEP processes.³⁵

The Commission should consider alternative configurations and PPTN scope, potentially including: 1) necessary upgrades to the onshore local and bulk transmission system; 2) creation of onshore "POI hubs", including associated real estate for converter stations, including duct banks and vaults; and 3) offshore hubs consisting of collection points near BOEM lease areas and corresponding HVDC system to bring power to onshore POIs. An advantage of a more comprehensive PPTN scope is that it can simultaneously optimize the broad range of reliability, economic, and public policy benefits that might otherwise be lost under a more siloed approach. As we discuss in the following section, this upfront refinement should not add to the overall timeline needed to complete the PPTN cycle.

٠

³⁵ SAA Order at 20-1.

Should the Commission opt for the more expansive PPTN configuration, care should be taken to ensure that location of the offshore converter station does not unfairly advantage certain leaseholders over others. This concern could be mitigated by siting a converter station in New York jurisdictional waters or the identification of new onshore locations with sufficient space for a converter station. Consideration should be given to the number of additional cable miles potentially required to implement these solutions.

F. The Coordination and Sequencing of the PPTN with Ongoing OREC Solicitations is Critical.

As a practical matter, a Commission designation of an offshore wind PPTN through the instant proceeding, and the subsequent RFP design, issuance, and project selection, will likely not be completed until well after – many months or perhaps years after - the current NYSERDA ORECRFP22-1 is concluded.³⁶ As a matter of competitive fairness, and the sustained and orderly development of an OSW market in New York State, ACE NY/NYOWA strongly urge the Commission to refrain from mandating the *retrospective application of* the PPTN to OSW projects bidding into OREC solicitations to date. Projects bidding into the NYSERDA ORECRFP22-1 will be evaluated on the basis of such factors as price, constructability, environmental performance, and reliability impacts, which are all implicated by the developers' respective choice of offshore transmission routes and selected POIs. To override developers' market decisions, and concomitantly, the basis on which the projects were evaluated, would erode confidence in the NYSERDA procurement process. That said, ACE NY/NYOWA would not oppose developers *voluntarily* agreeing to shift interconnection plans post-award if permitted by NYSERDA and supported by the NYISO.

While the OREC Purchase and Sale Agreement does allow for post-award negotiations for an alternative transmission solution,³⁷ ACE NY/NYOWA would urge the involved state agencies to exercise this option judiciously. Developers will need to crystallize their project design envelope early on so they may initiate federal and state permitting, and procurement processes and timely meet their contractual commercial operation dates ("COD"). In the event that an alternative solution is viable and cost effective, OSW developers would be open to such a change in course. However, revising a major project element such as the transmission solution post-award could have significant knock-on effects across all aspects of the project.

Going forward, it is vital that New York institutes a more streamlined and coordinated approach to the development of transmission solutions to support the state's OSW goals. At a minimum, this would mean that the selection of future project(s) through an OSW

_

³⁶ NYSERDA's current timetable calls for the notification of award to winning bidders in Q1 2023; and execution of OREC PSA's in Q2 2023. By contrast, if history is any guide, the PPTN process can take two years or more to result in the selection of a preferred transmission provider. For example, the current Long Island PPTN was declared in March, 2021 and, while an RFP and evaluation have been completed, the process has yet to be concluded.

³⁷ See, e.g., OREC RFP22-1 §4.2.1. (contemplating post-award adjustments to POI); Offshore Wind Renewable Energy Certificate Purchase and Sale Agreement, §5.04 (a), which states in pertinent part: "The Seller shall make commercially reasonable efforts to cause Interconnection Net Savings to occur, including but not limited to changing its Injection Point where appropriate."

PPTN should be made prior to the release of any subsequent OREC solicitation. Doing so would give developers greater confidence in the availability of transmission, and greater certainty around project timelines and deliverability. Significant costs associated with project execution risks would be removed from bids, as greater certainty over system headroom and paths to interconnection are known when bids are submitted.

Improved coordination of the PPTN and OREC solicitation processes can significantly de-risk future OSW construction. A state commitment to a "transmission first" strategy will limit developers' exposure to unanticipated costs for local and bulk transmission system upgrades as these cost estimates are refined and provide OSW developers greater confidence in their construction timelines and energy deliverability. This lowers the risk of project attrition and provides policy makers with greater confidence that the projected benefits of the New York OSW program will be realized.

Awarding projects through a PPTN cycle prior to subsequent OREC solicitations will require a streamlining of the current PPTN approach. Given the long lead time of OSW and the urgency of the climate crisis, ACE NY and NYOWA believe that this "rethinking" of the PPTN cycle is critical to the success of the industry in New York. Without it, projects will face an increasingly challenging and uncertainty interconnection landscape which will only compound the problem in the years to come.³⁸

Respectfully submitted,

That Zalana

Fred Zalcman

On behalf of ACE NY and NYOWA

Anne Reynolds
Executive Director
Alliance for Clean Energy New York
119 Washington Street
Suite 103
Albany NY 12210
(518) 432-1405
areynolds@aceny.org

Fred Zalcman
Director
New York Offshore Wind Alliance
119 Washington Street
Suite 103
Albany NY 12210
(518) 432-1405
fzalcman@aceny.org

³⁸ ACE NY and NYOWA will be offering recommendations for streamlining the PPTN process in forthcoming comments responding to the PSC's recent call for comments on implementation of the Accelerated Renewable Growth and Community Benefits Act, due February 28, 2023.