

## **Comments of PSEG Renewables Transmission and Ørsted N.A. (Coastal Wind Link) to PJM TEAC Slides**

The State of New Jersey has set ambitious climate change and clean energy goals, including a 7.5 GW by 2035 offshore wind target. The state has requested, and is now working with PJM to evaluate, onshore and offshore transmission investments that will further PJM's mission of industry-leading system reliability and unlock this clean energy future. Coastal Wind Link is enthusiastic about the opportunity to make this vision reality.

We appreciate the opportunity to provide feedback regarding the July 18<sup>th</sup> PJM SAA TEAC presentation<sup>1</sup>. We are concerned that the PJM analysis contains factual and analytical errors that may lead to flawed conclusions. With so much at stake for New Jersey's clean energy goals, we urge that PJM's evaluation fully consider the important and multi-faceted factors needed for this significant decision. Specifically, we would like to highlight the following specific comments on the TEAC presentation and analysis. Greater detail is provided below.

- I. **PJM's constructability risk assessment makes it difficult to understand project assessments.** PJM has presented a color-coded chart without clear explanation of the grading scale and how the assessments were derived.
- II. **PJM's constructability analysis shows little differentiation among bidders.** For example, multiple bidders are marked "medium" risk, presumably because of the need for BOEM permits. However, in the case of Coastal Wind Link, our project design ensures that the BOEM permitting process for the transmission project is kept separate from permitting for offshore wind farms, thus mitigating the level of risk for our project relative to other bidders.
- III. **PJM's constructability analysis seemingly considers only a limited set of potential risks and reflects errors and omissions in its assessment of Coastal Wind Link's proposal.** For example, it is not apparent that the analysis considers risks associated with substation construction at the New Jersey shore. The analysis also states that Coastal Wind Link has Green Acres risk, although the proposals are routed to avoid Green Acres properties.
- IV. **PJM's analysis does not clearly identify bidder experience and prior track record as differentiators.** This is critical because depth of experience and prior successes are key for mitigating the risks associated with complex infrastructure projects. Moreover, PJM's competitive transmission Manual 14F requires that it consider experience as a factor in its analysis.
- V. **PJM's financial analysis does not reflect an apples-to-apples cost comparison.** We are concerned that, unlike Coastal Wind Link, several bidders

---

<sup>1</sup> As part of the ongoing State Agreement Approach (SAA) competitive transmission solicitation process, on July 18<sup>th</sup>, 2022 PJM publicly reviewed with stakeholders the analysis it has prepared to date of the various submitted proposals. PJM's analysis addressed the following categories: reliability, economic/PROMOD analysis, constructability and financial (which included comparisons of both project cost and cost containment provisions). In its presentation, PJM stated that it "will consider feedback and update findings where appropriate ...." These comments provide that feedback.

have heavily redacted the cost of their proposals. We are also concerned that PJM has misunderstood Coastal Wind Link's cost cap proposal and that PJM's financial analysis lacks a true apples-to-apples cost comparison of the proposals. In addition, the analysis does not recognize that Coastal Wind Link has cost caps on all seven of its proposals.

**VI. PJM's analysis does not appear to consider and evaluate other key elements of the proposals, including schedule guarantees and reliability and resilience benefits of Option 3 proposals.** Coastal Wind Link has a true schedule guarantee

In addition, Coastal Wind Link offers a future-proofed meshed grid design submitted as an Option 3 solution that provides unique reliability and resilience benefits.

To provide a more transparent, complete and accurate picture of the various proposals and their ability to meet New Jersey's ambitious goals, Coastal Wind Link first requests that PJM incorporate permitting and construction experience as a criterion in the constructability risk analysis. Further, Coastal Wind Link urges that PJM provide an "Option 3" analysis that compares the various Option 3 proposals and ranks them from a risks and benefits perspective. We request that PJM provide additional public information on the bidders' approaches to cost caps, schedule, and schedule guarantees as is required by PJM's competitive transmission Manual 14F. We also request that PJM correct the errors identified herein in its analysis of the Coastal Wind Link proposals and fully explain the rating scale and basis for its constructability risk assessment.

Coastal Wind Link stands ready to provide PJM with any additional information or answer any clarifying questions to correct specific errors and facilitate a full evaluation of our proposals.

Please see additional detail below on each of these points.

**I. PJM's constructability risk assessment makes it difficult to understand project assessments.**

The TEAC presentation does not make clear how PJM has assessed constructability risk for individual proposals and how it has in turn graded one proposal vs. another - reference slides 37 and 38 of the TEAC slide deck. The criteria PJM and its consultants have used are not defined and there is no explanation of how such criteria are applied across the proposals. For example, slide 37 includes environmental risk assessments for all of the Option 1b/2 proposals. The chart on the slide has color coding to represent the risk evaluation and summarily references a few potential illustrative risks, such as whether the proposal requires BOEM permits, whether there are railroad crossings and whether there are Green Acres properties. This level of information does not provide sufficient clarity on the actual constructability differences between proposals, and does not provide sufficient transparency and confidence that the risks have been adequately captured. We are surprised that Coastal Wind Link is characterized as "medium" risk

across the board, and we are concerned that our proposals have not been adequately understood and evaluated.

## **II. PJM's constructability analysis shows little differentiation among bidders.**

As noted, on Slide 37, most of the proposals – including those of Coastal Wind Link - are evaluated as “medium” risk, largely because BOEM permits will be required. However, there is no differentiation between the proposals with respect to this risk or any evaluation of how a bidder may have mitigated this risk. Coastal Wind Link designed its offshore platforms with universal access to *facilitate* the permitting process and ensure that the BOEM process for transmission projects is kept separate and distinct from the permitting for offshore wind generation farms, thereby allowing for a more timely and focused permitting review by BOEM. In addition, Coastal Wind Link has far more BOEM permitting experience than any other SAA bidder, most of whom have none at all. Yet, when one looks at the PJM chart, one sees “medium” risk all across the vertical axis of the chart. In other words, PJM assigned a “medium” risk for offshore permitting to each and every bidder just because a BOEM permit was needed. Such an analysis does not provide relevant information to the state as it evaluates the relative permitting risks of the various proposals.

Another example pertains to its analysis of railroad crossings. PJM identified the need for railroad Rights-of-Way (ROW) as a potential concern for Coastal Wind Link. Yet, PJM does not explain that there is a difference between crossing a railroad ROW – which PSEG has done hundreds of times successfully in constructing transmission projects – and building a line parallel to a railroad ROW.<sup>2</sup> Railroad crossings are significantly simpler and less risky than parallel construction in the railroad ROW. In addition, PJM does not reference in its analysis that virtually all other bidders will encounter multiple railroad crossings just like Coastal Wind Link.

Further, PJM's analysis does not reflect any of the risk mitigation steps Coastal Wind Link has incorporated into its proposals. For example, the project's onshore underground transmission route largely uses existing ROW and city streets to minimize disturbances. One of the key features of the Coastal Wind Link proposals is the redevelopment of the Sewaren generating station, which – because it is an already-developed site – has no Green Acres or wetlands impacts. Moreover, PJM seemingly has not placed appropriate value on Coastal Wind Link's extensive site control for all proposed landings and interconnect points.

---

<sup>2</sup> The Coastal Wind Link proposals do not build along a railroad ROW but other bidders' proposals do entail building along a railroad ROW.

It does not appear that PJM performed an in-depth analysis of site control. This is a key factor that deserves fulsome treatment in the selection decision.

**III. PJM’s constructability analysis seemingly considers only a limited set of potential risks and reflects errors and omissions in its assessment of Coastal Wind Link’s proposal.**

PJM’s constructability analysis focuses on a few discrete permitting risks – Green Acres, railroad crossings, need for BOEM permits – while also seemingly ignoring all other risks. One of the bidders contemplates building a new substation on the Jersey Shore near Sea Girt. Two other proposals contemplate landing at Bay Head and Point Pleasant even though stakeholders have expressed significant concern about the ability to obtain municipal approvals at those locations. The need to obtain railroad crossings – which are very routine for a company like PSEG – is not equivalent to the type of risk and challenge a developer will face in siting a substation project on the New Jersey coastline or landing in a contested area. Yet, the recognition of this differentiation is not apparent in the analysis.

PJM’s analysis assigns Coastal Wind Link Green Acres “risk.” However, the Coastal Wind Link proposal was specifically routed to avoid Green Acres properties. It appears that PJM made generalized assumptions that most of the proposals will involve Green Acres properties and then assigned a medium risk designation to those proposals. In evaluating constructability risk, PJM lumped all seven Coastal Wind Link proposals together and assigned all of them Green Acres, railroad crossing and BOEM permitting risk without differentiating the actual degree of risk between the individual proposals. Slide 36 states that a landing point at Sewaren is still “under negotiation” and has not yet been secured. That is incorrect. Coastal Wind Link has in fact secured a property that will provide a landing point, as explained in our March 28<sup>th</sup> comments to the BPU and shared with PJM on March 29<sup>th</sup>.

**IV. PJM’s analysis does not clearly identify bidder experience and prior track record as differentiators.**

We are concerned that the constructability analysis does not identify permitting and construction experience as a differentiator. Ørsted and PSEG have significantly more experience with all aspects of these projects than any of the other bidders. Ørsted has developed more than 28 offshore windfarms and 17 transmission systems. PSEG has constructed over 1,000 circuit miles of transmission in New Jersey over the past 15 years, owns and operates over 2,044 miles of transmission lines (including over 350 miles of underground transmission) and has been recognized as the most reliable utility in the Mid-Atlantic for 20 years in a row. PSEG has extensive permitting experience and has been recognized for its ability to build through environmentally sensitive areas, work collaboratively with relevant stakeholders and mitigate environmental disturbances. As the National Park Service stated when PSE&G worked closely with it to permit the Susquehanna-Roseland transmission line through the

Delaware Water Gap National Recreation Area, “If you have to have somebody building a power line in your backyard, these folks (PSE&G) are great to work with.”

Similarly, Ørsted has successfully received a final approved BOEM Construction and Operations Plan (COP) for its Southfork Wind project, a combined offshore wind generation and transmission project, and expects COP approval for three additional projects by the end of 2023. The combined total for all other bidders in this SAA process is one permit application in process for one bidder.

While PJM has identified Coastal Wind Link’s use of a 275 kV system as a “medium” engineering/construction risk, Ørsted has extensive and differentiated experience designing and building a 275 kV system. That fact should flip the “medium” risk designation to a “low” risk designation rather than simply broadly assigning a “medium” risk to the use of 275 kV cable.<sup>3</sup>

PJM’s competitive transmission manual – Manual 14F, Section 8.1.4 – references “company experience and capability” as a factor that PJM will evaluate in its selection process so that PJM can “ensure that the proposing entity possesses the ability to design, construct, own, operate and maintain the proposed solution.” This factor – experience - is not discussed at all in PJM’s analysis. The reality is that several SAA bidders have not engineered, designed, permitted and/or constructed a single transmission project in either the PJM territory or New Jersey, and many bidders have no offshore development – construction or operating - experience. One other bidder has constructed only one transmission project in PJM, and that project experienced a prolonged 1/3 capacity de-rate only months after being placed into service. Another bidder claimed experience on multiple undersea cable projects only to be called out by the actual development party as misrepresenting the bidder’s association with those projects.<sup>4</sup> All this information is highly relevant in assessing constructability risk. We urge PJM to consider this fully in its analysis by attaching weight to experience, as is required by Manual 14F, and then clarify how experience has factored into its risk analysis.

## **V. PJM’s financial analysis does not reflect an apples-to-apples cost comparison.**

We find several critical flaws in the financial analysis PJM presents in the TEAC slides. As a preliminary matter, it is difficult for Coastal Wind Link to evaluate the accuracy of PJM’s analysis since, unlike Coastal Wind Link, many bidders heavily redacted their

---

<sup>3</sup> Similarly, PJM assigns a “medium” risk to Coastal Wind Link’s contemplated use of a 400 kV HVDC system.

These items are not mentioned anywhere in PJM’s analysis or risk assessment and we believe are important differentiators between Coastal Wind Link and the other bidders.

<sup>4</sup> See Comments of PowerBridge, LLC, BPU Docket No. QO20100630, April 27, 2022, at 2.

proposals – particularly their cost and cost cap information - at the beginning of the window process. PJM permitted this redaction to occur even though Section 6.2 of PJM’s Manual 14F states that “cost and schedule details” and “cost containment information” “should not be redacted.” That being said, we have identified several flaws and mistakes based on the public information. First, PJM depicts larger projects as more expensive than smaller projects without showing further analysis or differentiation. Second, and importantly, PJM has evaluated the Net Present Value revenue requirements of the various proposals without considering project cost caps. Rather than providing a base cost, Coastal Wind Link provided cost estimates that reflected its cost caps, representing a cost number that incorporates escalation, foreign exchange rates using a forward-looking curve, and the reasonable construction risks the project could expect to incur and still deliver at or below that number. Other bidders appeared to provide a “base” cost estimate that is ~ 20%-35% below their actual cost capped levels, while others did not incorporate a cost cap at all. Yet, when evaluating project “cost” in the TEAC slides, PJM only compared the “base” bid levels while providing no transparency into the capped costs of other bidders. Instead, PJM should provide a comparison of the cost capped amounts of the various proposals.

Further, we believe PJM has misunderstood Coastal Wind Link’s cost caps – what they mean and how they work. PJM stated in its analysis that Coastal Wind Link has only cost capped one proposal<sup>5</sup>, whereas Coastal Wind Link applies and incorporates the same cost capping mechanism for all 7 of its proposals. PJM’s analysis also erroneously shows large swings in project cost for changes in variables that Coastal Wind Link has in fact capped and would have zero customer impact<sup>6</sup>. As a result of these flaws, PJM’s conclusions regarding Coastal Wind Link’s costs and cost containment mechanisms are inaccurate.

PJM also does not evaluate the total cost of the various proposals; we note that several proposals would shift certain project costs to the wind developers – and these will ultimately be paid by New Jersey customers through the OREC price. We urge that PJM make public and transparent the actual costs to be borne by customers in the state for all of the different proposals.

**VI. PJM’s analysis does not appear to consider and evaluate other key elements of the proposals, including schedule guarantees and reliability and resilience benefits of Option 3 proposals.**

In its TEAC analysis, it is not evident how PJM has evaluated schedule feasibility or schedule guarantees. Coastal Wind Link has offered a schedule guarantee – with meaningful consequences - to the state and to customers.

---

<sup>5</sup> See Note on slide 43 of July 18<sup>th</sup> TEAC slides.

<sup>6</sup> Specifically, on Slide 55, PJM shows two Coastal Wind Link projects as increasing customer costs by almost 25% for a 25% increase in capital costs. In reality, the increase would be zero under our proposal, which should be reflected in both the CapEx and the Downside sensitivities.

By contrast, one of the other bidders can be six months late before experiencing any consequences. And, for the other bidders, it is difficult to tell what they may or may not have committed to regarding schedule because the information has not been disclosed (presumably because it was redacted by the bidders). Yet, PJM's analysis seemingly does not differentiate the various proposals on the basis of schedule commitments.

In addition, PJM Manual 14F requires that PJM evaluate "grid resilience" as a decisional criterion in open windows.<sup>7</sup> Coastal Wind Link's project design is anchored in a meshed grid concept to support the addition of future offshore wind while concurrently maintaining the highest standard of reliability and availability. PJM, however, does not include any "Option 3" analysis, thereby penalizing the only SAA project – Coastal Wind Link - with a fully operational and future-proofed meshed grid design that will enable the state to meet its aggressive offshore wind goals and do so in a reliable and resilient manner. PJM has also seemingly not evaluated whether contemplated large injections (3,000+ MWs) into a single station – as proposed by certain bidders - will present concerns from a reliability perspective or pose security risks.

## **Conclusion**

As New Jersey considers a very significant and complex decision on offshore wind transmission, thorough and accurate analysis about constructability and cost are essential. In order to provide the most reliable information to the state as it pursues its clean energy goals, we request that PJM:

- Correct the errors identified herein in its analysis of the Coastal Wind Link proposals.
- Incorporate permitting and construction experience as a criterion in the constructability risk analysis.
- Make public an "Option 3" analysis that compares the various Option 3 proposals and ranks them from a risks and benefits perspective.
- Level the playing field with regard to transparency of the various bidders' costs and cost caps by making this data public as required by PJM Manual 14F.
- Level the playing field with regard to transparency of the various bidders' approach to schedule and schedule guarantees and make public the comparison of the various schedule approaches as required by PJM Manual 14F.
- Fully explain the rating scale and basis for its constructability risk assessment.
- Fully differentiate and explain the relative degree of constructability risk between the various proposals.

---

<sup>7</sup> Section 8.1.3 of Manual 14F requires that PJM ask the question – "does the proposal enhance grid resilience through including redundancy or operational flexibility?"

- Make transparent an “apples-to-apples” comparison of the various cost proposals.

Coastal Wind Link stands ready to provide PJM with any additional information or answer any clarifying questions required for facilitating a full evaluation of our proposals.