PO Box 383
Madison, CT 06443
Voice: 646-734-8768
Email: fpullaro@renew-ne.org
Web: renew-ne.org

November 10, 2020

By Electronic Mail (mwinkler@iso-ne.com)

Mariah Winkler, Chair
NEPOOL Markets Committee
ISO New England, Inc.
1 Sullivan Road
Holyoke, MA 01040

Subject: Response to IMM's Position on RENEW's Pro-Consumer Offshore Wind Offer Review Trigger Price Proposal

Chair Winkler:

This letter responds to the IMM's memo posted late last night that addresses RENEW's proposed amendment to the Offer Review Trigger Price (ORTP) for offshore wind. While it is unfortunate that the IMM is only providing this feedback at the 11th hour as RENEW sought out and strived to be responsive to comments during this four month process, this memo rebuts the IMM's assertions on the legal standard and two revenue assumptions and accepts his feedback on the cost of capital assumption, which reflected an unintentional transcription error, to reflect the ISO's latest cost of capital figure.

RENEW observes that the change in WACC to the IMM's recommended value, as described in more detail below, results in increasing the offshore wind capital cost from \$3,106 to \$3,326 kW according to the analysis Daymark Energy Advisors performed on New England offshore wind contracts. By comparison, the **bottom-up** independent analysis performed for the New York State Department of Public Service and NYSERDA, which unlike the ISO's proposal was checked against actual offshore wind contracts, determined the capital cost to be \$3,155 kW. RENEW will accept the IMM's WACC value and adjust its proposed offshore wind ORTP from \$0 kW-month to \$1.53 kW-month to reflect that assumption change.

I. The IMM's ORTP Standard Is Contrary to the Tariff and FERC and Hurts Consumers

The ISO-NE Tariff and FERC's directives regarding implementation of buyer-side mitigation in New England require that an ORTP for offshore wind must be consistent with ***expected prevailing market conditions***. The IMM in his memo contends that we should not be "setting the ORTP too low". In fact, setting the ORTP at the low end is exactly what we should be doing according to the Tariff and FERC directives. The ISO itself in its December 2013 filing updating ORTPs for Forward Capacity Auction (FCA) 9 (FERC Docket ER14-616) described the intent of the ORTP calculation as: "**ORTPs are set at the low end of the competitive range of expected offers** so as to strike a reasonable balance by only subjecting resources to IMM review which plainly appear commercially implausible absent out-of-market revenues." If it is the position of the ISO and IMM to subject offshore wind resources to a higher bar than that specified in the Tariff or FERC directives, that could explain why the ISO's proposed ORTP values are head and shoulders higher than all public estimates including the June 2020 **bottom-up** independent study for the New York State Department of Public Service and NYSERDA.

The ISO and the IMM have focused on RENEW's use of a top-down cost estimating method rather than Mott MacDonald's bottom-up method as the primary basis for rejecting RENEW's proposal. There is nothing intrinsically more accurate about a bottom-up analysis, and where it is shown to be substantially different from every single public source of data regarding offshore wind capital costs, as the RENEW literature review has done, the assumptions underlying the bottom up analysis should be viewed as suspect.

The IMM quotes Tariff Section III.A.21.1.2(b), stating that the RENEW calculation is contrary to the Tariff methodology. This is simply incorrect. The Tariff, as they quoted it and as RENEW presented to the MC at its October 7 meeting, simply states that a capital cost assumption must be put into a capital budgeting model. The Tariff does not speak to how this capital cost assumption must be developed.

The IMM has questioned the validity of the Daymark analysis underpinning the RENEW proposal due to uncertainty in the input parameters. RENEW has every step of the way since the Daymark analysis was first presented to the MC in August noted the inherent uncertainty in the assumptions and resulting value. RENEW's extensive literature review, which has been presented to the MC, clearly demonstrates that the Daymark findings are supported by the preponderance of cost data that exists in the public literature.

By contrast, the ISO proposal falls outside of the range of every public source of information for a project with the specifications of the ORTP reference project. Even though there is no public data supporting the MM capital cost value, the IMM asks the Markets Committee to take it on faith that Mott MacDonald's proprietary capital cost data, which cannot be shared with the committee, has been scrutinized by MM, CEA, and the ISO. They argue that it must therefore be accurate simply because these parties have no financial interest in having a higher or lower capital cost value.

II. The IMM's Suggested Pay for Performance Assumption Is Not Valid For Use In the Daymark Analysis as Developers Could Not Have Known This at Bid Submittal Time

The Daymark model sought to determine what revenues the three offshore wind project developers could reasonably have expected when submitting their bids for power purchase agreements. Though we are skeptical that any of them would have counted on FCM pay for performance revenue, Daymark nonetheless included it in the final model to be consistent with ISO's approach and to be more conservative. At the time that the developers submitted their bids in 2018 and 2019, the Pay for Performance Rate was set at $5,455/MWh in the Tariff for FCA 15 and beyond. There is no way the developers could have known then to expect the PPR to be raised to $9,307/MWh in late 2020 for FCA 16. Regardless, even had the Daymark model assumed that the developers were omniscient and could have anticipated a future PPR rate of $9,307/MWh, the impact is minor as it would have changed the implied capital cost by a mere $22/kW and the ORTP value by just $0.27/kW-mo. Regardless of the magnitude, RENEW would not support this assumption as valid as there is no way the developers could have known this future number at the time of their bid submittals.

III. RENEW Has Updated Its WACC Assumption to Be Consistent with the ISO Value

The original Daymark model presented to the MC in August and September, before the ISO had determined the updated ATWACC values to be used for FCA 16, utilized the ISO's FCA 15 ATWACC value of 7.29% as a placeholder. At the October 7 MC, RENEW noted that the Daymark model had been updated to reflect ISO's latest FCA 16 assumptions, including their new cost of capital, which raised RENEW's proposed cost slightly. It appears that the October Daymark model update RENEW presented included a transcription error in which the ISO's WACC of 7.1% was used rather than ISO's ATWACC of 6.36%. RENEW has consistently stated its intention to utilize the same assumptions as ISO and appreciates the IMM bringing this transcription error to its attention, even if at the last minute. The RENEW materials and proposal have been updated to utilize the correct cost of capital assumption of 6.36% resulting in a proposed capital cost of $3,326/kW and an ORTP value of $1.533/kW-mo.

IV. IMM Suggestion Supports the RENEW Amendment to Model a Full 25-year Economic Life for Wind Resources

As noted in the materials RENEW has presented, the ISO model includes only 20 years of project revenues. To be more conservative than the ISO assumptions and more closely match what we expected project developers would account for, Daymark included a five-year merchant tail for energy. Interestingly, the IMM suggests a reasonable offshore wind developer would have been expected to count on both this energy revenue in years 21-25 as well as REC revenue, leaving us hopeful that they will be supportive of the RENEW amendment to model a full 25 year economic life for wind resources in the ORTP calculation.

V. Conclusion

Offshore wind plays a significant role in states' plans to reach their renewable energy and decarbonization objectives. Without an appropriate ORTP, these projects will be prevented from clearing in the market due to unreasonable mitigation, which will deprive them of revenue critical to their implementation and consequently increase costs to consumers. As the FCA 16 ORTP's will affect Capacity Commitment Periods between 2025-2028 when many of these projects will come online, it is critical to get these ORTP calculations right.

Thank you for sharing this report with the committee for its review prior to this morning's discussion on RENEW's proposal.

Sincerely,

Francis Pullaro
Executive Director