STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard	Case 15-E-0302
In the Matter of Offshore Wind Energy	Case 18-E-0071

SUNRISE WIND LLC'S COMMENTS ON NYSERDA'S PETITION TO ADJUST INDEX (O)REC FORMULAS FOR NEW CAPACITY ACCREDITATION RULES

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I. INTRODUCTION

Sunrise Wind LLC (Sunrise Wind) respectfully submits these comments to the New York State Public Service Commission (the Commission) in response to the New York State Energy Research and Development Authority's (NYSERDA) Petition Regarding Adjustment to Index REC and Index OREC Formulas for New Capacity Accreditation Rules, which NYSERDA filed in Cases 15-E-0302 and 18-E-0071 on June 29, 2023 (the NYSERDA Petition).

As explained further below, Sunrise Wind generally supports revisions to existing and future Renewable Energy Certificate and Offshore Wind Renewable Energy Certificate Purchase and Sale Agreements (collectively, (O)REC Contracts) to account for changes to long-term capacity revenue expectations resulting from modifications to the New York Independent System Operator, Inc.'s (NYISO) Market Administration and Control Area Services Tariff (MST) to adopt a marginal capacity accreditation market design (the New Capacity Accreditation Rules).

As a result, Sunrise Wind's comments are limited to two specific points. First, although NYSERDA states that its proposed revisions to existing (O)REC Contracts are consistent with the "Changes in Law" provision in most of those agreements, the Changes in Law provision in Sunrise Wind's October 2019 Offshore Wind Renewable Energy Certificate Purchase and Sale Agreement (Sunrise Wind OREC Agreement) with NYSERDA is materially different than the typical provision cited in the NYSERDA Petition – and those differences are directly relevant to NYISO's New Capacity Accreditation Rules. In order to respect the contractual rights of parties that intentionally negotiated Changes in Law provisions that differ materially from the terms relied upon in the NYSERDA Petition, NYSERDA should be authorized to agree to further revisions specifically tailored to those terms.

Second, because it is possible that NYSERDA's proposed revisions to the (O)REC Contracts will not adequately account for reduced capacity revenues resulting from the New Capacity Accreditation Rules as required under the various Changes in Law provisions, NYSERDA should be authorized to agree to any further revisions necessary in the future to ensure that (1) (O)REC Contracts provide a valid market-based index of capacity prices, and (2) there is no reduction in the capacity value of offshore wind as a generation resource.

II. BACKGROUND

A. The Sunrise Wind Project

Sunrise Wind is part of a 50/50 joint venture between Orsted North America Inc. (Ørsted NA) and Eversource Investment LLC (Eversource) that was formed in 2016.[1] Sunrise Wind is developing the Sunrise Wind Project, a 924 megawatt (MW) offshore wind facility, to be located in federal waters approximately 30 miles off the east coast of Long Island, that is expected to begin commercial operation in 2025 (the Project). The Project will connect to New York State's electricity grid at the Long Island Power Authority's existing Holbrook Substation in central Long Island.

[1] Ørsted NA is a subsidiary of Ørsted A/S (Ørsted), which is the world's leading developer of offshore wind and the only company to have successfully developed offshore wind projects in North America, Europe, and Asia. Eversource is a subsidiary of Eversource Energy, a utility and experienced transmission developer that, among other things, transmits and delivers electricity to approximately four million customers in New England.

The Project will provide significant environmental, health, power system reliability, economic, and fiscal benefits to New York State. For example, the Climate Leadership and Community Protection Act (CLCPA) established multiple ambitious greenhouse gas (GHG) reduction mandates to combat climate change, including a requirement for the State to procure at least 9 gigawatts of offshore wind energy by 2035, which the Commission has recognized is a critical element of the State's overarching objectives of obtaining 70% of its electricity from renewable sources by 2030 and 100% of its electricity from zero-emission sources by 2040. The 924 MW Project will satisfy more than 10% of the CLCPA's offshore wind energy requirement and will contribute toward satisfying the CLCPA's renewable energy and GHG emission reduction requirements.

B. NYSERDA's 2018 Phase 1 Offshore Wind Procurement, and NYSERDA's Selection of the Sunrise Wind Project

On November 8, 2018, NYSERDA issued its Phase 1 offshore wind procurement solicitation – ORECRFP18-1 (the Phase 1 RFP). As required by the Phase 1 RFP, developers submitted two price offers with each proposal: one for a fixed OREC price and the other for an adjustable "Index OREC" price based on an offer "strike price."[2] The Index OREC strike price was intended to represent "the all-in revenue requirement of the project,"[3] with NYSERDA recognizing that such pricing must "achieve the investor's target rate of return."[4]

On July 18, 2019, New York State simultaneously announced the single largest renewable energy procurement by any state in U.S. history at the time – nearly 1,700 MW – with

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2 Phase 1 RFP § 4.

3 Case 18-E-0071, *In the Matter of Offshore Wind Energy*, Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement (issued July 12, 2018), at 34 (OSW Standard Order).

4 Case 18-E-0071, *supra*, NYSERDA's Offshore Wind Policy Options Paper (filed Jan. 29, 2018), at 64 n.79 (Policy Options Paper).

NYSERDA's selection of two offshore wind projects for contracts from the Phase 1 RFP: (1) the Sunrise Wind Project; and (2) Equinor Wind US LLC's 816 MW Empire Wind Project.[5]

C. The Sunrise Wind OREC Agreement and Calculation of the Index OREC Price Using the Reference Capacity Price

NYSERDA executed the Sunrise Wind OREC Agreement with Sunrise Wind on October 23, 2019.[6] Under the 25-year Sunrise Wind OREC Agreement, once the Sunrise Wind Project enters into commercial operation, NYSERDA will purchase ORECs from Sunrise Wind.[7] An OREC represents the environmental attributes associated with generation of one MWh of renewable offshore wind electricity by a project.[8] Under the OSW Standard, each load serving entity (LSE) must acquire a percentage of the ORECs NYSERDA purchases each year in proportion to the LSE's share of statewide electricity load.[9]

Under Section 4.03 of the Sunrise Wind OREC Agreement, the purchase price for the ORECs (the "Index OREC Price") is determined on a monthly basis using the Index OREC formula and is equal to the OREC Strike Price less the sum of the Reference Capacity Price (RCP) and the Reference Energy Price (REP) – which will result in the Index OREC Price rising or falling inversely to a composite average of New York State's energy and capacity market prices.[10]

The RCP is calculated using a formula based on data that the NYISO publishes for its monthly spot market unforced capacity (UCAP) prices.[11] The RCP equals the product of (1) the Reference UCAP Price (RUP [the load-weighted average of monthly UCAP prices ($/kW) in

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5 Phase 1 Report at 2.

6 Case 18-E-0071, *supra*, Launching New York's Offshore Wind Industry: Phase 1 Report (NYSERDA Report No. 19-41, filed Oct. 25, 2019), at S-1 (Phase 1 Report).

7 OREC Agreement at 3, 6, 9-11; *see* Phase 1 Fact Sheet at 1.

8 OREC Agreement at 6.

9 OSW Standard Order at 4, 29-31, 62.

10 OREC Agreement § 4.03; Phase 1 Report at S-3.

11 OREC Agreement § 4.03 (a) (3).

NYISO Zones G, H, I, J, and K]), (2) the UCAP Production Factor (UPF [38% for the Project]), (3) the Operational Installed Capacity for the Project (IC [in MW]), and (4) a conversion factor of 1,000 kw/MW – which product is then divided by the total ORECs that the Project produces for the subject month (*i.e.*, total MWh delivered):

$$RCP = (RUP \times UPF \times IC \times 1{,}000) \div \text{Total ORECs}$$

Given that the RCP is intended to provide a market-based index of capacity prices, Section 4.07 of the Sunrise Wind OREC Agreement recognizes that if conditions change such that the RCP no longer reasonably reflects this objective, then the Sunrise Wind OREC Agreement should be subject to conforming changes to reflect a more accurate capacity price index. Specifically, Section 4.07 of the Sunrise Wind OREC Agreement is titled "Changes in Law," and Section 4.07 (a) states:

> In the event that a change in Applicable Law after the Effective Date (i) reduces materially, or when such change in Applicable law takes effect (the "Change in Law Date") will reduce materially, the NYISO Capacity Market revenues available either to offshore wind facilities that participate in the Offshore Wind Standard program, or to intermittent resources as a class, and (ii) does not apply generally to all generation facilities in NYISO but does apply selectively based on generator fuel or technology type, the intermittent or variable nature of the generation resource, or receipt of compensation for Environmental Attributes, the Parties shall negotiate in good faith to agree mutually to amend the definition of Reference Capacity Price in this Agreement, prospective from the Change in Law Date, to reflect a more accurate index capacity price for offshore wind facilities delivering to the NYCA … For avoidance of doubt, changes in Applicable Law that may qualify under the first sentence of this Section 4.07(a) may include, but are not limited to: (x) changes to the scope, exemptions, or methodology for calculating the offer floors imposed by NYISO as market power mitigation measures in Section 23 of its Market Services Tariff, or any newly implemented minimum offer price rules including but not limited to the imposition of a two-stage auction to coordinate the entry of resources receiving compensation for Environmental Attributes; and (y) imposition of a capacity performance structure that would reduce the capacity value of offshore wind as a generation resource.[12]

Further, Section 4.07 (c) states:

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[12] Article I of the OREC Agreement defines "Applicable Law" to include, among other things, "NYISO Tariffs."

> In the event that a change in Applicable Law after the Effective Date changes, or on the Change in Law Date will change, the price structure or methodology, settlement, zonal structure, or terminology used in either the NYISO Energy Market or NYISO Capacity Market such that the calculation of Reference Energy Price or Reference Capacity Price as described in Section 4.03 of this Agreement becomes impossible or no longer reasonably reflects the objective of providing a market based index of energy and/or capacity prices in the zones described in Section 4.03, in each case as they existed on the Effective Date, the Parties shall negotiate in good faith to amend this Agreement, prospective from the Change in Law Date, to make such conforming changes as are necessary to achieve that objective.

Importantly, while Section 4.07 (c) of the Sunrise Wind OREC Agreement is substantively identical to the generic "Changes in Law" provision included in most of NYSERDA's (O)REC Contracts and quoted on Pages 6-7 of the NYSERDA Petition, Section 4.07 (a) is a materially different provision that Sunrise Wind and NYSERDA specifically negotiated in contemplation of possible future changes in NYISO's MST that could reduce the Project's capacity market revenues, and one assumption under which the Project's ultimate pricing was established.

D. The New Capacity Accreditation Rules

On May 10, 2022, the Federal Energy Regulatory Commission approved NYISO's petition to adopt the New Capacity Accreditation Rules.[13] Starting with the Capability Year beginning on May 1, 2024, the New Capacity Accreditation Rules will significantly change the method by which electric generation resources' capacity payments are calculated.

Under the current NYISO capacity market rules (in effect when the OREC Agreement was executed in October 2019), the quantity of UCAP eligible for market revenue for "Intermittent Power Resources" like the Project is calculated by multiplying the Adjusted Available Installed Capacity value (Adjusted ICAP) by a resource-specific derating factor.[14] For Intermittent Power Resources like the Project, the resource-specific derating factor is based on the resource's actual

[13] *New York Independent System Operator, Inc.*, 179 FERC ¶ 61,102 (2022).

[14] 179 FERC ¶ 61,102, at P 8.

output over a specified peak period as a percentage of its nameplate capacity (to account for the resource's historic availability/performance).[15]

Under the New Capacity Accreditation Rules, each resource will be assigned to a Capacity Accreditation Resource Class (CARC) based on technology type and location.[16] A Capacity Accreditation Factor (CAF) will be defined for each CARC, which will determine the Adjusted ICAP for resources in that CARC.[17] Each resource's Adjusted ICAP value will reflect its expected capacity contribution and be calculated by multiplying its available ICAP by the applicable CAF.[18] A resource's UCAP will be the product of its ICAP value, its CAF, and its availability derating factor.[19]

E. NYSERDA's Petition to Amend Its (O)REC Contracts Because of the New Capacity Accreditation Rules

As a result of the New Capacity Accreditation Rules, the NYSERDA Petition generally seeks to revise the manner in which RCP is calculated in both existing and future (O)REC Contracts, including the Sunrise Wind OREC Agreement.

With respect to existing (O)REC Contracts, NYSERDA argues the typical "Changes in Law" provisions (similar to Section 4.07 [c] of the Sunrise Wind OREC Agreement, quoted above) "are applicable to the implementation of the New NYISO Capacity Accreditation Rules because the inclusion of the CAF in the updated calculation of UCAP is expected to substantially reduce the capacity revenue of Intermittent Power Resources" – including the Sunrise Wind Project.[20]

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[15] *Id.* at P 8.

[16] *Id.* at P 47.

[17] *Id.* at P 44, 46-47.

[18] *Id.* at P 44-47.

[19] *Id.* at P 44.

[20] NYSERDA Petition at 7.

NYSERDA first proposes to replace the RCP formula in existing (O)REC Contracts with Formula 3 in NYSERDA's Petition:

$$\text{RCP} = (\text{RUP x } \mathbf{rUPF} \text{ x IC x 1,000 x } \mathbf{CAF}) \div \text{Total ORECs}$$

The UPF value in formulas in existing (O)REC Contracts would be replaced by the rUPF value of 1.[21] NYSERDA states Formula 3 is intended "to align the RCP calculation with reasonable capacity market revenue expectations at the time the applicable project established its UPF."[22]

NYSERDA recognizes that "setting the rUPF value at 1 for all Index (O)REC Contracts does not adequately address the impacts of the New NYISO Capacity Accreditation Rules."[23] Consequently, NYSERDA also proposes Formula 4 as an adjustment to the Index (O)REC Strike Prices in existing (O)REC Contracts, which NYSERDA characterizes as an "approach … designed to hold steady the total revenue reasonably expected to be achieved by each project."[24]

NYSERDA states that "because of the number of existing Index (O)REC Contracts, and because all existing Index (O)REC Contracts contain a substantially similar Change of Law provisions and were awarded on a competitive basis, NYSERDA intends to treat all Index (O)REC Contracts in a consistent manner," and "does not intend to engage in further negotiations on the topic *unless ordered to do so by the Commission or otherwise required by law*."[25]

As noted above, however, the Changes in Law provisions in Section 4.07 (a) of Sunrise Wind's OREC Agreement are materially different than the typical Changes in Law provision quoted and relied upon in NYSERDA's Petition.[26] For this reason and as explained below, in order

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[21] *Id.*
[22] *Id.*
[23] *Id.* at 8.
[24] *Id.*
[25] *Id.* at 7, 10 (emphasis added).
[26] *Id.* at 6-7.

to respect the contractual rights of parties that intentionally negotiated Changes in Law provisions that differ materially from the terms relied upon in the NYSERDA Petition, NYSERDA should be authorized to agree to further revisions specifically tailored to those terms. Further, because it is possible that NYSERDA's proposed revisions to the (O)REC Contracts will not adequately account for reduced capacity revenues resulting from the New Capacity Accreditation Rules as required under the various Changes in Law provisions, NYSERDA should be authorized to agree to any further revisions necessary in the future to ensure that (O)REC Contracts provide a valid market-based index of capacity prices.

III. COMMENTS

THE COMMISSION SHOULD AUTHORIZE REVISIONS TO EXISTING (O)REC CONTRACTS AS NECESSARY TO PROVIDE A VALID MARKET-BASED INDEX OF CAPACITY PRICES.

In discussing the function of (O)REC Contracts generally, NYSERDA has explained that "development and construction of offshore wind projects involves significant capital investment, necessitating long-term contracts from an entity such as NYSERDA in order to finance and construct the projects."[27] In general, as part of negotiating these contracts with NYSERDA, it is very difficult for developers of long-term renewable energy projects like the Sunrise Wind Project to predict future energy and capacity markets, especially when changes in law and/or market rules occur. Consequently, Changes in Law provisions are an important measure to reduce risk to developers whose project revenues are a function of Index (O)REC formulas. Among other things,

[27] NYSERDA, Fact Sheet: Offshore Wind Contract and Phase One Report (Phase 1 Fact Sheet) at 1, available at https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/Offshore-Wind/osw-phase-1-fact-sheet.pdf (last accessed September 29, 2023); *see also* CES Framework Order at 11 ("Renewable resource generation facilities are long-lived capital assets that will only be financed and constructed if the investor building them can be assured of a reasonable opportunity to recover its costs. Generally, long-term contracts or other durable mechanisms are necessary to provide sufficient certainty for prospective investors to induce them to make the investment.").

Changes in Law provisions both avoid unnecessary “risk premiums” in (O)REC project pricing and help prevent legal or market rule changes from rendering important renewable energy projects financially infeasible. This in fact was the case for Sunrise Wind, resulting in Section 4.07 (a) of the Sunrise Wind OREC Agreement.

Here, the New Capacity Accreditation Rules qualify as a “Change in Law” under both the typical Changes in Law provision cited in the NYSERDA Petition and the specially negotiated and broader provision in Section 4.07 (a) of the Sunrise Wind OREC Agreement for the Sunrise Wind Project. By reducing the Project’s UPF, NYISO’s New Capacity Accreditation Rules will likely materially reduce the Project’s expected capacity market revenues in a way that does not apply to all generation facilities. That was exactly the scenario contemplated by Section 4.07 (a) of the Sunrise Wind OREC Agreement.

Sunrise Wind commends NYSERDA for affirmatively taking action to address the fact that the New Capacity Accreditation Rules trigger the Changes in Law provisions in the existing (O)REC Contracts. And Sunrise Wind recognizes NYSERDA’s desire for administrative simplicity by treating all existing (O)REC Contracts with identical Changes in Law provisions “in a consistent manner.”[28]

Based on the facts currently available, Sunrise Wind generally supports the revisions to the existing (O)REC Contracts, starting with those proposed in the NYSERDA Petition because they will improve the alignment between the Index (O)REC formulas and the NYISO capacity market as it will function under the New Capacity Accreditation Rules. However, the Commission should also recognize that some parties to (O)REC Contracts (*e.g.*, Sunrise Wind) intentionally negotiated Changes in Law provisions that are materially different. In order to respect those parties’

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[28] NYSERDA Petition at 7.

contractual rights, NYSERDA should be authorized to agree to revisions tailored to bespoke Changes in Law provisions like Section 4.07 (a) of the Sunrise Wind OREC Agreement.

In addition, it is possible that initial revisions to (O)REC Contracts – either those proposed in the NYSERDA Petition or further revisions to (O)REC Contracts with atypical Changes in Law provisions – will not adequately account for reduced capacity revenues resulting from the New Capacity Accreditation Rules. That is because the actual impacts of the New Capacity Accreditation Rules cannot be definitively assessed until sometime after they go into effect and a project goes into service. For example, CAF and availability derating factor are variables that will be used to calculate a generation resource's qualified capacity. The timing of those variables will vary within a capacity qualification period, which will not be completed until immediately before a delivery period and will vary over the long term. Because of that uncertainty, developers like Sunrise Wind bear the risk that revisions to existing (O)REC Contracts will not align with actual capacity market revenues. Accordingly, given the parties' contractual rights under the Changes in Law provisions, NYSERDA should be authorized to implement further revisions to existing (O)REC Contracts in the future as necessary to ensure (1) that the contractual definitions of RCP and related terms provide a representative and valid market-based index of capacity prices, and (2) there is no reduction in the capacity value of offshore wind as a generation resource.[29]

IV. CONCLUSION

For the foregoing reasons, Sunrise Wind respectfully submits that the Commission should authorize (1) NYSERDA's revision to the (O)REC Contracts to account for changes to long-term capacity revenues for renewable energy projects resulting from the New Capacity Accreditation Rules, (2) revisions to be tailored to bespoke Changes in Law Provisions like Section 4.07 (a) of

[29] For example, it may ultimately be appropriate to credit a lower percentage of capacity revenues against the (O)REC Strike Price.

the Sunrise Wind OREC Agreement, and (3) further revisions in the future, as necessary, to ensure that (i) (O)REC Contracts provide a valid market-based index of capacity prices, and (ii) there is no reduction in the capacity value of offshore wind as a generation resource.

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