

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**ISO New England Inc.                   )   Docket No. ER21-1637-000**

**COMMENTS OF THE INTERNAL MARKET MONITOR  
ON THE RECALCULATIONS OF THE OFFER REVIEW TRIGGER PRICES AND  
PROPOSED JUMP BALL NEPOOL ALTERNATIVE**

The Internal Market Monitor (“IMM”) of ISO New England Inc. (“ISO” or “ISO-NE”) submits these comments in support of the ISO’s triennial recalculation of the Offer Review Trigger Price (“ORTP”) for each relevant technology for the Capacity Commitment Period beginning on June 1, 2025 with the sixteenth Forward Capacity Auction (“FCA” or, specifically, “FCA 16”).<sup>1</sup> In contrast, the IMM opposes the NEPOOL Alternative jump ball proposals.

**I.       OVERVIEW**

The ISO and NEPOOL respective proposals differ only on a few but important items — the ORTPs for Offshore Wind (FCA Starting Price versus \$0.00/kW-month), Photovoltaic Solar (\$1.381 versus \$0.00 /kW-month), and Energy Storage Device – Lithium Ion Battery (\$2.912 versus \$2.601 /kW-month). However, these differences are not just of degree but of kind. The NEPOOL Alternative seeks to change the ways in which ORTP’s are set. This includes: adding an “economic life” input (up to 35 years) into the capital budgeting model that models discounted *cash flows* based on 20-year contract revenues and financing terms; prescribing

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<sup>1</sup> See Appendix A, Section III.A.21.1.2 of the ISO New England Inc. Transmission, Markets and Services Tariff (“Tariff”) (“Where any Offer Review Trigger Price is recalculated, the Internal Market Monitor will review the results of the recalculation with stakeholders and the new [ORTP] shall be filed with the Commission prior to the Forward Capacity Auction in which the [ORTP] is to apply.”). Capitalized terms used but not defined herein are intended to have the meaning given to such terms in the Tariff.

examples of potentially unreliable hearsay documents that can be used to support such an “expected” increased economic life for resource-specific New Resource Offer Floor Price (“Offer Floor Price”) requests; and allowing “asset gerrymandering” around the use of a weighted average ORTP for co-located Assets behind the same point of interconnection if they register separately as New Capacity Resources. The NEPOOL proposed revisions would result in substantially lower ORTPs across the board, effectively curtailing or even eliminating IMM review. In contrast, the ISO’s updated ORTPs are just and reasonable trigger prices for IMM review — they do not preclude any resource from entering the auction at a competitive price, as long as the resource can justify the resource-specific requested Offer Floor Price during the IMM mitigation review.

The NEPOOL Alternative proposes in these regards:

- revising the ORTP capital budgeting model to not “look[] at 20 years of real dollar cash flows” discounted at the weighted average cost of capital (WACC) but to allow up to a 35 year newly-defined “New Capacity Resource Economic Life” for a new resource regardless of the project’s financing terms, and without any commensurate risk adjustments to the WACC, to arrive at the break-even contribution required to yield a discounted cash flow of zero;
- prescribing the documentation that the IMM must consider for a resource seeking to submit a bid below the relevant technology ORTP (*i.e.*, an Offer Floor Price request) rather than leaving this to the independent determination of the IMM based on all available documentation and information and subject to the review of the Commission;
- revising the ORTP for new resources composed of Assets having different technology types from the weighted average of the ORTPs for the different technology types “based on the expected capacity contribution from each asset technology type” to allow essentially for asset gerrymandering, whereby Assets behind the same point of interconnection (*e.g.*, a battery asset that charges off a solar Asset and receives federal tax credits through the Investment Tax Credit (“ITC”) program) can participate separately and avoid receiving a weighted average ORTP.

As a threshold matter, such fundamental design changes are likely outside the scope of this proceeding — which should be limited to the triennial update of FCM parameters and not extend to the underlying Tariff models and procedures. More importantly, if accepted, the NEPOOL Alternative could result in internally inconsistent and unsupported bids that would be largely immune from IMM review and mitigation — the revised procedures would effectively circumvent the so-called Minimum Offer Price Rule (“MOPR”) and have a price suppressing effect on capacity clearing prices, which is far from a “preferable” solution and not just and reasonable.

As discussed below, the ISO’s “bottom up” method of calculating a new ORTP for Offshore Wind technology better reflects the actual capital costs associated with this technology type and, therefore, is preferable to and more reliable than the “top down” approach advocated in the NEPOOL Alternative. It is worth mentioning the ORTP value in the NEPOOL Alternative proposal apparently was developed and advocated by RENEW. By comparison, the IMM has seen no evidence in the data submitted for mitigation review (of comparable Offshore Wind resources) in recent years that supports the RENEW assertions that (a) \$ 0.00kW-month is a reasonable ORTP for Offshore Wind in New England, or (b) total overnight costs for Offshore Wind in New England are as low as \$3,326/kW (2019\$) as purported by the RENEW study, or (c) such overnight costs are decreasing.<sup>2</sup> In fact, the limited data set of actual New England Offshore Wind projects we have suggests these underlying RENEW assertions are false.

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<sup>2</sup> See *Informational Filing for Qualification in the Fifteenth Forward Capacity Auction* dated November 10, 2020, at Attachment I (attaching new resource Qualification Determination Notifications), confidential version filed with FERC; *Informational Filing for Qualification in the Fourteenth Forward Capacity Auction* dated November 5, 2019, at Attachment I (same), confidential version filed with FERC. The public versions of these filings are available at [https://www.iso-ne.com/static-assets/documents/2020/11/public\\_info\\_filing\\_for\\_fca\\_15.pdf](https://www.iso-ne.com/static-assets/documents/2020/11/public_info_filing_for_fca_15.pdf) and [https://www.iso-ne.com/static-assets/documents/2019/11/er20-000\\_11-5-19\\_fca\\_14\\_info\\_filing.pdf](https://www.iso-ne.com/static-assets/documents/2019/11/er20-000_11-5-19_fca_14_info_filing.pdf).

The same type of bottom up approach to calculating an ORTP for co-located Resources composed of different technologies is also preferable to the weighted average approach under the current Tariff<sup>3</sup> — which in turn should not be amended to allow for the separate registering of Assets of different technologies (*e.g.*, a battery that charges off a solar asset and receives tax credits for doing so behind the same point of interconnection sharing constraints), as advocated by the NEPOOL Alternative.

Also, by specifying what constitutes “sufficient documentation” to support a resource-specific Offer Floor Price based on an economic life in excess of 20 years, the NEPOOL Alternative is overly-prescriptive and could circumscribe the IMM’s independent determination based on *all* relevant evidence. While claiming that this is “borrowed from similar language” approved by the Commission in the PJM market, NEPOOL omits to mention that the PJM Tariff includes other materially important language, including a requirement of consistent revenue and financing cash flows, certification and market monitor approval. Nor is there a “rebuttable presumption” that any below-ORTP request is commercially implausible as NEPOOL contends. The Tariff allows IMM mitigation only when a request is “clearly inconsistent with prevailing market conditions.”

In short, the triennial recalculation of ORTPs is important for ensuring competitive bidding in the FCA consistent with prevailing market conditions. However, it should not be

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<sup>3</sup> While the ISO did not finalize its calculation of such an ORTP for co-located Assets, the IMM requests herein that the Commission consider directing the ISO to do so.

construed as open season for eliminating IMM review and related buyer-side mitigation of potentially uneconomic offers from new capacity that could suppress capacity market prices. Each component of the NEPOOL Alternative proposal discussed below is problematic and, either alone or especially in combination, could essentially undermine the IMM's independent review and determination of capacity offers from New Capacity Resources, which is tantamount to assuring a competitive FCA.

## **II. BACKGROUND**

A well-designed capacity market must protect against price suppression by uneconomic new entry — just as it also must include strong protections against inappropriate price inflation resulting from the exercise of market power through, for example, economic withholding. In the ISO-operated Forward Capacity Market, the IMM is responsible for reviewing a Project Sponsor's bid for a New Capacity Resource that is below the relevant-technology ORTP. The IMM has stated that “setting the ORTP too low (below a reasonable unsubsidized commercial cost basis) carries with it the potential for significant market harm.”<sup>4</sup> At the same time, there is no conflict between the IMM's general view that an ORTP should be set at the “low end” and that it should not be “too low.” Significantly, that is the balance that must be struck between the twin goals of mitigating price suppressing effects and limiting administrative review, along with using a transparent and robust calculation method.

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<sup>4</sup> See Memorandum to NEPOOL Markets Committee dated November 9, 2020, available at [https://www.iso-ne.com/static-assets/documents/2020/11/a4\\_imm\\_memo\\_re\\_ucs\\_renew\\_offshore\\_wind\\_amendment.pdf](https://www.iso-ne.com/static-assets/documents/2020/11/a4_imm_memo_re_ucs_renew_offshore_wind_amendment.pdf).

- *ORTPs Are Thresholds for Resource-Specific Offer Floor Price Reviews*

To preserve competitive pricing and prevent the exercise of buyer-side market power in the Forward Capacity Market, the Tariff subjects New Capacity Resources to Section III.A.21's so-called MOPR, which requires new resources to bid into the market at their unsubsidized, reasonably projected costs.<sup>5</sup> Notably, while designed to prevent subsidized resources from having a competitive advantage, the MOPR does not act as a prophylactic against risky, unsubsidized competitive bidding based on assumptions that are not "clearly inconsistent" with prevailing market conditions.<sup>6</sup> Rather, the IMM determinations are focused on ensuring that new capacity offers are reasonably based on internally consistent, substantiated cash flows in the capital budgeting model, while adjusting for "[a]ny assumptions that are clearly inconsistent with prevailing market conditions."<sup>7</sup> Contrary to the NEPOOL participants' assertions, there is no special "presumption" for participants to overcome,<sup>8</sup> and the IMM mitigates a submitted new offer (higher/upward only) based on its informed, independent judgment (not "discretionary satisfaction," as NEPOOL contends), subject to review by the Commission. The ORTP for relevant technologies operates as an initial screen for determining whether new supplier bids

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<sup>5</sup> See Letter from ISO-NE to FERC re: Revisions to ISO-NE England Transmission, Markets and Services Tariff Related to Competitive Auctions with Sponsored Policy Resources, dated January 8, 2018 at 2-3, n.7, available at [https://www.iso-ne.com/static-assets/documents/2018/01/er18-619-000\\_caspr\\_filing.pdf](https://www.iso-ne.com/static-assets/documents/2018/01/er18-619-000_caspr_filing.pdf). See also Order on Tariff Filing, 162 FERC ¶ 61,205 (2018) (concurring Statement of Commissioner Richard Glick on The ISO-NE Capacity Competitive Auctions with Sponsored Policy Resources Proposal dated March 9, 2018 (Docket ER18-619-000)) ("The better course of action would be for the Commission and the RTOs/ISOs to . . . apply the MOPR in only the limited circumstance for which it was originally intended: to prevent the exercise of buyer-side market power.").

<sup>6</sup> See Motion for Leave to File Answer and Answer of the IMM (Docket No. ER19-1166-000) dated April 29, 2019 at 9, available at [https://www.iso-ne.com/static-assets/documents/2019/04/imm\\_answer\\_fca13.pdf](https://www.iso-ne.com/static-assets/documents/2019/04/imm_answer_fca13.pdf).

<sup>7</sup> See Tariff Section III.A.21.2 (b) (i).

<sup>8</sup> See NEPOOL Filing Letter at 7.

warrant IMM review. ORTPs do not constitute a rate or price for any specific New Capacity Resource. New Capacity Resources that submit offers in the FCA at prices below the relevant technology ORTP must provide documentation justifying that price as “consistent with overall market conditions” in light of the resource’s costs, subject to review by the IMM and calculation of an Offer Floor Price.<sup>9</sup> The IMM’s task is not only to exclude any out-of-market revenue sources (*e.g.*, subsidies) from the cash flows used to evaluate the requested Offer Floor Price, but also to make sure costs, revenues and other inputs are in line with market conditions for New Capacity Resources being offered below the relevant ORTP. Significantly, only “assumptions that are *clearly inconsistent* with prevailing market conditions will be adjusted.”<sup>10</sup>

The MOPR thereby was designed to guard against the potential price-suppressing impact of New Capacity Resources on the Capacity Clearing Price and the potential negative impact of procuring uneconomic resources to meet capacity requirements. An additional benefit of establishing an ORTP specific to technologies — *e.g.*, batteries, Photovoltaic Solar and Offshore Wind — lies in the benchmark model(s), parameters, and inputs that have been through the stakeholder process and approved by FERC. Normally, having these aspects of the mitigation review established in this fashion helps provide guidance on reviewing assumptions submitted by

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<sup>9</sup> See Tariff Section III.13.1.1.2.2.3 (a) (“All New Generating Capacity Resources that might submit offers in the [FCA] at prices below the relevant [ORTP] must include in the New Capacity Qualification Package the lowest price at which the resource requests to offer capacity in the [FCA] and supporting documentation justifying that price as competitive in light of the resource’s costs (as described in Section III.A.21). This price is subject to review by the [IMM] pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.”). Tariff Section III.A.21.2(b) provides for the IMM to evaluate and mitigate, if necessary, a resource-specific Offer Floor Price request below the relevant ORTP. Tariff Section III.13.1.1.2.8 (f) requires the Qualification Determination Notification to provide the IMM’s “determination regarding whether the requested offer price is consistent with the long run average costs of that New Generating Capacity Resource.”

<sup>10</sup> Tariff Section III.A.21.2 (b) (emphasis added).

participants for Offer Floor Price requests below the relevant ORTP technology and provides IMM staff with time-saving benchmarks to use in their evaluations.<sup>11</sup>

In summary, the relevant technology ORTP does not act as a floor price on New Capacity Resources bidding into the Forward Capacity Market and competing for a capacity award. The ORTP merely provides the eponymous price point that “triggers” review and possible — but not mandatory — mitigation of a supplier’s offer by the IMM in determining the resource-specific Offer Floor Price to enter into the FCA, subject to review by the Commission in the pre-auction informational filing.

- *Stakeholder Discussions on Flexibility and Consistency*

Contrary to the stated perceptions in the NEPOOL jump ball filing, the IMM does not refuse to consider longer than 20 years of economic life for any particular resource in determining an Offer Floor Price. Rather, the IMM only declined in the stakeholder process to discuss past treatment of any specific resources for reasons of confidentiality and to preserve competition in the Forward Capacity Market.<sup>12</sup> However, the IMM did clarify that its

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<sup>11</sup> New technologies, such as battery storage and solar did not have a technology-specific ORTP until enough information became available to construct an empirical basis of valuation. In such cases, the ORTP for these technologies had been set to the FCA Starting Price. In practice, over 80% of such projects requested an Offer Floor Price well below an expected ORTP value.

<sup>12</sup> See Joint Statement of Chairman Chatterjee and Commissioner McNamee (Docket ER19-1166-000) (2019) (“the Commission has also recognized that it is inappropriate to disclose confidential material that can create adverse impacts to competition” and “release of resource-specific privileged information was inappropriate because that information would remain sensitive beyond the FCAs in question and could harm the competitiveness of FCAs going forward”) (citing *ISO New England Inc.*, 148 FERC ¶ 61,137 at PP 19-21 (2014)), available at [https://www.iso-ne.com/static-assets/documents/2019/09/er19-1166-000\\_9-27-19\\_chatterjee\\_mcnamee\\_statement.pdf](https://www.iso-ne.com/static-assets/documents/2019/09/er19-1166-000_9-27-19_chatterjee_mcnamee_statement.pdf).



determination is not simply whether a resource has a useful life of more than 20 years but, more precisely, what is the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the specific resource based on all *supportable* cost and financing projections.

Indeed, a project may have a useful life in excess of 20 years (as many types of new and older technology resources conceivably do). However, if the project has expected *financing* for only 20 years (or a power purchase contract for a similar tenor), the IMM reviews the *cash flows* over the 20 year *pay down* (*i.e.*, amortization) *period* for internal *consistency* in the capital budgeting model. Put another way, under the current Tariff *the IMM has flexibility to consider Offer Floor Price requests based on more than 20 year cash flows, provided that the request is supported by adequate documentation (e.g., financing terms, contract terms) and that any other necessary changes to the capital budgeting model (e.g., to the risk-adjusted WACC based on the extended time period) are made for internal modeling consistency.*

To use a simple example, most houses have useful lives of greater than 30 years, yet “how much house can you afford” calculations typically look at a prospective buyer’s cash flows over the projected financing period at a certain interest rate (*e.g.*, a 30-year mortgage). If the “expected economic life” were the prime determinative factor, then a centuries old built-to-last palace (*e.g.*, the Palace of Versailles) might seem more “affordable” than a house in the suburbs. But absent the coffers of the State (or Regent), the ordinary person would not have the means to fund the cash flows to support such an extravagant purchase.

The Tariff also provides in this regard that “[s]ufficient documentation and information must be included in the resource’s qualification package to allow the [IMM] to make the determination described in [the MOPR].” Importantly, “such documentation should include *all*

relevant financial estimates and costs projections for the project, including the project's pro-forma financing support data."<sup>13</sup> Furthermore, "[i]f after consultation, the Project Sponsor does not provide sufficient documentation and information for the [IMM] to complete its analysis, then the resource's [Offer Floor Price] shall be equal to the [ORTP]."<sup>14</sup>

- *Differences in Proposals and Impact on IMM Review*

The ISO's recalculations and the NEPOOL Alternative provide diametrically different methods for calculating Offshore Wind and Photovoltaic Solar technologies. Based on existing Offshore Wind project data (the project costs used to develop ORTP values for all technologies were developed by the ISO's consultant Mott MacDonald, using data from its proprietary database), the ISO has been *unable* to justify an ORTP below the Starting Price of the FCA. In stark contrast, the NEPOOL Alternative's "top down" approach results in an ORTP of zero, which is indicative of a completely economical technology requiring no "missing money" from the Forward Capacity Market. For new standalone Photovoltaic Solar resources, the NEPOOL Alternative also posits an ORTP of zero, while the ISO calculates a value of \$1.381/kW-month, which is considerably lower (reflecting lower costs) than the prior use of the FCA Starting Price.

As mentioned upfront, the ORTP value for Offshore Wind in the NEPOOL proposal, which was developed and advocated by RENEW, is considerably lower (by several orders of magnitude) than the mitigated floor prices that the IMM has reviewed in recent years. We have seen no evidence in the data submitted for mitigation (comparable resources) that support the

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<sup>13</sup> Tariff Section III.A.21.2 (b) (iv) (emphasis added). *See Order Accepting Informational Filing for FCA 14*, 170 FERC ¶ 61,132 at P 52 (2020) ("In other words, the responsibility to support its proposed Offer Floor Price rests on the resource; the Internal Market Monitor is not obligated to affirmatively address deficiencies in a resource's proposal.").

<sup>14</sup> *Id.*

RENEW assertions that (a) \$ 0.00/kW-month is a reasonable ORTP for Offshore Wind in New England, or (b) total overnight costs for Offshore Wind in New England are as low as \$3,326/kW (2019\$) as purported by the RENEW study, or (c) such overnight costs are decreasing.

If the Alternative NEPOOL values are accepted for Offshore Wind and Photovoltaic Solar resources, the role of the IMM in reviewing such bids will be eliminated, as the IMM only reviews offers below the ORTP, and it is not possible to submit an offer below \$0.00/kW-month, as that is the FCA floor. Yet the long-standing practice in the ISO's Forward Capacity Market has been to enter IMM-reviewed supplier bids, including mitigated bids, into the FCA to ensure a competitive outcome.<sup>15</sup> By comparison, the difference between the ISO and NEPOOL Alternative for battery resources is narrower, \$2.912 versus \$2.601 /kW-month, which likely leaves some opportunity for IMM review in either case.

Against this background, the IMM respectfully requests that the Commission reject the NEPOOL Alternative as unnecessarily changing the IMM review process and not preferable to the ISOs' straightforward recalculation of ORTPs.

### **III. DISCUSSION**

Tariff Section III.A.21.2 (a) provides that the ORTPs for each technology type "shall be recalculated *using updated data*" for the FCA 16 Capacity Commitment Period and at least every

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<sup>15</sup> Tariff Section III.A.21.2 (b) (vi) provides that if the IMM determines that a requested Offer Floor Price for any new capacity resource is "not consistent with the [IMM's] capacity price estimate, then the resource's offer prices shall be set to a level that is consistent with the capacity price estimate, as determined by the [IMM]," and explained in the resource's Qualification Determination Notification to be filed with the Commission. If a Project Sponsor requests to offer below the relevant ORTP, the Offer Floor Price under the Tariff's MOPR shall equal the greater of the participant-requested Offer Floor Price or the IMM-determined Offer Floor Price.

three years thereafter.<sup>16</sup> Tariff Section III.A.21.2(b) further provides that “the *methodology* used to recalculate the [ORTP] . . . is as follows”:

Capital cost, expected non-capacity revenues and operating costs, assumptions regarding depreciation, taxes and discount rate are input into a capital budgeting model which is used to calculate the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project. The [ORTP] is set equal to the year-one capacity price output from the model. *The model looks at 20 years of real-dollar cash flows discounted at a rate (Weighted Average Cost of Capital) consistent with that expected of a project whose output is under contract* (i.e., a contract negotiated at arms’ length between two unrelated parties).<sup>17</sup>

The Commission should accept the ISO’s recalculations based on updated data and reject the NEPOOL Alternative proposals.

**A. Discounted Cash Flows in an Internally Consistent Capital Budgeting Model Should Be Used to Update the ORTP for Each Technology**

The NEPOOL Alternative seeks to materially change the capital budgeting model used to calculate ORTPs from “look[ing] at 20 years of real-dollar cash flows discounted at a rate (Weighted Average Cost of Capital) consistent with that expected of a project whose output is under contract” to eliminating the “20 years of” cash flows for all technologies and adding a newly-defined term “over the New Capacity Resource Economic Life of the Project.”<sup>18</sup> In turn,

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<sup>16</sup> *Id.* (emphasis added).

<sup>17</sup> Tariff Section III.A.21.1.2 (b) (emphasis added).

<sup>18</sup> The NEPOOL Alternative proposed redline reads as follows:

NEPOOL's new definition would allow a technology's economic life to be as long as 35 years, which would vary depending on the technology type.<sup>19</sup> According to NEPOOL, since 2013 “technological advancements have extended the economic life of certain resources well beyond twenty years,” which necessitates replacing the “current over-simplified and outdated limitation of economic resources to twenty years” with “language that allows the model to consider the New Capacity Resource Economic Life appropriate to each technology.”<sup>20</sup>

We disagree. The current ORTP capital budgeting model reasonably looks at a levelized (for all technology types) 20-year *cash flow* “consistent with that expected of a project whose output is under contract” — which contract term also is typically 20 years (unless evidence is provided otherwise in a resource-specific Offer Floor Price request below the ORTP), and not the potential *economic life* of a project. This is the same 20-year cash-flow analysis for *all* technologies, consistent with industry custom and practice (*e.g.*, conventional financing terms

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(b) For New Generating Capacity Resources, the methodology used to recalculate the Offer Review Trigger Price pursuant to subsection (a) above is as follows. Capital costs, expected non-capacity revenues and operating costs, assumptions regarding depreciation, taxes and discount rate are input into a capital budgeting model which is used to calculate the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project. The Offer Review Trigger Price is set equal to the year-one capacity price output from the model. The model looks at ~~20 years of~~ real-dollar cash flows discounted at a rate (Weighted Average Cost of Capital) consistent with that expected of a project whose output is under contract (i.e., a contract negotiated at arm's length between two unrelated parties), over the New Capacity Resource Economic Life of the project.

<sup>19</sup> The NEPOOL proposed definition of “New Capacity Resource Economic Life” is as follows:

[T]he number of years that is the lesser of (a) the period of time that a New Capacity Resource of a given technology type or types would reasonably be expected to operate before the resource becomes unprofitable for at least two consecutive years, (b) the expected physical operating life of the resource, or (c) 35 years.

<sup>20</sup> Nepool Filing Letter at 11-12.

and power purchase agreements/contracts). In contrast, NEPOOL's proposed raising of the ORTP cash-flow modeling period from 20 years to up to 35 years for some technologies would be arbitrary and discriminatory. This approach likely would result in modeling internally inconsistent cash flows based on the estimate of potential economic life of certain technologies (or specific resources) regardless of the cash flows that are expected during the tenor of actual financing and contract terms.

Regardless of perceived "economic life," resources with different technologies should be modeled similarly based on their cash flows, including expected financing and contract terms, and not on vague and open-ended subjective terms such as the "expected physical operating life of the resource" or how long it is "expected to operate before . . .becom[ing] unprofitable for at least two consecutive years."<sup>21</sup> Applying the proposed NEPOOL definition would likely result in arbitrary and disparate modeling of resources with different technologies that cannot be justified based on a straight-forward discounted cash-flow analysis consistent with the prevailing market conditions for financing and contract terms.

The NEPOOL Alternative would significantly alter the current process by lowering the ORTP threshold for — and essentially eliminating — IMM review for Offshore Wind and Photovoltaic Solar technology types by automatically increasing the economic life of such technologies to 25 to 35 years (rather than the current 20 year cash flow analysis for all resources currently in the Tariff).

Insofar as a specific resource (regardless of the technology) may have different financing or contract terms, that resource currently can request a unit-specific review by the IMM through

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<sup>21</sup> For example, NEPOOL does not explain how a Project Sponsor would reasonably model an expectation of when a project would become unprofitable in 2 consecutive years.

the Offer Floor Price process. The Tariff provides in this regard, “[t]he [IMM] will review capital costs, discount rates, depreciation and tax treatment to ensure that it [the below-ORTP offer] is consistent with overall market conditions.”<sup>22</sup> However, the IMM’s determination is not simply whether a resource has an economic life of more than 20 years but, more precisely, what is the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the resource based on all supportable cost and financing projections.

Contrary to NEPOOL’s statement of the “IMM’s perceived stance,”<sup>23</sup> under the Tariff only “assumptions that are clearly inconsistent with prevailing market conditions will be adjusted.”<sup>24</sup> Indeed, as the Commission recently stated in approving a similar 20-year based model in the PJM market, “The purpose of the Resource-Specific Exception is to allow sellers to use alternative assumptions, so long as they can be justified to PJM’s and the Market Monitor’s satisfaction.”<sup>25</sup>

In this regard, a project may have an economic life in excess of 20 years (as many types of resources conceivably do), but if the project has expected *financing* for only 20 years, the IMM reviews the cash flows over the 20 year pay down (*i.e.*, amortization) period for internal *consistency* in the capital budgeting model. The prevailing market conditions and expected

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<sup>22</sup> Tariff Section III.A.21.2 (b) (i).

<sup>23</sup> NEPOOL Filing Letter at 14.

<sup>24</sup> Tariff Section III.A.21.2 (b) (i). Inputting the resource-specific cost data into the same capital budgeting model used to calculate ORTPs, the IMM must calculate the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for a new project. That value constitutes the IMM-determined price, which is compared with the Project Sponsor’s requested Offer Floor Price.

<sup>25</sup> *Calpine Corp. et al. v. PJM Interconnection, L.L.C.*, 173 FERC ¶ 61,061 at P 281 (2020) (“PJM Order”); *id.* at P 293 (approving model with “asset life of 20 years”).

useful economic life for Offshore Wind thus may be 25 years (if not more), but that is not necessarily an accurate representation of how this technology will be financed and the related discounted cash flows for such projects. Yet the NEPOOL Alternative, with its newly-minted definition of “New Capacity Resource Economic Life,” fails to take into account the need for consistent cash flows, including terms of financing and contract revenues, for the purpose of capital budget modelling.

In addition, if cash flows of greater than 20 years for a resource are input into the capital budgeting model for determining a resource-specific Offer Floor Price, the IMM likely may need to *adjust other inputs* in the capital budgeting model *consistent with the extended cash flows for all years beyond year twenty*. For example, at a minimum, the WACC used as the discount rate must also increase with the extension of the cash flows in years beyond year twenty to be internally consistent and consistent with reasonable market assumptions. The NEPOOL Alternative fails to make such necessary adjustments.

In short, flexibility and consistency are hallmarks of the IMM’s review and determination of new resource-specific Offer Floor Prices under the Tariff, which would be eliminated or severely curtailed under the proposed NEPOOL Alternative.

**B. Any Item Estimating the Economic Life of a New Capacity Resource By Itself Is Not Necessarily “Sufficient Documentation” to Justify an Offer Floor Price**

The NEPOOL Alternative also seeks to change the methodology by which the IMM reviews and determines Offer Floor Prices for resource-specific offers below the relevant technology ORTP. NEPOOL thus proposes Tariff language that would allow new resources to claim an “economic life beyond what is assumed in the ORTP calculation” — by inserting the same newly defined term “New Capacity Resource Economic Life” in Tariff Section



III.A.21.2(b).<sup>26</sup> Further, NEPOOL proposes allowing New Capacity Resources to “justify” this “expected” claim through “a non-exhaustive list of documents” — to be inserted in Tariff Section III.A.21.2(b)(iv) — that the IMM “shall [*i.e.*, must] consider” in making its Offer Floor Price determination.<sup>27</sup> Any single item on this list— ranging from “independent project engineer opinion” *or* “manufacturer’s performance guarantee,” *or* “opinions of third-party experts,” *or* an SEC filing — may be used to support the “expected” New Capacity Resource Economic Life for the resource. While “preferable” to some participants, the proposed revisions fail to ensure a just and reasonable procedure for independent IMM review of the competitiveness of new capacity supply offers.

The Tariff currently requires that “[*s*]ufficient documentation and information must be included in the resource’s qualification package to allow the Internal Market Monitor to make the determinations described in this subsection (b) [*i.e.*, the missing money calculation based on the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow for a proposed project with a net present value of zero].” The Tariff further provides

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<sup>26</sup> The NEPOOL Alternative redline to Tariff Section III.A.21.2(b) is as follows:  
For any other New Capacity Resource, the Internal Market Monitor shall enter all relevant resource costs and non-capacity revenue data, as well as assumptions regarding depreciation, taxes, [New Capacity Resource Economic Life](#), and discount rate into the capital budgeting model used to develop the relevant Offer Review Trigger Price and shall calculate the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project. [For a new Capacity Resource with an expected New Capacity Resource Economic Life greater than the New Capacity Resource Economic Life used in Section III.A.21.1.2\(b\) to calculate the Offer Review Trigger Price for the corresponding technology type, the Project Sponsor shall provide sufficient documentation as described in Section III.A.21.2\(b\)\(iv\) to justify its expected New Capacity Resource Economic Life. The Internal Market Monitor shall consider the documentation provided.](#) The Internal Market Monitor shall compare the requested offer price to this capacity price estimate and the resource’s New Resource Offer Floor Price and offer prices shall be determined as follows:

<sup>27</sup> NEPOOL Filing Letter at 10, 15.

that “[s]uch documentation should include *all the relevant financial estimates and cost projections* for the project, including the project’s pro-forma financing support data.”<sup>28</sup>

The NEPOOL Alternative amendment would significantly change the Tariff design if construed as allowing *any* supporting documentation from the newly-proposed list to constitute *sufficient* documentation that the IMM “shall consider” to meet the Project Sponsor’s burden of demonstrating an Offer Floor Price below the relevant ORTP.<sup>29</sup> However, what constitutes

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<sup>28</sup> Tariff Section III.A.21.2 (b) (iv) (emphasis added).

<sup>29</sup> The NEPOOL Alternative proposal provides:

For a New Capacity Resource that has an *expected* New Capacity Resource Economic Life greater than the New Capacity Resource Economic Live used to calculate the Offer Review Trigger Price for the relevant technology type in Section III.A.21.2(b), the Project Sponsor shall provide evidence to support the expected New Capacity Resource Economic Life, *including but not limited to*, the asset life term for such resource as utilized in the Project Sponsor’s financial accounting (e.g., independently audited financial statements); *or* project financing documents for the resource or evidence of actual costs or financing assumptions of recent comparable projects to the extent the Project Sponsor has not executed project financing for the resource (e.g., independent project engineer opinion or manufacturer’s performance guarantee); *or* opinions of third-party experts regarding the reasonableness of the financing assumptions used for the project itself or in comparable projects. The Project Sponsor *may also rely on* evidence presented in federal filings, such as its FERC Form No. 1 or an *SEC Form 10-K*, to demonstrate an expected New Capacity Resource Economic Life other than the New Capacity Resource Economic Life of similar projects. If there are multiple technology types in the New Capacity Resource, the New Capacity Resource Economic Life should reflect the weighted average of the New Capacity Resource Economic Life of each of the technology types. For a New Capacity Resource that is receiving an out-of-market revenue source and that is seeking a different Weighted Average Cost of Capital than the Net CONE reference unit, the Project Sponsor must submit documentation to demonstrate that the requested Weighted Average Cost of Capital is consistent with that of a resource not receiving out-of-market revenues. This documentation could include but not be limited to publicly available information sources or private information relevant to projects in North America that are not receiving out-of-market revenues. *[emphasis added]*

sufficient documentation is a question of fact that is resource-specific and cannot be pre-determined from a list of hearsay documents specified in the Tariff.

Insofar as the NEPOOL Alternative can be construed as specifying what constitutes “sufficient documentation,” the proposal is overly prescriptive and would substitute for the IMM’s determination *any* evidence provided by the participant, including an “independent project engineer opinion or manufacturer’s performance guarantee” or “opinions of third-party experts.”<sup>30</sup> It would neither be just nor reasonable to require the IMM to accept as sufficient documentation *any* proffered opinion of *any* third-party rather than making an independent determination based on the weight of *all* the evidence, as currently required by the Tariff. This could lead to an arbitrary and capricious result and a finding of sufficient documentation that is not genuinely supported by all the evidence.

Notably, the NEPOOL Alternative proposal also requires the IMM to consider as support for the “expected” economic life of a resource federal filings such as those attached to SEC Form 10-K. However, such securities filings contain a statutory safe harbor from liability for “forward-looking statements” (including “expected” projections) and, as the Commission has recognized, even “puffery” (*e.g.*, “built to last a lifetime” or “guaranteed to outperform in its class”).<sup>31</sup> We ask

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<sup>30</sup> Notably, the NEPOOL Alternative uses an unusual, self-contradictory grammatical construct of “including without limitation” followed by a *disjunctive* list of document types, each of which is separated by an “or” rather than an “and,” as would be expected for an inclusive but not exclusive list. As worded, the proposed language might be construed (or misconstrued) to provide that any of the documents specified in the list would satisfy the “sufficient documentation” requirement.

<sup>31</sup> *Order 670, Prohibition of Energy Market Regulation*, 114 FERC 61,047 at P 42 & n.84 (2006) (“the Commission agrees . . . that ‘mere puffery’ is not violation”). More precisely, the securities law on which the Anti-Manipulation rule was based has a statutory exemption for forward-looking statements, which typically include “expected” performance. *See* 15 U.S.C. § 77z-2(i)(1) (Supp. II 1996); *id.* § 78u-5(i)(1). *See e.g.* C. Chivers and G. Quinn, *Recent Court Case Confirms the Importance of Well Drafted Forward-Looking Statement Disclosures: Tips for Taking Advantage of the Safe Harbor*, Weill Gotshall Finance Digest (Dec. 2009) (“Forward-looking statements can be identified by words such as

that the Commission carefully consider the implications described above when considering the NEPOOL proposal on resource-specific review.

NEPOOL claims that the proposed language is “largely borrowed from similar language that was recently approved by the Commission in a PJM Interconnection LLC (PJM) proceeding.” Not only is that not talismanic but there also are salient *material differences* between the NEPOOL Alternative and the *full* PJM Tariff language: notably, the examples of evidence in PJM are “subject to the review and approval of the IMM or PJM” and further require “certification” that is absent here.<sup>32</sup> In addition, the PJM Tariff requires that the resource identify “offsetting revenue” and most importantly that “the offsetting revenues are consistent, over a reasonable time period identified by the Capacity Market Seller.”<sup>33</sup> As the Commission ruled in the PJM Order, the “demonstration that any resource is actually financed over 35 years . . . must be made before a resource could use 35 years in its resource-specific offer.”<sup>34</sup>

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‘anticipates,’ ‘intends,’ ‘plans,’ ‘seeks,’ ‘believes,’ ‘estimates,’ ‘expects’ and similar references to future periods.”), available at [https://www.weil.com/~media/files/pdfs/finance\\_digest\\_december\\_09.pdf](https://www.weil.com/~media/files/pdfs/finance_digest_december_09.pdf).

<sup>32</sup> The PJM Tariff states “the request must include a certification that the claimed costs accurately reflect, in all material respects, the seller’s reasonably expected costs of new entry and that the request satisfies all standards for a resource-specific exception hereunder.” PJM Tariff, §5.14(h)(5)(ii), available at <https://www.pjm.com/~media/committees-groups/task-forces/ccstf/postings/20201030-pjm-tariff-attachment-dd-section-5-14-elcc-redline.ashx>. See generally A. Keech, PJM Unit-Specific Exception Process (2020) at side 6 (“examples of acceptable evidence subject to the review and approval of the IMM or PJM”), available at <https://www.pjm.com/~media/committees-groups/committees/mic/2020/20200312-special-capacity-mopr/20200312-item-04-unit-specific-exception-process.ashx>.

<sup>33</sup> PJM Tariff, § 5.14(h)(5)(ii) provides: “The request also shall identify all revenue sources relied upon in the Sell Offer to offset the claimed fixed costs, including, without limitation, long-term power supply contracts, tolling agreements, or tariffs on file with state regulatory agencies, and shall demonstrate that such offsetting revenues are consistent, over a reasonable time period identified by the Capacity Market Seller, with the standard prescribed above.”

<sup>34</sup> *PJM Order* at P 281.

In short, the “sufficient documentation” requirement should not be amended such that it can be satisfied by a minimal showing of “select documentation” by the Project Sponsor of the “expected” economic life of a resource, especially where such select documentation falls within a statutory safe harbor from liability for misrepresentation, is not certified or even necessarily consistent with other data over a specified reasonable time period. In contrast, under the current Tariff design, the Project Sponsor has the opportunity to present — and the burden of demonstrating based on all relevant and requested documentation — the unique business case of the project to the IMM, which must make an independent determination reviewable by the Commission.

Also, NEPOOL further proposes that “[i]f there are multiple technology types in the New Capacity Resource, the New Capacity Resource Economic Life should reflect the weighted average of the New Capacity Resource Economic Life of each of the technology types.” Presumably, if the economic life for one Asset is 20 years and another Asset of equal size is 30 years, this would require calculating the combined offer based on a 25 year average life. Yet this approach would allow the resource with the shorter economic life to be extended 5 years — arbitrarily — without any increase in capital expense for the additional 5-year life span or adjustment to the WACC to be consistent with the longer evaluation period. Weighing the economic life by megawatts size is also arbitrary, as how the size of the resource impacts its economic life is unclear. In fact, the proposed Tariff language is not specific to how the weighting is applied (size, price or other). This approach would also allow for these resources with multiple technology types to misrepresent the terms of their financing arrangements, which, as stated before, should be the primary basis for evaluating these projects, not “economic life.”

### **C. The ISO's ORTP for Offshore Wind at the FCA Starting Price Uses a Preferable Estimate of Capital Costs Than Does the NEPOOL Alternative ORTP at Zero**

The ISO and the NEPOOL differ greatly on calculating an ORTP for Offshore Wind. The ISO believes that the threshold cost of new entry for this technology is at or above the FCA Starting Price. The NEPOOL Alternative suggests that the technology is economic to the point that no missing money (\$0.00/kW-month) is required to yield the requisite breakeven contribution required from the capacity market to make the net present value of the project's discounted cash flows equal to zero. As discussed below, this difference is largely attributable to the "bottom up" versus "top down" approach to calculating capital costs for Offshore Wind projects by the ISO and NEPOOL, respectively.

In the IMM's view, inferring a capital cost based on a discounted cash flow model that is admittedly sensitive to inputs and related uncertainty — essentially the approach taken in the NEPOOL Alternative<sup>35</sup> — is *not* as robust and reliable as compared to using direct capital cost data (albeit non-public) that the ISO's consultant relies upon in determining the estimated capital costs to support the ISO's ORTP calculation. The capital cost of a project is a key input into the capital budgeting model that drives the ORTP calculation and any related IMM-determination of a below-ORTP requested Offer Floor Price.<sup>36</sup> Capital cost is a separate and independent input into the capital budgeting model that is unassociated with capacity market revenues.<sup>37</sup>

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<sup>35</sup> For example, with RENEW's model the value of capital costs can change materially with changes in the assumed inputs into the discounted cash flow model – e.g., inputting a PPA with greater revenue spits out a greater capital cost amount, yet the capital costs of a project should not vary with revenue.

<sup>36</sup> Tariff Section III.A.21.1.2 (a) ("Capital cost, expected non-capacity revenues and operating costs, assumptions regarding depreciation, taxes and discount rate are input into a capital budgeting model which is used to calculate the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project.").

<sup>37</sup> *Id.*

In calculating an ORTP for Offshore Wind technology, the ISO estimates the costs of such projects based on actual cost data estimates developed by third-party consultants (Matt MacDonald and Concentric Energy Advisors) — neither of which has a financial or other interest in having a higher or lower capital cost value other than one that accurately represents the capital cost of a new Offshore Wind project in New England.

By comparison, the NEPOOL Alternative does not estimate capital cost using actual capital costs associated with Offshore Wind projects. Rather, the NEPOOL Alternative solves for the capital cost needed in order to breakeven using a discounted cash flow model given assumptions regarding future cash flows.<sup>38</sup> Notably, the inferred value for capital cost *changes materially* with changes to the other assumed inputs (*i.e.*, cash flows, financial assumptions) in the model. Yet a true estimate of the capital cost of a project should not depend on or vary with such other model inputs (such as the amortization schedule, energy revenues, REC prices, and WACC).<sup>39</sup>

NEPOOL's criticisms on benchmarking are misplaced. First, the ISO explains the benchmarking it performed for its consultant's Offshore Wind capital cost calculation, with reasonable explanations of the relevance of the studies it relies upon.<sup>40</sup> More generally, there is no need to benchmark a model because the ISO uses *actual cost data* gathered by its consultants

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<sup>38</sup> As described during the stakeholder process, the NEPOOL Alternative underlying model derives an implied capital expenditure for Offshore Wind projects using publicly available PPA pricing. In essence, the methodology uses a discounted cash flow model and backs out an implied initial capital cost that could be recovered by the revenue expected from the various PPA contracts, given other assumptions about ongoing operating costs, term, discount rate, and other revenue. The model itself performs a break-even analysis that solves for the implied capital expenditures required to yield a discounted cash flow with a net present value of zero for each project.

<sup>39</sup> In fact, the IMM has evaluated the sensitivity of the discounted cash flow model and found that the Offer Floor Price can be reduced by as much as 45% by making small adjustments in a number of the input variables to that equation. Such discounted cash flow model is highly sensitive to the inputs and, therefore, any inferred capital cost value will be too.

<sup>40</sup> See ISO Filing Letter at 33-35.

(Mott MacDonald). Similarly, the fact that the methodology underlying the proposed amendment results in a different value than the ISO’s estimate does not mean that the ISO’s calculations based on actual data are wrong — when a theory does not match the “lab results,” the theory, not the lab results, require adjustment.

**D. Lack of an ORTP for Co-Located Lithium Ion Battery – Solar Photovoltaic Technologies Results in the Use of a Weighted Average Approach that Lacks Precision But Should Not Be Revised to Allow for Asset Gerrymandering**

To balance the burden to participants and the need for review of new capacity supply offers, there should be an ORTP calculated for each major technology or technologies that seek to qualify in the Forward Capacity Market. The ISO and its consultants endeavored to calculate an ORTP for the combination of Photovoltaic Solar and Energy Storage Device – Lithium Ion technologies, which are typically located behind the same point of interconnection and share constraints (referred to herein as “co-located solar/battery facility”), that have increased in submissions in recent years.

The ISO initially determined that this combination of technologies was not economic and, therefore, would be priced above the FCA Starting Price. Subsequently, based on a change in available federal tax credits,<sup>41</sup> the ISO preliminarily calculated an ORTP of \$6.964/kW-month for a co-located solar/battery facility.<sup>42</sup> This calculation notably took a “bottom up” analytical approach: for example, the calculation reflected the relatively small size of units participating in

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<sup>41</sup> On December 28, 2020, the Consolidated Appropriations Act, 2021 was signed into law, which extended the Investment Tax Credit (ITC). The extension of the ITC impacted the ORTP for multiple technologies and specifically impacted the ORTP for co-located solar/battery resources.

<sup>42</sup> See draft report available at [https://www.iso-ne.com/static-assets/documents/2021/02/a02\\_mc\\_2021\\_02\\_24\\_cea\\_adendum.docx](https://www.iso-ne.com/static-assets/documents/2021/02/a02_mc_2021_02_24_cea_adendum.docx). See also [https://www.iso-ne.com/static-assets/documents/2021/02/a02\\_mc\\_2021\\_02\\_24\\_orpt\\_tariff\\_red.docx](https://www.iso-ne.com/static-assets/documents/2021/02/a02_mc_2021_02_24_orpt_tariff_red.docx).



this manner in the Forward Capacity Market (typically under 5 MWs); it also accounted for limitations in how a co-located solar/battery facility would need to operate in the first five years of operations to qualify for the valuable ITC, while also allowing for more economic dispatch after year five to account for additional revenues the facility could receive in years beyond the ITC limitation.<sup>43</sup>

The IMM strongly supports applying such a bottom up analysis to determine the ORTP for any technology or combination of co-located technologies. In the case of a co-located solar/battery facility, a bottom-up calculation is preferable because it accurately represents the constraints that co-located solar/battery facilities face. For example, to capture the ITC (as is expected), a battery must charge a minimum amount of the time from the renewable (solar) Asset, which means the solar Asset must forebear energy revenues and renewable energy credits by not providing electricity to the grid while charging the battery in the limited number of solar hours in the day. The battery Asset also must relinquish the ability to charge during cheaper overnight hours of the day and instead must charge from the solar Asset in hours it could reasonably be expected to be available for dispatch to the grid. This opportunity cost must be factored into the ORTP for this combination of resources to accurately represent their cost in the Forward Capacity Market.

However, neither the ISO nor NEPOOL ultimately filed an ORTP for a co-located solar/battery facility. Under the current Tariff, an ORTP based on the “weighted average” of the ORTPs underlying the combined resource technologies must be used — unless the Commission

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<sup>43</sup> See *id.* See also IMM Memorandum to NEPOOL Markets Committee dated February 5, 2021, available at [https://www.iso-ne.com/static-assets/documents/2021/02/a05\\_mc\\_2021\\_02\\_09\\_10\\_imm\\_memo\\_co\\_located\\_treatment.pdf](https://www.iso-ne.com/static-assets/documents/2021/02/a05_mc_2021_02_09_10_imm_memo_co_located_treatment.pdf).

directs the ISO and participants to finalize an ORTP proposal for a co-located solar/battery facility.<sup>44</sup>

The IMM notes below that a weighted average approach is a less desirable solution than calculating an ORTP that estimates the actual cost of new entry for such co-located solar/battery facilities based on actual operating constraints and is likely to understate the cost of new entry for such co-located facilities. The weighted average approach, in the case of co-located battery and solar, results in an ORTP value that is below the true “missing money” for the combined resource, allows such resources to offer in at prices below a competitive price without review and mitigation, and undermines the protections put in place by the MOPR. The IMM also opposes the NEPOOL’s proposed revisions to the weighted average approach, whereby assets behind the same point of interconnection and sharing constraints can elect to register New Capacity Resources separately and, thereby, avoid application of a weighted average ORTP through essentially “asset gerrymandering.”

- *The Weighted Average Is Less Desirable than a Bottom Up ORTP Calculation*

In the absence of a technology specific ORTP for a co-located solar/battery facility, stakeholder focus shifted to applying the weighted average approach under the Tariff. However, individually modelled solar and battery technologies do not represent how the resources would need to operate in the market to receive the ITC as a co-located facility, where the battery must charge from the solar. Instead, all energy revenues associated with the battery ORTP and the solar (plus REC revenues) are included in the weighted average ORTP, which will overestimate

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<sup>44</sup> Tariff Section III.A.21.2 (c) provides that the ORTP for a “new capacity resource shall be the weighted average of the [ORTPs] of the asset technology types of the assets that comprise the resource, based on the expected capacity contribution from each asset technology type.”

the potential revenues the facility could reasonably expect to receive and allow the combined ORTP for co-located facilities to be priced below their actual costs.

For example, assume a co-located solar and battery facility seeks to enter the Forward Capacity Market as a New Capacity Resource. Under the NEPOOL Alternative proposal, a resource with qualified capacity of 5 MW of battery (\$2.601 kW-month) and qualified capacity of 0.945 MW (18.9 % of 5 MW nameplate) of solar (\$0.000 kW-month) would receive a weighted ORTP of \$2.188 kW-month (capacity weighting applied). This value is \$4.776 kW-month below the preliminary ORTP value (\$6.964/kW-month) the ISO and its consultants calculated for a co-located solar/battery facility. Applying the weighted average has effectively removed the MOPR for this combination of assets — which are newer to the market, have high costs and are typically subsidized — by underestimating the “missing money” needed for this co-located resource to be economical.

- *The Weighted Average Approach Should Not Be Revised to Allow Asset Splitting*

The NEPOOL Alternative proposes revising the Tariff to allow Assets that register separately behind the same point of interconnection and participate as separate Resources in the Forward Capacity Auction to avoid a weighted average ORTP insofar as each Asset will not be contributing to the “FCA Qualified Capacity” of the other.<sup>45</sup> The IMM believes that this elevates

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<sup>45</sup> The NEPOOL Alternative redline proposes as follows:

(c) For a ~~n~~New ~~e~~Capacity ~~r~~Resource composed of ~~a~~Assets having different technology types the Offer Review Trigger Price shall be the weighted average of the Offer Review Trigger Prices of the ~~a~~Asset technology types of the ~~a~~Assets that comprise the New Capacity ~~r~~Resource, based on the expected ~~capacity~~ contribution from each ~~a~~Asset technology type toward the FCA Qualified Capacity of the New Capacity Resource. Sufficient documentation must be included in the New Capacity ~~r~~Resource’s New Capacity ~~e~~Qualification ~~p~~Package or New Demand Capacity Resource Qualification Package to permit the Internal Market Monitor to determine the weighted average Offer Review Trigger Price.

form over substance and would allow participants to artfully compose Assets separately in an attempt to clear a Capacity Supply Obligation notwithstanding their actual costs.

Using the same size example as above, a facility that houses both a solar and a battery unit would receive two separate ORTP values if each Asset behind the same point of interconnection registers separately as a New Capacity Resource. Using the NEPOOL proposed ORTPs, the solar Asset would receive a \$0.000 kW-month ORTP and the battery Asset would receive a \$2.601 kW-month ORTP. This would completely ignore the constraints that come along with co-locating these technologies and does not accurately model the limitations associated with facilities receiving the ITC. This approach if accepted would allow for revenues to be captured in the ORTP that the resources may not actually be able to receive when complying with the ITC constraints (as presumably the co-located Assets are seeking to avail themselves of the ITC for tax purposes). As the IMM has stated publically to stakeholders, artful registration of capacity resources should not dictate what ORTP should be applied. Instead, a common-sense approach to developing an ORTP should be applied that represents the characteristics of the facility. This would be similar to how the qualification of megawatt values are analyzed, where the entirety of the facility is reviewed to ensure deliverability to the grid given all constraints on the facility.

The NEPOOL Alternative also runs into definitional issues insofar as it relies on ISO training materials rather than the Tariff in an attempt to distinguish between an “Asset” and “Resource.”<sup>46</sup> However, under the Tariff, the definitions of Asset and Resource both include a

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<sup>46</sup> See NEPOOL Filing Letter at n. 123 (“explaining how the words “resource,” “asset,” and “hybrid resource” are understood in New England”). Compare the definitions of “Asset” and “Resource” in Tariff Section I.2.2, available at [https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect\\_1/sect\\_i.pdf](https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_1/sect_i.pdf). As stated in the upfront disclaimer in the training materials: “As always, in the event of a conflict between the Tariff and any presentation such as this, the

“Generator Asset,” rendering the distinction to be without a difference. This is another reason to reject the NEPOOL Alternative revisions.

The IMM respectfully requests that the Commission resolve this issue by (a) rejecting the NEPOOL Alternative proposal, and (2) directing the ISO and NEPOOL to work together on these issues for FCA 17.

## CONCLUSION

For the foregoing reasons, the IMM respectfully requests that the Commission approve the ISO’s recalculations of the Offer Review Trigger Price relevant technologies and deny the NEPOOL Alternative proposals in their entirety. In addition, the Commission should consider directing the ISO and NEPOOL participants to develop an appropriate Offer Review Trigger Price for co-located solar/battery facilities for use in the future.

April 28, 2021

Respectfully submitted,

*/s/ Jeffrey McDonald*

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Tariff governs, and it is the Market Participant's responsibility to understand the applicable provisions of the Tariff.” See <https://www.iso-ne.com/static-assets/documents/2020/04/20200408-co-located-market-participation.pdf>.

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Holyoke, Massachusetts this 28<sup>th</sup> day of April, 2021.

/s/ Julie Horgan

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