Response to Stakeholder Comments on the Boston 2028 RFP – Review of Phase One Proposals

1. Introduction

This document captures stakeholder comments submitted to pacmatters@iso-ne.com in response to the presentation by Brent Oberlin to the Planning Advisory Committee (PAC) on June 17, 2020 titled "Boston 2028 RFP – Review of Phase One Proposals,"[1] the June 16, 2020 posting of the "Draft Boston 2028 RFP – Review of Phase One Proposals,"[2] and the ISO responses to the stakeholder comments.

The purpose of the June 17, 2020 presentation was threefold:

- Discuss the methodology used to evaluate the 36 Phase One Proposals received for the Boston 2028 Request for Proposal (Boston 2028 RFP).
- Present the draft listing of qualifying Phase One Proposals for consideration in Phase Two Solutions.
- Provide the explanation for the exclusion of Phase One Proposals from consideration in the Phase Two Solution process.

Prior to addressing the specific comments received on these proposals, it is important to note a few salient points regarding the review of Phase One Proposals by the ISO.

- The ISO expected that the Phase One Proposals submitted to the ISO as of the March 4, 2020 deadline would be comprehensive and complete. The process to cure proposal deficiencies under Attachment K, Section 4.3(f) only allows for curing of minor deficiencies and does not permit a material modification to the proposal. Therefore, QTPS Respondents were contacted to cure a Phase One Proposal only if the cured proposal would not be considered a materially modified proposal. As an example, modifying the size of a dynamic reactive device was considered a material modification. Therefore, if a proposal was excluded based on an inadequately sized dynamic reactive device, the QTPS Respondent was not contacted to cure the proposal.
- Even though "cost and speed" were the two most important evaluation factors, the review of cost competitiveness was only performed after the preliminary review of the proposals to determine if they provided a viable solution to the identified needs. Once viable, low-cost options were identified, it was determined that all proposals that had an installed cost at or above $94 million were non-competitive in this solicitation, even if they had passed the preliminary review. Of the 36 Phase One Proposals, 31 Phase One Proposals have an

[1] https://www.iso-ne.com/static-assets/documents/2020/06/a2_boston_2028_rfp_phase_one_proposal_review.pdf

[2] https://www.iso-ne.com/static-assets/documents/2020/06/draft_boston_2028_rfp_review_of_phase_one_proposals.docx

installed cost that is equal to or exceeds $94 million and would have been considered non-competitive.

The ISO used the aforementioned points in order to accomplish the following goals:

- Minimize the costs to be borne by the ratepayers by only including cost competitive proposals in the draft listing of qualifying Phase One Proposals, ensuring that only those proposals with a realistic chance of being selected as the preferred solution are eligible for regional rate recovery in the Phase Two Solutions process.
- Minimize the costs for QTPS Respondents if the proposals had no chance of advancing to Phase Two Solutions.
- Prevent further delays in posting of the draft listing of qualifying Phase One Proposals.

Comments on the presentation and report were received from the following parties:

- Anbaric
- SP Transmission
- Joint Comments from Eversource and National Grid
- Transource New England, LLC
- State of Connecticut, Office of Consumer Counsel
- New England Energy Connection

Several of the comments received were lengthy, and in some of the following sections only a high-level summary of the comments provided are included. The complete set of comments provided are included in appendices to this document.

Some of the comments received offered recommendations to improve the competitive transmission solicitation process in the future. As the ISO has previously noted, it plans to have a general lessons-learned discussion with the Planning Advisory Committee (PAC). The ISO also plans to offer a one-on-one discussion with each of the Qualified Transmission Project Sponsors (QTPSs) which participated in the RFP to go over areas of concern, both from a project-specific point of view and from a process perspective. Accordingly, the ISO will discuss recommendations for future improvements as part of the lessons-learned process.

2. Anbaric Comments[3]

Anbaric asserts six errors made by ISO-NE (identified in Section II A – Section II F of Appendix A) in the comments provided to the Planning Advisory Committee. Each of those assertions are addressed below. Only a summary of the six asserted errors is provided below. The details provided by Anbaric for each assertion are available in Appendix A to this document. After further review, the ISO agrees with Anbaric on two of its assertions and disagrees with four of its assertions. Therefore, two of the preliminary review factors that led to the exclusion of the Anbaric Phase One Proposals have been removed. However, with this additional review, the ISO has identified an additional issue with the

[3] Comments of Clarke Bruno received via email on June 16, 2020 from John-Paul Kwasie. The complete Anbaric comments submittal can be found in Appendix A.

Anbaric proposals that would also lead to their exclusion from the listing of qualifying Phase One Proposals.

A. Contrary to the Facts ISO-NE States that Equipment is Missing from Bid. The Missing Equipment is Identified Clearly in the Bid and Included in Bid Costs

The ISO disagrees with Anbaric's assertion that a step-up transformer between a STATCOM and the 345 kV point of interconnection in the Anbaric AC project is "*Identified Clearly in the Bid and included in the Bid Costs.*" Anbaric states that the step-up transformer is shown on the provided diagrams, but that is the only place where the transformer may be discerned. No mention is made of the transformer anywhere else in the Anbaric proposal, including in the three sections where a transformer should reasonably be listed: Section 4.15 Transformer, Section 4.18 Dynamic Reactive Device, and the Cost Estimate Workbook provided in Section 6.2.

Furthermore, no modeling data – best approximate or otherwise – is provided for the transformer in Section 5 of the Anbaric proposal. It is important to note that based on the order in which conflicts within an RFP submittal would be resolved, the modeling files have the highest precedence.

In the RFP instructions, ISO-NE explicitly specified that transformers were to be identified in Section 4.15 of the RFP submittal.

> *"The response shall state the type of work being done (add, replace, or remove), the voltage level, the summer normal, LTE and STE rating in MVA, the tap changing capability and controls for the transformer if any, the station where the transformer work is taking place, and the installed cost estimate for the work. If the work includes more than one transformer, then an entry at the end of the response shall be added to reflect the total installed cost for all of the transformer work. Each new transformer shall be marked with an identifier that will be consistently used in other responses in the RFP. The response shall be submitted in a narrative form and not in an uploaded file."*

Even in Anbaric's comments, they admit that the step-up transformer was only implied in the proposal,

> *''Anbaric's response to item 4.1 identifies the STATCOM as a 345kV element. The transformer is included in that element and is part of its cost. A STATCOM includes a transformer as part of the kit supplied by a vendor.''*

There is no description in the RFP submittal that supports the above statement that the transformer was included in the 345 kV connected STATCOM that was provided.

All the existing dynamic reactive devices on the transmission system in New England have the step-up transformer explicitly modeled. The ISO considered this an essential component of the model because the MVAR available at the point of interconnection (POI) is a requirement for the dynamic reactive device (DRD) and accounting for transformer losses is a critical component.

Since the PAC meeting, the ISO has reviewed the practices in other areas and some of the existing literature on the subject of explicitly modeling the transformers for a dynamic reactive device. The existing literature suggests that the step-up transformer model may be excluded if the impact of the

step-up transformer is taken into account in the model that is directly connected to the high voltage bus.

While the Anbaric proposal did not explicitly state that the effects of the step-up transformer are taken into consideration within the 345 kV connected model that was provided, the ISO identifies this review factor as one where conflicting conventions in other areas may have led to confusion. Therefore, Missing Equipment has been removed from reasons to eliminate the Anbaric Mystic Reliability AC Wind Link from the listing of qualifying Phase One Proposals. As part of the lessons-learned process, the ISO will be seeking input to ensure that all components of the proposals and the expectations for QTPS submitted information and materials are clearly defined.

Note that the only proposal that excluded a step-up transformer for a dynamic reactive device was the Anbaric Mystic Reliability AC Wind Link (BOS-005) and, therefore, the ISO's exclusion of this preliminary review factor for the Anbaric Mystic Reliability AC Wind Link does not impact any other proposals.

B. ISO-NE Incorrectly States that the Anbaric AC Project is Unable to Provide the Reactive Power Required to Address the Identified Needs. The Project as Described in the Bid Provides the Reactive Power to Address All Identified Needs

The following language has been extracted from the Boston 2028 Needs Addendum,[4] under the subsection with "Detailed Requirements for the Dynamic Reactive Device:"

"The dynamic reactive device shall:

- *Provide at least 300 MVAR of continuous dynamic reactive capability at the point of interconnection (POI) with:*
    - *The ability to continuously operate from 0 to 150 MVAR leading at the POI (reactive injection at the POI from -150 MVAR to 0 MVAR) for voltages at the POI from 0.95 p.u. to 1.05 p.u.*
    - *The ability to continuously operate from 0 to 150 MVAR lagging[3] at the POI (reactive injection at the POI from 0 MVAR to +150 MVAR) for voltages at the POI from 0.90 p.u. to 1.05 p.u.*
    - *The device shall be designed to continuously withstand the device terminal voltages that may result from the POI being operated in these voltage and reactive output ranges*

      ….
- *Provide continuous voltage control at the POI under normal operating conditions by utilizing the complete dynamic reactive range*"

Footnote 3 in the quoted text said:

[4] https://www.iso-ne.com/static-assets/documents/2019/10/final_boston_2028_na_addendum.pdf

[3] *For system restoration, the total dynamic reactive range is based on the charging associated with cable switching. However, the restoration of the Boston system includes the energization of reactors and transformers, that would require use of the capacitive range of the dynamic reactive device. Additionally, requiring the device to be able to produce reactive power allows the device to not only be useful for system restoration, but also be useful in normal day to day operations, providing significantly improved post-fault voltage recovery.*

The three highlighted bullets clearly indicate that the dynamic reactive device requirements are for all operating conditions, including both normal and system restoration conditions.

Anbaric states in their response that in order to meet the -150 MVAR requirement at the POI, the shunt reactors that are installed to compensate the charging associated with the proposed 345 kV need to be utilized.

"It appears that ISO-NE it did not look at the whole package of project elements, which are designed to work together so that the 150 MVAr STATCOM provided the necessary system voltage performance."

Furthermore, in the specific language highlighted by Anbaric, Anbaric states that:

"*During system restoration, shunt reactors at Everett would be available to the system operator in addition to the STATCOM*."

There are a number of concerns with Anbaric's proposal and associated response. First and foremost, the ISO's requirements for the capabilities of the dynamic reactive device are for the dynamic reactive device itself and not a conglomeration of various transmission elements. The introductory language quoted above described this: "The dynamic reactive device shall…." Anbaric's response indicates that to meet the dynamic device requirements, the ISO must rely on a +/- 150 MVAR STATCOM *and* manually switched shunt reactors.[5] Clearly this does not meet the requirements since, by Anbaric's own response, the Phase One Proposal relies upon devices other than the dynamic reactive device itself to try to meet some aspects of the requirements.

Even if the ISO was to consider the shunt reactors in meeting the requirements for the dynamic reactive device, these requirements are required to be met under normal operating conditions as well as under system restoration conditions. Under normal operating conditions, the shunt reactors would already be in service to compensate for significant cable charging associated with the project and therefore would have no bearing on the ability of the STATCOM to meet the requirements. Furthermore, the dynamic reactive device must provide continuous operation over the entire range of conditions. Relying on operators to switch shunt reactors does not meet this requirement.

Anbaric also notes that their review indicates that:

"300 MVAr of dynamic reactive capability at the site-controlled location near Mystic is able to provide as much support as at the other locations specified by ISO-NE."

[5] In Anbaric's Phase One Proposal, the use of the reactors is not described as being used to meet the dynamic device requirements, but instead stated "Cable charging will be compensated by four 180MVAr shunt reactors for each cable, with two switched shunt reactors at each cable terminal."

However, in the Boston 2028 Needs Assessment Addendum, the ISO has clearly identified the following POI's for interconnecting the dynamic reactive device

"The dynamic reactive device must be interconnected to one of the following locations:

- *Mystic 345 kV or 115 kV*
- *North Cambridge 345 kV or 115 kV*
- *Wakefield Junction 345 kV or 115 kV*
- *Woburn 345 kV or 115 kV*
- *Tewksbury 345 kV "*

In summary, the ISO has evaluated the dynamic reactive devices consistent with the detailed requirements that were specified in the Boston 2028 Needs Assessment Addendum.

Based on the discussion above, the ISO disagrees with Anbaric's conclusion that the Anbaric Mystic Reliability AC Wind Link (BOS-005) is able to provide a reactive injection of -150 MVAR at Mystic 345 kV for a 0.95 p.u. to 1.05 p.u. voltage at Mystic 345 kV.

Inadequate dynamic capability continues to be a viable reason to eliminate the Anbaric AC Phase One Proposal (BOS-005).

C. The ISO's Assertions Regarding In-Service Date Feasibility as a Fatal Flaw for the AC and DC Projects are Contrary to Evidence. The Mystic Cost of Service Agreement Does Not Prohibit Construction Outages and such Outages are Common

Anbaric notes that nothing in the Mystic Cost of Service Agreement prohibits routine outages for construction or maintenance. This is correct, and while the presence of such language in an agreement does not assure that the system will be reliable while the required outages are taken, upon further review the ISO agrees with Anbaric. A Phase One Proposal will not be excluded based on an inability to meet the in-service date solely because the proposal plans to interconnect to the Mystic 8 terminal. Inability to meet the in-service date will be removed from the reasons to eliminate the Anbaric Mystic Reliability AC Wind Link (BOS-005) and Anbaric Mystic Reliability DC Wind Link (BOS-009).

Additionally, there are three Transource New England Phase One Proposals (BOS-019, BOS-029, and BOS-065) that utilize the Mystic 8 terminal. For these proposals, the use of Mystic 8 terminals will be removed as a reason for exclusion. However, since the in-service date for the three Transource New England proposals is beyond June 1, 2024, inability to meet the in-service date will continue to be identified as a reason for excluding these proposals.

Once the ISO concluded that the use of Mystic 8 terminal would not be a disqualifying factor, the ISO again reviewed the Phase One Proposals to evaluate if a proposal utilizes the non-PTF breakers that are owned by Exelon to interconnect at Mystic 345 kV, rather than interconnecting to the NSTAR owned equipment at Mystic. Of the five proposals that utilize the Mystic 8 terminal, the Anbaric Mystic Reliability AC Wind Link (BOS-005) and Anbaric Mystic Reliability DC Wind Link (BOS-009) utilize the non-PTF breakers at Mystic that are owned by Exelon.

However, in the RFP submittal Anbaric has not demonstrated access to the non-PTF breakers that are owned by Exelon in order to facilitate the construction of this project. Therefore, the review

factor related to "Access to Land" has been expanded to include "Access to Land/Facilities" and this has been added as a preliminary review factor for the exclusion of these two proposals from the listing of qualifying Phase One Proposals.

D. ISO-NE Incorrectly Asserts that New Equipment Connected to Existing Substations is a Fatal Flaw; this Assertion is in Violation of Section 210 of the Federal Power Act, Section 2.05 of the Transmission Operating Agreement, and Attachment K Section 4.3(a)

Anbaric claims that its proposal for the incumbent Participating Transmission Owner ("PTO") (in this case, National Grid) to build and install new series reactors at W. Amesbury on the 115 kV K-163 line at the substation – constitutes eligible "upgrades" under Section 4.3(a) of Attachment K of the ISO's OATT. However, Anbaric's proposal does not meet the requirements of Section 4.3(a) of Attachment K because the proposal requires the PTO to develop, own and construct new transmission facilities, rather than simply upgrade existing facilities. Under Section 4.3(a) of Attachment K, a QTPS's comprehensive solution may include "*an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases, the Qualified Transmission Project Sponsor's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available . . .*." Section 4.3(a) limits the upgrades to existing facilities owned by the incumbent PTO, and to upgrades built by the incumbent to interconnect facilities developed by the QTPS. Anbaric's proposals also fail to meet Sections 4.3(b) and 4.3(e)(i) of Attachment K. The first section provides that "*[n]either the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way.*" The second section requires the QTPS to provide sufficient data. Anbaric's proposed series reactor is a part of its proposed solution, not an upgrade required of the incumbent PTO to accommodate interconnection of the facilities developed by the QTPS. Anbaric's proposal relies on the incumbent to build the series reactor and to do so on the incumbent's land. Even if Anbaric had proposed to build the series reactor itself, its proposal still would have been deficient because it failed to address how it would not alter the incumbent's ROW, or to provide information about how it would obtain access to the land or ROW needed to install the reactor.

Anbaric is incorrect that not accepting Anbaric's proposal to require the incumbent PTO to build and install a new series reactor on the incumbent PTO's system violates Section 210 of the Federal Power Act. Anbaric fails to demonstrate the applicability of Section 210 of the Federal Power Act. That section of the Federal Power Act sets forth the requirements for interconnections between certain entities. It authorizes the Commission to require the physical interconnection of an "*electric utility, Federal power marketing agency, geothermal power producer (including a producer which is not an electric utility), qualifying cogenerator, or qualifying small power producer*" to the transmission facilities of an electric utility upon such an entity's application. Anbaric is not an entity of the type to which Section 210 applies. Even if Anbaric could somehow overcome that fact, it is

not simply requesting interconnection of its facilities. Rather, Anbaric's proposal requires the incumbent PTO (National Grid) to build a new series reactor in National Grid's existing ROW. Anbaric's proposal falls well outside the interconnection provisions of Section 210 of the Federal Power Act. Further, as discussed above, Anbaric's proposal to require the incumbent PTO to build new transmission facilities is inconsistent with Attachment K.

E. ISO-NE Incorrectly Asserts that Projects are Not Competitive for Reasons of Cost. The Order No. 1000 Standard is "More Efficient or Cost-Effective" and Not Least Capital Cost; Least Capital Cost May Be Significantly More Expensive to Consumers

Anbaric asserts that the Anbaric Mystic Reliability AC Wind Link (BOS-005) and Anbaric Mystic Reliability DC Wind Link (BOS-009) may be considered more efficient or cost-effective if in addition to considering installed costs, the ISO considered the following in determining cost competitiveness of the Phase One Proposals:

- The ability to integrate 2,400 MW of offshore wind
- The retirement of the Kendall unit in Boston and Canal units in southeast Massachusetts (SEMA)
- The cancellation of the New England Clean Energy Connect (NECEC) project
- Inclusion of public policy goals into the RFP evaluation

Therefore, Anbaric argues that the two Anbaric proposals (BOS-005 and BOS-009) should be carried over into Phase Two Solutions.

Discussion related to cost

The RFP was consistent with ISO statements at numerous stakeholder meetings leading up to the RFP being issued, where cost of the proposal and the expected in-service date were described as the two most important evaluation factors.[6] In the RFP evaluation factors[7] the ISO has identified three groups of evaluation factors and listed them in order of importance (Group 1 has the highest importance). Of the evaluation factors in Group 1 (highest priority), the following pertain to costs:

- *Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate*

[6] ISO Response to Question 2, "Information as to the consideration of evaluation factors specific to the Boston RFP will be provided in Section 1.2 of the specific RFP. However, the ISO has stated on many occasions that the cost of the proposal and the expected in-service date will be two of the most significant evaluation factors being considered for the Boston RFP," https://www.iso-ne.com/static-assets/documents/2019/12/boston_rfp_questions_12_04_19.pdf.

[7] See document "Part 1 Appendix A Evaluation Factors.pdf" that is posted at: https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_documents.zip

- *Note that the Life-Cycle Cost Workbook was developed to be able to accept information for up to a 60-year life, but Qualified Transmission Project Sponsor (QTPS) Respondents shall only provide data for the expected life of each component*

- *Any cost cap or cost containment provisions*

    - *These are provided by the QTPS Respondents. Evaluation may consider a number of different scenarios to understand the exposure to cost increase*

- *Impact on NPCC Bulk Power System (BPS) Classification*
    - *Consideration of whether the project will cause additional stations to be classified as BPS and also if the project will cause stations to no longer be classified as BPS. This will help the ISO understand the risk of additional cost related to the BPS classification change that would emerge during the PPA process and potential for additional criteria violations based on NPCC Directory 1 being applied to the newly identified BPS facilities.*

As soon as the proposals were received, the ISO identified that based on the information available at the end of the Phase One Proposal submittal, the life-cycle costs would be misleading due to the exclusion of life-cycle costs associated with upgrades built by the incumbent where the incumbent is not the QTPS Respondent (corollary upgrades).

Therefore, the ISO relied on installed costs as a reasonable metric to compare the costs of the Phase One Proposals to account for the evaluation factors listed above, because:

- There were several Phase One Proposals where the installed costs for the proposal far exceeded the least-cost[8] Phase One Proposal (BOS-017), which was $49M. Specifically, 30 of the 36 Phase One Proposals had an installed cost that exceeded 200% of the installed cost of the least-cost Phase One Proposal, with the installed cost of Anbaric's two proposals being $449M and $744M.

- The life-cycle cost of $74 million for BOS-017 was not misleading because this proposal did not include any corollary upgrades. All components for this proposal will be built by the QTPS Respondents. There are 33 Phase One Proposals with an installed cost that exceeds the life-cycle cost for the least-cost Phase One Proposal (BOS-017).

- Finally, the ISO does not believe that the inclusion of cost caps or other cost containment measures provided by the excluded Phase One Proposals would bridge the gap in terms of costs of the excluded Phase One Proposals with the least-cost Phase One Proposal.

Specifically, with respect to the Anbaric proposals, the inclusion of cost caps or expansion of life-cycle costs to include incumbent upgrades would not make the two Anbaric proposals (BOS-005 and BOS-009), that have an installed cost of $449M and $744M, cost-competitive with BOS-017 that has an installed cost of $49M and a life-cycle cost of $74M.

[8] For the purposes of this discussion least-cost refers to the Phase One Proposal with the least installed costs.

Anbaric states that:

> *"While refusing to evaluate 35 of 36 competitive proposals may be convenient for ISO-NE, it is looking at "costs" in ways that disregard FERC's intentions in promulgating Order No. 1000 to enhance regional planning."*

However, the exclusion of the Phase One Proposals instead of being a matter of "convenience" is consistent with Section 4.3(g) of Attachment K to the ISO Tariff.

> "*…The ISO with input from the Planning Advisory Committee may exclude projects from the list, and from consideration in Phase Two Solutions, based on a determination that the Phase One Proposal is not competitive with other projects that have been submitted in terms of cost, electrical performance, future system expandability, or feasibility…*"

Discussions related to alternate assumptions

Additionally, Anbaric claims that the following factors would make their proposals cost-effective:

- The retirement of the Kendall unit in Boston and Canal units in SEMA
- The cancellation of the New England Clean Energy Connect (NECEC) project

However, the retirement of the generators listed was clearly documented as a lower priority evaluation factor and placed in Group 2, which was to be used only if Group 1 evaluation factors do not result in a clear "winner" when comparing proposals.[9] In this instance, based on the substantial difference in installed costs between the BOS-017 proposal and the two Anbaric proposals, the ISO did not consider an evaluation of the impact of retirements to be necessary for the Boston 2028 RFP.

Further, inclusion of the NECEC project into the models used to establish the system concerns identified in the Boston 2028 Needs Assessment Update is required under Section 4.1(f) of Attachment K which states:

"… the ISO shall incorporate or update information regarding resources in Needs Assessments that have been proposed and (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored Request For Proposals, or (iii) have a financially binding obligation pursuant to a contract."

The final two factors that Anbaric states as "errors" by the ISO are:

- Not considering the ability to integrate 2,400 MW of off shore wind in SEMA
- Not including public policy goals in the RFP evaluation

[9] Part 1 Appendix A Evaluation Factors.pdf, that is posted at: https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_documents.zip. "The ISO will consider those evaluation factors necessary to select the preferred Phase Two Solution; consideration of all evaluation factors, especially those in groups of lower importance, may not be necessary to make this determination."

The scope of this RFP was clearly defined pursuant to the reliability needs identified after the basecase assumptions were established, consistent with the Tariff, and subsequent to stakeholder input. While these considerations may benefit public policy, it is clearly outside the scope of this RFP. Therefore, the ISO does not agree with Anbaric's request to consider alternate future scenarios.

In summary, the least-cost project ($49M) to solve the identified reliability needs is the correct solution. Furthermore, as suggested by Anbaric, incurring a cost nine times more than the least cost project in the case of the Anbaric Mystic Reliability AC Wind Link (BOS-005) or fifteen times more than the least cost project in the case of the Anbaric Mystic Reliability DC Wind Link (BOS-009) to accommodate speculation of future changes is imprudent, contrary to the Tariff, and outside the scope of this RFP.

Discussion related to Special Protection Scheme

In a footnote to this comment (footnote 21 in Appendix A), Anbaric asserts that the $49M Phase One Proposal (BOS-017) is achieved using a usually disallowed Special Protection System (SPS)[10] as defined in the NPCC Glossary of terms. The scheme in question by Anbaric is a Direct Transfer Trip (DTT) of the Seabrook to West Amesbury section of the 394 Line following opening of the 394 terminal at Ward Hill.

Independent of whether such a scheme is classified as an SPS or not, Appendix H[11] to the Transmission Planning Technical Guide states that:

"When evaluating the no-fault contingencies pursuant to implementation of NERC, NPCC, and ISO New England standards and criteria, as described in earlier sections, the following will be used to establish the acceptability of post-contingency results and potential corrective actions:

- *If voltage is within acceptance criteria and power flows are within the applicable emergency rating, operator action can be assumed as a mitigating measure.*

- *If voltage is outside of acceptance criteria or power flows are above the applicable emergency rating, operator action cannot be assumed as a mitigating measure.*

- ***Mitigating measures beyond operator action may include, but are not limited to, transfer trip schemes detecting an open circuit breaker(s) or open disconnect switch(es)**."*(emphasis added)

Therefore, the utilization of a DTT Scheme is entirely consistent with the recommended mitigating measure for line end open contingency in the Transmission Planning Technical Guide. An example of the use of a DTT in a recent generation interconnection SIS is the Western Mass Distributed Energy

[10] The terms Special Protection System and Remedial Action Scheme are synonymous.

[11] https://www.iso-ne.com/static-assets/documents/2014/12/transmission_planning_techincal_guide_app_h_no-fault_contingency_rev2.pdf

Resources Addition Cluster (Group 1).[12] This study relied on a DTT to mitigate overloads on 69 kV PTF facilities.[13]

Furthermore, the NERC definition of a RAS contains a list of specific applications that do not constitute a RAS. Letter (i.) from this NERC list states:

> *"Schemes that automatically de-energize a line for a non-Fault operation when one end of the line is open"*

This specific application, which is not considered a RAS by NERC, is the exact scenario for which the DTT is proposed. While the ISO does not agree that a DTT to address a line end open scenario would be classified as an SPS under the current NPCC construct, the debate is moot at this time. NPCC will be adopting the NERC definition of RAS as its own by the effective date of PRC-012-2, January 1, 2021. NPCC has already posted the change in definition in its "open process" along with proposed changes to NPCC Directory 7, Special Protection Systems, to conform with PRC-012. The ISO reviewed the comments received and did not find a single comment regarding the adoption of the NERC definition.

In summary, Anbaric's assertion that the least-cost project inappropriately utilizes a DTT is not correct.

F. The Process Has Not Been Transparent as Required by Order No. 1000

The ISO disagrees with Anbaric's assertion that the Boston 2028 RFP process has not been transparent as required by Order No. 1000. Consistent with Section 4.3(g) of Attachment K, the ISO discussed the results of its review of the Phase One Proposals and the draft list of qualifying Phase One Proposals with the Planning Advisory Committee on June 17, 2020. As stated in the Anbaric response, the ISO did indicate in Section 2 of Part 2 to the RFP Instructions that each QTPS Proposal's Executive Summary[14] would be posted on the ISO's external website. The manner and timing of how and when the Executive Summaries would be posted was not specified. As stated in the memo from Brent Oberlin to the Planning Advisory Committee on March 19, 2020:[15]

> *"…the ISO also has concerns with the information contained in the responses to Question 2. The ISO had intended to mask the names of the developers (to try to limit any bias during stakeholder review) and simply publish the responses to Question 2. However, even with masking, the ISO has concerns that some of the responses thwart the ISO's intent to let each proposal stand on its own merits. Some examples are:*
>
> - *Rather than describing the project, some responses are written as an advertisement for the project*

[12] https://smd.iso-ne.com/operations-services/ceii/rc/2019/11/a3_5_western_mass_distributed_resource_additions_cluster_roup_1_lvl3_ppa.zip

[13] https://www.iso-ne.com/static-assets/documents/2019/12/western_mass_solar_cluster_group_1_nep_installation_of_direct_transfer_trip_protection_pratts_junction_to_crystal_lake_nep_19_x01.pdf

[14] The Executive Summaries were requested to be provided in Question 2 of the RFP.

[15] https://www.iso-ne.com/static-assets/documents/2020/03/boston-2028-rfp-posting-of-phase-1-proposals-final.pdf

- *Some responses include language that criticizes other possible proposals*
- *Some responses refer to specific technologies that would essentially identify the QTPS.*

Masking this information would remove a significant portion of the response. Due to the concerns with the proposals and the responses to Question 2, the ISO does not believe that it is appropriate to provide the list of Phase One Proposals without including the ISO's draft findings."

All of the Executive Summaries were posted on June 16, 2020[16] as part of the ISO's report on its findings and the draft listing of qualifying Phase One Proposals. The posting is two months earlier than the stated RFP schedule provided in Part 1 to the RFP Instructions.

The ISO has also solicited stakeholder feedback at the June 17, 2020 PAC meeting and during the subsequent comment period. The ISO posted the written comments received and has provided responses as reflected in this document. During the June 17, 2020 PAC meeting, Brent Oberlin fielded many stakeholder questions and provided responses which are summarized in the June PAC Meeting Minutes.[17] In addition, numerous QTPS questions asked through RFP360 were responded to, and when responses were relevant to all QTPSs, the response was sent to all QTPSs.

The ISO disagrees with Anbaric's statement that the ISO did not run a clear and transparent process. However, there are always opportunities for improvement and the ISO has already committed to a lessons-learned process.

3. SP Transmission, LLC Comment[18]

SP Transmission believes that it responded appropriately to the requirements of the RFP about demonstrating access to or commitment to procure land for the installation of series reactors and STATCOM.

SP Transmission's response did not provide any level of certainty in their ability to acquire their desired properties or even in the acceptability of the properties for their intended use. Any sort of certainty would not be known until after the Selected Qualified Transmission Project Sponsor Agreement (SQTPSA) was signed. In Section 7.6 Real Estate of its proposal, SP Transmission provided the following language,

> *"For each of these sites, SP Transmission will work with a local real-estate consultant to identify, contact, and negotiate with land-owners to pursue an option to purchase parcels of sufficient size to construct the proposed stations and for ROW for the overhead line to access the existing 345 kV Tewksbury station (if needed). Once the SQTPSA is executed and site diligence has been completed, in order to identify any potential fatal flaws of the site, SP Transmission would exercise the options and purchase the target parcels."*

[16] https://www.iso-ne.com/static-assets/documents/2020/06/draft_boston_2028_rfp_review_of_phase_one_proposals_appendix_a.docx

[17] https://www.iso-ne.com/static-assets/documents/2020/07/061720_final_pac_minutes.pdf

[18] Comments of Warren Whitson received via email on June 23, 2020. The complete SP Transmission comments submittal can be found in Appendix C.

"As indicated on the attached map, the primary target parcel is a ~200 acre parcel owned by New England Power Company that is adjacent to the existing Tewksbury station."

ISO-NE determined that working with a real-estate consultant in the future was insufficient to demonstrate the level of certainty required of a Phase One Proposal. For some parcels, the owner of the land has not been identified. In the case of Tewksbury, where SP Transmission has identified the owner of the land, the owner is a competitor in this very RFP, raising further concerns about any sort of certainty to the proposal. In addition, the identified backup plans in case the primary parcels for the Tewksbury STATCOM, Woburn reactors, and W. Amesbury reactor did not work out, indicated a lack of confidence that SP Transmission had firm plans for the primary parcels or had done much due diligence on the acceptability of the parcels for their intended use.

Access to land will continue to a viable reason to eliminate the SP Transmission Project from further consideration.

4. Joint Eversource and National Grid Comments[19]

The Eversource and National Grid comments support the ISO's process for evaluating the Boston Phase One Proposals and agree with the evaluation performed.

5. Transource New England, LLC Comments[20]

Transource New England "does not dispute the ISO-NE's recommended project for the Boston 2028 RFP"; however, they offer the following comments.

A: Use of the Mystic 8 terminal

The Transource New England comment on the use of Mystic 8 terminal and the ISO's response is addressed in the following two subsections

1. *Outage Planning*

   Transource suggests ISO consider outage planning as a potential mitigation to disruptions of generation or transmission services

   Please see the response to Anbaric comment "C" above. Based on that response, the three Transource New England Phase One Proposals (BOS-019, BOS-029, and BOS-065) will not be excluded based on the use of the Mystic 8 terminal. However, since the in-service date for the three Transource New England proposals is beyond June 1, 2024, inability to meet the in-service date will continue to be identified as a reason for excluding these proposals.

[19] Comments of James G Holodak of National Grid and William J Quinlan of Eversource received via email on July 2, 2020. The complete comments submittal can be found in Appendix D

[20] Comments of Adam Hickman received via email on July 2, 2020. The complete Transource New England comments submittal can be found in Appendix E

2. *Uniformly applying the criteria to all bids*

Transource notes four Boston proposals that appear to use the Mystic 8 terminal position (BOS-003, BOS-033, BOS-045, and BOS-039) however; they were not eliminated for this reason. The appearance is based on their review of the executive summaries provided.

In ISO's review, the following language is included in the executive summaries for the four Phase One Proposals that Transource New England, LLC has identified as appearing to utilize the Mystic 8 terminal:

"Create a second independent 345 kV path from Eversource's Mystic Substation through National Grid's Golden Hills Substation to National Grid's Wakefield Junction Substation by:

- *Separating the existing 349X and 349Y underground cables into two independent circuits at both Mystic Substation and Golden Hills Substation.*"

and,

"The details of the 345 kV Line, 115 kV Line, and existing substation work elements required to create this second independent 345 kV path from Mystic Substation through Golden Hills Substation to Wakefield Junction Substation are described in Sections 4.7, 4.9 and 4.14 of this Proposal, respectively."

There is insufficient information in the section above for any stakeholder to make conclusions on the interconnection location of the separated 349X and 349Y underground cables at Mystic.

These proposals do not utilize the Mystic 8 terminal and the ISO has applied all criteria, including the use of Mystic 8 terminal, consistently to all Phase One Proposals. The ISO disagrees with the Transource New England comment regarding the uniform applicability of criteria to all proposals.

B: Relying on Incumbent Land

Transource New England contends that ISO used an extremely narrow interpretation of transmission system to eliminate 22 bids from consideration for using incumbent land.

Please see the response to Anbaric comment "D" above. ISO-NE disagrees with this contention.[21]

[21] See slides 26 through 28 of the June 17, 2020 PAC presentation - https://moss.iso-ne.com/sites/tpdr/Documents/Boston_2028/Boston%202028%20RFP%20Documentation/Phase%20One%20Proposals/boston_2028_rfp_phase_one_proposal_review_June9postedversion.pdf

6. State of Connecticut, Office of Consumer Counsel Comments[22]

The State of Connecticut, Office of Consumer Counsel comments support the ISO's process for evaluating the Boston Phase One Proposals and agree with the evaluation performed.

7. New England Energy Connection Comments[23]

New England Energy Connection (NEEC) does not dispute the primary recommendation of the RFP Review Report; however, they offer the following two comments for consideration

A: Regarding the ISO-NE's Process

NEEC contends that the ISO-NE process could be improved by:

- *Using the RFP evaluation factors for a complete evaluation rather than a process of elimination*
- *Relying on incumbent land*
- *Providing an opportunity to Cure*

The ISO will consider these topics under lessons-learned discussions to take place in the future with the PAC and QTPSs.

B: Separate Solutions for Discrete Needs

NEEC contends that a separate solution to address the three distinct needs in the Boston RFP should be considered.

The ISO does not agree that the three needs are distinct, requiring them to be solved independently. While some QTPSs submitted Phase One Proposals that attempted to solve each need independently, other Phase One Proposals attempted to solve all of the needs with a single element, such as a new HVDC line.

[22] Comments of Richard Sobolewski received via email on July 2, 2020. The complete State of Connecticut Office of Consumer Counsel comments submittal can be found in Appendix F

[23] Comments of Lawrence Willick received via email on July 2, 2020. The complete new England Energy Connection comments submittal can be found in Appendix G

Appendix A: Anbaric Comments

June 16, 2020

Planning Advisory Committee
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040
pacmatters@iso-ne.com

RE: Identification of Errors of in ISO New England's Review Boston 2028 RFP Submissions

Via Electronic Mail

To Whom it May Concern:

Anbaric Development Partners, LLC ("Anbaric") submits these comments to ISO New England Inc. ("ISO-NE") to correct various factual, technical and legal errors made in ISO-NE's June 8, 2020 on-line posting "Boston 2028 RFP – Review of Phase One Proposals" ("ISO-NE Presentation"),[1] which resulted in ISO-NE excluding Anbaric's proposals from further consideration. The purpose of these comments is to share the review conducted by Anbaric and its consultants – including EN Engineering, Power Engineers, and Daymark Energy Advisors – of the ISO-NE Presentation. This review demonstrates that ISO-NE's decisions in this matter are incorrect and should be revised.

In the ISO-NE Presentation, Anbaric's two transmission proposals were summarily rejected for failure to meet the requirements of that RFP (along with 24 of 36 other proposals). As a result, ISO-NE did not give Anbaric's proposals any further consideration. This rejection is arbitrary and flawed because it is based on technical, factual, and legal errors. The rejection is also contrary to the Federal Energy Regulatory Commission ("FERC" or the "Commission") requirements for competitive transmission solicitations held under FERC Order No. 1000.[2]

After rejecting 24 of 36 proposals on allegedly technical grounds, the ISO-NE Presentation goes on to eliminate all but one of the remaining 11 projects from further consideration based on cost. As discussed below, these cost determinations are inconsistent with Order No. 1000's directive to identify the "more efficient or cost-effective project." Projects that appear to be more expensive may in-fact be more economical to ratepayers when a range of factors other than up-front capital costs, and of the types identified by Order No. 1000 are considered. For example, the Anbaric Projects eliminate the need for significant near-term system upgrades identified by ISO-NE as needed to incorporate offshore wind being procured by

[1] The presentation has been updated, and Anbaric is referring to the Boston 2028 – Review of Phase One Proposals, June 9, 2020 version.

[2] *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 (2011), *reh'g denied*, Order No. 1000-A, 139 FERC ¶ 61,132, *on reh'g*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *review denied sub nom*. S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41 (D.C. Cir. 2014) (*per curiam*) ("Order No. 1000").

the New England states at a cost of $620 million. When that avoided cost is considered, the projects put forward by Anbaric are more cost effective than the $49 million incumbent project that ISO-NE has preliminarily selected.[3] Further, the project preliminarily selected by ISO-NE will not even solve the transmission security reliability needs in the area if the Northeast Clean Energy Connect ("NECEC") project, now the subject of a voter referendum in November 2020, is delayed or does not move forward. This will require the Mystic generating units to remain online to meet system reliability criteria, supported through an extended cost of service agreement or gap RFP. Multiple additional years of out-of-market cost support payments to the Mystic generators while additional system reliability needs are addressed also make the Anbaric projects more efficient or cost effective than the incumbent backstop solution preliminarily selected by ISO-NE.

Finally, the RFP process to-date has not been transparent contrary to both Order No. 1000 and the ISO-NE Information Policy. Despite requests from Anbaric and others to post public versions of the bids submitted so that meaningful and timely input could be provided to ISO-NE, those non-confidential bids have been withheld. While stakeholders – including policy makers – cannot get back the lost months of review, ISO-NE should mitigate any further delay in the process by posting the complete public versions of the bids so that meaningful feedback can be given on what projects should move forward to Phase II as is required by Order No. 1000 and the ISO-NE tariff.

I. Project Overview

The Boston 2028 RFP was issued to solicit transmission solutions to address reliability issues created by the retirement of the 2000 MW Mystic power plant in Everett, MA.

Anbaric made two submissions into the Mystic transmission reliability RFP process: an AC project that would move 900 MWs of electricity on two tri-core cables between the former Pilgrim station area in Plymouth, MA to the Mystic substation in Everett, MA, ("Anbaric AC Project"); and a 1200 MW HVDC proposal, that would move 1200 MWs over one HVDC cable bundle between the same two points ("Anbaric HVDC Project").[4] The projects are both referred to as the Mystic Reliability Wind Link.[5] Each avoids the need for near-term 345kV upgrades to the system that would cost approximately $620 million. Each includes extra duct banks that *are not included in the project costs* that would allow more $0-bid offshore wind to reach Boston, lowering consumer costs. Each utilizes a cost cap as well as a 7.9% ROE with a lengthy

[3] The $49 million dollar cost is achieved through "a DDT scheme on the 394 line to eliminate the contingency that causes the K-163 115 kV line overload." *See* ISO-NE Presentation at slide 53. This configuration is a Special Protection System under the NPCC Glossary of Terms. This is significant departure from ISO-NE planning practice which has sought to *remove* remedial action schemes from the system rather than add them. Use of remedial action schemes could have avoided some of the many transmission projects built over the last several years, but have not been considered good planning practice.

[4] As described in the Anbaric AC and HVDC Project bids, the technical studies and design were supported by not only Anbaric's in-house engineers, but also EN Engineering and Power Engineers, two highly accomplished electrical engineering firms.

[5] The project URL is: http://mystic.anbaric.com

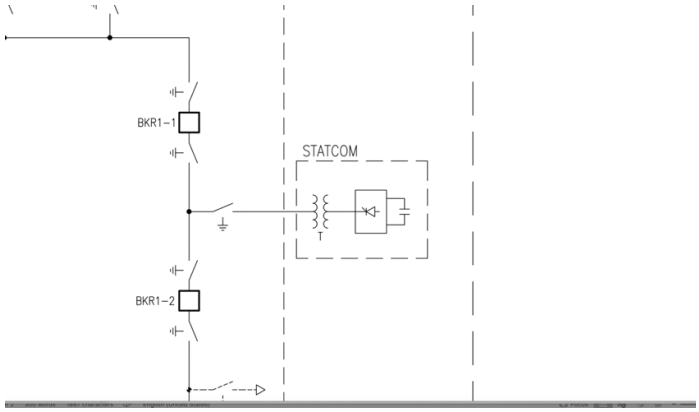
depreciation to provide reliability and other benefits to New England customers. The ratepayer impact of the Anbaric AC Project *is less than 30 cents* a month on the average New England retail electric bill, and that's before accounting for additional savings from the low-cost renewable power it helps integrate. And both of these projects make the electric system additions that will have to occur in the near future. These additions are necessary to meet the electric supply characteristics mandated by the states in which ISO-NE does business.

II. Identification of Errors

ISO-NE makes several material factual, legal and technical errors in rejecting the Anbaric AC and HVDC Projects from further consideration. When these are corrected, both of the Anbaric Projects must move forward for further consideration. In addition to the specific errors called-out below, it is *prime facia* evidence of either wide spread errors by ISO-NE or capricious implementation of the RFP that 24 of 36 proposals from some of the most competent, sophisticated and successful transmission developers in the world have been found to fail the basic submission requirements for the RFP.

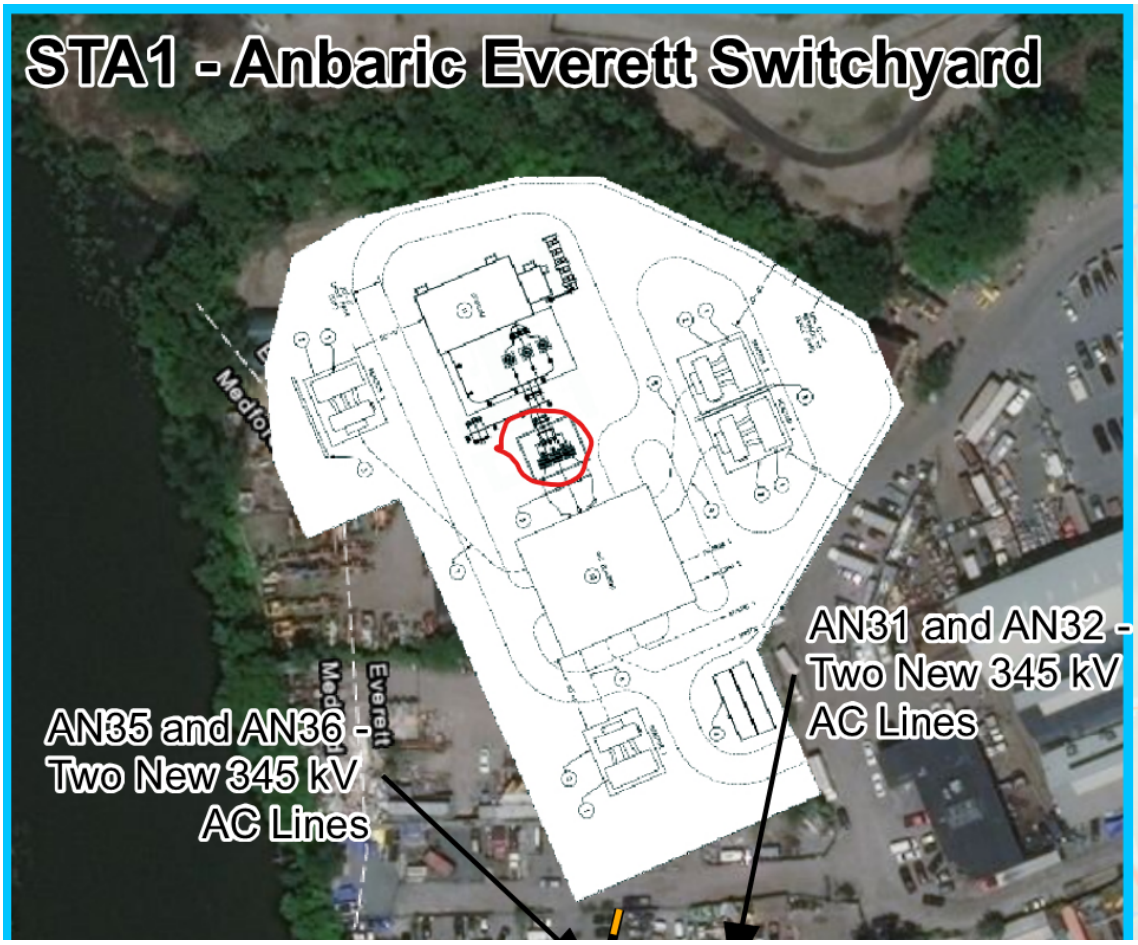
A. Contrary to the Facts ISO-NE States that Equipment is Missing from Bid. The Missing Equipment is Identified Clearly in the Bid and Included in Bid Costs

Slide 74 of the ISO-NE Presentation asserts that "Anbaric AC response is missing a required listing of a step-up transformer. This is incorrect. The step-up transformer is clearly identified on the project one-line in Section 4.3[6] on page 32 (see Figure 1 below) with the transformer symbol item marked "T" within the STATCOM box referring to the step-up transformer:



[6] The ISO-NE RFP instructions for Section 4.3 state: "One-line diagram(s) shall be provided to show new or modified equipment in addition to existing or already planned system changes. The detailed one-line diagram(s) of the proposed facilities shall show the connectivity between all new proposed equipment (i.e., circuit breakers, transformers, shunt-connected capacitor banks, shunt-connected reactors, dynamic reactive devices, transmission lines, etc.) and the proposed bus configuration at the Point(s) of Interconnection. Each new station, line, and equipment shall be marked with an identifier that will be consistently used in other responses in the RFP. The response requires at least one file at a minimum to be uploaded into RFP360 and only PDF files shall be accepted."

The step-up transformer is also identified in the switchyard layout in Section 4.2 and is circled here in the layout image that is included with the bid:



Anbaric's response to item 4.1 identifies the STATCOM as a 345kV element. The transformer is included in that element and is part of its cost. A STATCOM includes a transformer as part of the kit supplied by a vendor. The transformer is clearly shown on the one-line and the diagram above and any experienced planner would know that STATCOMs with step-up transformers are typically purchased as turn-key kits from vendors. These turn-key kits include all necessary components, including transformers. Therefore, ISO-NE's rejection of Anbaric's AC response is factually incorrect.

In fact, the ISO's own suggested model answers to the RFP provide sample text for Section 4.18: "Written response examples – 'Install a new 345 kV, 200 MVAR STATCOM ID# 60 at K station at an installed cost of $X. The controls for the STATCOM will hold the voltage of the ZZZ bus to AAA p.u.'" The ISO sample text for the STATCOM, like Anbaric's description, does not separately call out the step-up transformer that would be part of that turn-key kit.

The cost quoted by the vendor and included in the bid does include the transformer as is common practice for a turnkey STATCOM system.

The ISO-NE is therefore incorrect in asserting that that the step-up transformer was not specifically identified and included in Anbaric's AC Project bid. It is clearly included in the project one-line and in the switching station layout diagram, and Anbaric followed ISO-NE's own sample RFP text in describing the STATCOM.

ISO-NE then compounds its erroneous and arbitrary reading of the text of the response by determining that the absence of the step-up transformer in the modeling information a fatal flaw. This conclusion is not only technically incorrect, but it is also contrary to the RFP's own instructions about how the RFP is to be evaluated. Attachment K, Section 4.3(e), which states that for the purposes of the RFPs Phase I review, the ISO performs "preliminary feasibility review." In such a review, which is typically conducted before equipment drawings and specifications are developed by the equipment vendor, any details of the step-up transformer are at best approximate.

In this RFP process, ISO-NE already had identified the dynamic reactive device ratings required and the model included that device along with other equipment – like the 170 MVAr shunt reactors – that interact with the STATCOM to affect overall performance. Section 7.5 of the Anbaric AC Project bid shows the proposed project exceeded these minimal needs identified by the ISO in the Needs Assessment, and improves system performance beyond what was required as an additional benefit of the project design.[7] For example, the project provides additional margin against high voltage during minimum load conditions. The project reduces voltage at all 21 of the buses identified as driving time-sensitive needs in the Needs Assessment, with voltage reductions up to 0.8 to 1.4 percent at 15 of these buses and up to 0.5 percent at the remaining 6 buses.[8]

Finally, the ISO-NE disqualification of the Anbaric AC Project on the erroneous claim it did not specify the step-up transformer runs counter to industry best practices: a review of Eastern Interconnection Reliability Assessment Group (ERAG) Multiregional Modeling Working Group (MMWG) power flow cases demonstrate that the majority of transmission-

[7] The information the ISO provided in the modeling files was intended to provide a feasibility review of whether the proposed solution satisfies the needs described in the Needs Assessment. The Anbaric AC Project addresses not only all these needs, but also mitigates needs that were identified as short-term fixes (which otherwise would be automatically awarded to the incumbents), (Anbaric AC Project bid at Section 9) and also addresses needs from the earlier version of the Needs Assessment that were later removed once the NECEC transmission project was assumed to be in service in 2024. *See* Anbaric AC Bid at Section 7. At this point, the ISO-NE cannot know the outcome of the Maine referendum on NECEC, and therefore should have retained the Anbaric AC Project in Phase II of the RFP process. By rejecting Anbaric's AC Project on unjust and unreasonable technical grounds, ISO-NE also eliminates for the region an effective solution to the Mystic Reliability issues should the NECEC project fail the referendum, or be delayed by subsequent litigation. *Modeling confirms that if NECEC is removed from the dispatches used for the 2028 Boston Needs Assessment, the reliability needs in the Southern Boston 345kV Overloads category and the fourth Northern Boston 345kV N-1-1 overload would resurface and would require a solution*. As a result, the Anbaric AC Project was tested against those needs and EN Engineering confirmed that Anbaric AC Project will address those additional reliability needs.

[8] Anbaric AC Project bid at Section 9.

connected STATCOMs in the Eastern Interconnection are modeled directly on the transmission bus without modeling the transformer. This includes the 204 MVAr STATCOM at the Marcy 345 kV bus in New York, seven 125 MVAr STATCOMS connected at bus voltages ranging from 138 kV to 500 kV in the Dominion Virginia Power service territory, and two 250 MVAr STATCOMs connected at 138 kV buses in the Ameren Illinois service territory.

Therefore, ISO-NE's rejection of the Anbaric AC Project on this basis is inconsistent with the feasibility review nature of Phase I of the RFP, common industry practice, and is unjust and unreasonable.

B. ISO-NE Incorrectly States that the Anbaric AC Project is Unable to Provide the Reactive Power Required to Address the Identified Needs. The Project as Described in the Bid Provides the Reactive Power to Address All Identified Needs

ISO-NE incorrectly concludes that the Anbaric AC Project is unable to provide the reactive power necessary to address the identified needs. Slide 74 of the ISO-NE Presentation explaining the rejections of Anbaric's AC Project asserts:

> "Inadequate Dynamic Capability: The STATCOM is unable to provide:
> - a reactive injection of -150MVAR at Mystic 345 kV for a 0.95 p.u. and 1.05 p.u. voltage at Mystic 345 kV"

In reaching this conclusion, ISO-NE ignored the language in the bid response. It appears that ISO-NE it did not look at the whole package of project elements, which are designed to work together so that the 150 MVAr STATCOM provided the necessary system voltage performance.

Based on its description in the Needs Assessment, ISO-NE appears to make errors regarding the requirements for the STATCOM. ISO-NE stated that the 40 MVAr limit on the interconnection facility charging is based on the amount of additional charging that the system can withstand during the restoration process. Furthermore, ISO-NE stated that for system restoration, the total dynamic reactive range is the critical feature of the device, rather than the specific leading or lagging capability.[9] If the system can withstand the charging from the Anbaric AC Project interconnection cables, and the project is providing the needed 300 MVAr of dynamic reactive capability range, then the Anbaric AC Project solution clearly addresses the need identified by ISO-NE in its Needs Assessment as required by the RFP.

More specifically, EN Engineering has determined that 300 MVAr of dynamic reactive capability at the site-controlled location near Mystic is able to provide as much support as at the other locations specified by ISO-NE.

[9] Presentation to the Planning Advisory Committee, "Boston 2028 Needs Assessment Addendum – System Restoration Needs," Pradip Vijayan, September 26, 2019, at slide 15, stating "[t]he 40 MVAR value is based on the amount of additional charging that the system can withstand during the restoration process."

The Anbaric AC Project also provides operational flexibility in that the STATCOM could be operated on a single cable (reducing the charging from 37.2 MVAr to 18.6 MVAr) or the system operator could connect one of the 170 MVAr shunt reactors included in the Anbaric AC Project to lower the voltage, if needed. The net effect would be to bias the STATCOM in the lagging direction so that Anbaric AC Project provides 150 MVAr lagging at the point of interconnection. ISO-NE appears to have only looked at the STATCOM rating and not continued its analysis of the cable configuration and added capability of the 170 MVAr shut reactors to lower voltage, which shows this net effect of 150 MVAr lagging at the point of interconnection.

In addition to being obvious as a matter of electrical system design, the role of the shunt reactors is described in Section 5.3 of the Anbaric AC Project bid:

> The STATCOM at Everett has been modeled at or near 0 MVAr to maintain the full dynamic reactive capability for response to system contingencies. The reactive power is adjusted by modifying the PSS®E FACTS model parameter "VSET" in the power flow model to achieve reactive power at or near 0 MVAr. The STATCOM has been modeled as responding following contingencies. *During system restoration, shunt reactors at Everett would be available to the system operator in addition to the STATCOM.* (emphasis added)

ISO-NE's assertion of the bid's failure to address the reactive power needs set out in the Needs Assessment is demonstrably incorrect and the ISO's must correct this error.

C. The ISO's Assertions Regarding In-Service Date Feasibility as a Fatal Flaw for the AC and DC Projects are Contrary to Evidence. The Mystic Cost of Service Agreement Does Not Prohibit Construction Outages and Such Outages are Common

ISO-NE asserts that the Mystic AC and HVDC projects are disqualified for an inability to meet the required in-service date.[10] However, there is nothing in the Mystic cost of service agreement that prohibits or limits ISO-NE usual ability to direct construction outages, the time period in question is one where such construction outages or planned outages for plant maintenance occur without negatively impacting reliability, and these outages are common practice.

The ISO incorrectly asserts on slide 75 for the Anbaric AC Project, and slide 79 for the Anbaric HVDC Project that:

> "The Phase One Proposal reuses the Mystic 8 terminal for interconnecting new facilities, and because Mystic 8 has an obligation through May 31, 2024, the ability to meet the in-service date of June 1, 2024 is not considered feasible."

[10] *See* ISO-NE Presentation at slides 75 and 79.

ISO makes a technical and legal error in this assertion. First, construction outages of generators for transmission projects are routine. In fact, Attachment K anticipates such generator outages to facilitate transmission work in the RFP process. Attachment K, Section 4.3(h)(iii) requires for Phase II a:

> "description of construction sequencing, a conceptual plan for the anticipated transmission *and generation* outages necessary to construct the Phase II Solution and their respective duration, and possible constraints." (emphasis added)

This is further explained in the attached Affidavit of Dwarakesh Nallen, EE, Attachment A to these comments. Mr. Nallen is a former ISO-NE system planner familiar with technical issues surrounding construction outages for reliability projects.

ISO-NE's reference to the obligation through May 31, 2024[11] is to the cost of service agreement for the Mystic 8 and 9 generator agreed to by ISO-NE. The cost of service agreement provides a subsidy to Exelon to keep the Mystic 8 and 9 plants funded and in-service, along with the associated LNG facility that provides the fuel for the generators. Even a cursory review of the agreement and timing here reveal that the cost of service agreement is not a bar to routine maintenance outages, construction outages or transmission outages directed by ISO-NE.

Section 7.1 of the Mystic Cost of Service Agreement states, for example:

> "7.1.1. Planned Outages. Lead Market Participant shall be entitled to take one or both of the Resources out of operation or reduce the net capability of one or both of the Resources during Planned Outages, in accordance with the schedule for Planned Outages as established and implemented pursuant to the ISO New England System Rules, the Transmission, Markets and Services Tariff and the MPSA."[12]

The Cost of Service agreement sets out a subsidy payment and obligations. It did not remove the system operator's routine prerogative to direct plant outages for construction or other reasons.

Under the terms of the cost of service agreement, Exelon would be paid through the end of the term whether there was an outage or not, just as it is paid during any other construction-related or transmission outage.

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[11] While June 1, 2024 is the "need by" date for the project, it is worth noting that the vast majority of reliability projects approved by ISO New England are brought in-service many *years* after the stated need by date. This is obviously not a fatal project flaw in all other cases. *See e.g. Response of ISO New England Inc. to Order Instituting Section 206* Proceedings, in Docket No. EL19-90-000 (December 27, 2019) at Attachment A. we need to point to what attachment A says to drive the factual point home. Here, as explained, the need-by date can reliably be met using routine outage tools.

[12] *See* Mystic Rate Schedule FERC No. 1, filed in Docket No. ER18-1639-000 under the caption *Constellation Mystic Power, LLC* on May 16, 2018. The agreement contains no provisions that modify or limit ISO-NE's ability to plan, coordinate, and direct outages for construction.

Importantly, the reliability needs associated with Mystic 8 and 9 are peak system issues where transfer capability into the greater Boston area is not sufficient to handle the influx of power. Cut over prior to June 1, 2024 would occur in the light load shoulder months where the system has many thousands of megawatts of extra supply capability even during maintenance season. Further, the transmission lines into Boston are more than able to handle power transfers into Boston during those shoulder months, including May. This is why a maintenance outage for the Mystic station, when ISO-NE allows the units to come offline for several days at a time, is not a critical system reliability issue during the shoulder months.

While ISO-NE rejected Anbaric's request for substation drawings, preventing a detailed assessment of the interconnection scope of work, Anbaric's engineering consultants – including personnel who have worked previously for many years with incumbent transmission owners in the area and elsewhere – indicate that the cut overs such as this can be achieved with short duration outages, particularly when the majority of the proposed project elements can be pre-constructed prior to an outage, as is the case with the proposed Anbaric AC Project.

Should ISO-NE have system reliability concerns, a two-stage cut over could occur. In this scenario, the circuits of either the AC project or the HVDC project is connected to either the former Mystic 8 or 9 breaker while the other unit remains on-line, capable of providing over 700MWs of power[13] and several hundred MVAr of reactive support. As noted above, the ISO-NE tariff specifies that detailed cutover plans would be developed in Phase II.

The in-service date is clearly achievable in a routine, and reliable manner that uses common generator outage windows and is not prohibited by the Cost of Service agreement between ISO-NE and Exelon. This stated reason for rejection of the Anbaric AC and HVDC Projects is demonstrably incorrect, unjust and unreasonable and the ISO's analysis must be updated to reflect correction of the error.

D. ISO-NE Incorrectly Asserts that New Equipment Connected to Existing Substations is a Fatal Flaw; this Assertion is in Violation of Section 210 of the Federal Power Act, Section 2.05 of the Transmission Operating Agreement, and Attachment K Section 4.3(a)

ISO-NE asserts at slide 75 of the ISO-NE Presentation for the Anbaric AC Project and slide 79 for the Anbaric HVDC project that the two projects are disqualified for:

> "Relying on the Incumbent and/or the Incumbent's land: In this Phase One Proposal the QTPS Respondent requires the incumbent (not the QTPS Respondent) to install a series reactor at the West Amesbury 115 kV substation on the K-163 line. The QTPS Respondent may not rely on the incumbent for the installation of this upgrade because this upgrade is not an:

[13] *See* ISO New England 2020 CELT Report available at https://www.iso-ne.com/static-assets/documents/2020/04/2020_celt_report.xlsx In Section 2.1 of the Microsoft Excel spreadsheet report, Mystic Unit 8 is listed with a summer claimed capability of 703.324 MW, while Mystic Unit 9 is listed as 713.900 MW.

– Upgrade(s) to existing facilities owned by an incumbent, or
– Upgrade(s) built by an incumbent to interconnect facilities developed by the QTPS Respondent submitting the Phase One Proposal"

The ISO's interpretation is legally incorrect and unlawful under the Federal Power Act statute and FERC-approved documents. The interpretation crafted by ISO-NE would create barriers that would make competitive transmission largely impossible and protect the existing electric system as a closed, proprietary system in violation of Section 210 of the Federal Power Act, and the FERC-approved Transmission Operating Agreement.[14] The ISO's interpretation is contrary even to some of the very Attachment K language that it relies on to erect this barrier to competition and open access. The ISO notes that *22 projects* were disqualified for this reason.[15] It is unlikely that most projects from highly competent and successful developers misunderstand the basics of what system upgrades are permissible.

1. The System Additions

The system additions at issue are described in Section 4.1 of the Anbaric AC Project bid as:

- Install a new 115kV SCADA operated 3% series reactor (SR) on the W. Amesbury – King Street 115kV line at the W. Amesbury substation.

The location of the series reactor is not important electrically, which means that it can be installed either at the substation itself or anywhere along the W. Amesbury to King Street 115 kV line. The Anbaric AC Project AC bid describes this in Section 7.1, Addressing Identified Needs:

> *The second component consists of a series reactor installed in the W. Amesbury – King Street 115kV line*. The series reactor, in conjunction with injection of up to 900MW of power at Mystic, reduces the loading on the 115kV line below the LTE rating, eliminating the need for an operating procedure to address thermal overloads for the n-1 conditions identified in the Needs Assessment. (emphasis added)

2. ISO New England's Interpretation

According to ISO-NE at slide 26 of the ISO-NE Presentation "Phase One Proposals were excluded if the Phase One Proposals either:

- Violates the land ownership provisions and involves the installation of new equipment in an incumbent's right of way (ROW) or substation

[14] The Transmission Operating Agreement can be found at the following URL: https://www.iso-ne.com/static-assets/documents/regulatory/toa/v1_er07_1289_000_toa_composite.pdf

[15] ISO-NE Presentation at slide 28.

- Requires the incumbent to build new facilities that are not related to the interconnection of the QTPS facility"

For authority for this interpretation and exclusion of competitive projects, ISO-NE then cites to Attachment K, Section 4.3(a):

*"*A Qualified Transmission Project Sponsor may propose a comprehensive solution to address the identified needs that includes an upgrade(s) located on *or connected to* a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). ... The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process." (emphasis added)

ISO-NE continued on slide 27, stating:

Attachment K, Section 4.3.(b), Use and Control of Right of Way states:
— "Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project."

The ISO goes on to cite Part 2 of the RFP instructions, which note what information is required for upgrades to existing (emphasis added by ISO-NE) elements, e.g. based on publicly available information and costs.

– *"For proposed modifications to existing element(s) where the QTPS Respondent is not the PTO for the existing system element(s) it is the responsibility of the QTPS Respondent to provide responses, which may be based on publicly available information for the proposed upgrade."*

– *"For proposed modifications to existing element(s) where the QTPS Respondent is not the PTO for the existing system element(s) the QTPS Respondent is not required to include the costs of these upgrades in establishing the life-cycle cost."*

These last two cites, even if they could modify federal law, are not even on point. They simply provide guidance on information and cost information.

ISO-NE then cobbles together this collection to arrive at the conclusion:

In summary, the only permissible upgrades that are not the responsibility of the QTPS Respondent submitting the Phase One Proposal are:
– Upgrade(s) to existing facilities owned by an incumbent
– Upgrade(s) built by an incumbent to interconnect facilities developed by the QTPS respondent submitting the Phase One Proposal[16]

3. Identification of Errors in ISO-NE's Proposed Interpretation

The ISO's interpretations are incorrect, try to do too much to create restrictions that do not exist, and violate federal law.

First is the ISO's selective use of the term "upgrade". The section of the tariff cited by the ISO on slide 26, Section 4.3(a) states:

> "A Qualified Transmission Project Sponsor may propose a comprehensive solution to address the identified needs that includes an upgrade(s) located on *or connected to* a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s)." ... (emphasis added)

Understanding the term "upgrade" to be a system addition is consistent with how the term is used elsewhere in the tariff, *i.e.*, a system "upgrade" may be (and usually is) a wholly new component being added to the existing grid. Examples of this are Regional Benefit Upgrades and Reliability Transmission Upgrades ("RTU").[17] The "upgrade" is that the capability of the system is being expanded beyond what it can do today, providing the needed additional reliability capabilities. In the case of the Anbaric AC Project, the system upgrade is the addition of a series reactor "*installed in the W. Amesbury – King Street 115kV line*,"[18] with the proposed location for this electrically at the W. Amesbury substation.

With regard to Section 4.3(b), ISO-NE reads this as a prohibition on incumbent substation or right of way use. This is incorrect. Section 4.3(b) simply states that nothing in the Order No. 1000 process, including project selection, "*…shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights… .*" The question, then, is what are the laws that govern? Having misread the provision as preemptive legal bar to FERC-approved agreements and federal law, the ISO does not address that issue.

Section 2.05 of the Transmission Operating Agreement is on point:

2.05 **Connection with Non-Parties.**

[16] ISO-NE Presentation at slide 26.

[17] The ISO-NE RFP itself is includes "RTU" in the title.

[18] Anbaric AC Project bid at Section 7.1

> On or after the Operations Date, *each PTO shall connect its Transmission Facilities with the facilities of any entity that is not a Party, including the facilities of a current or proposed Transmission Customer, and shall install (or cause to be installed) and construct (or cause to be constructed) any transmission facilities required to connect the facilities of a non- Party to a PTO's Transmission Facilities to the extent such connection or construction is required by applicable law, including the Federal Power Act and any applicable regulations issued by FERC* and provided that the construction of any such transmission facilities shall be subject to the conditions associated with the PTOs' obligation to build set forth in Schedule 3.09(a). Any such connection shall be subject further to: (1) the receipt of any necessary regulatory approvals, (2) compliance with the procedures set forth in the ISO OATT for review of the reliability and operational impacts of a proposed interconnection (including the procedures for interconnection of a Generating Unit or Elective Transmission Upgrade under the Interconnection Standard or as otherwise provided under the ISO OATT); and (3) execution of an Interconnection Agreement with such entity containing provisions for the safe and reliable operation of each interconnection with respect to such entity's facilities in accordance with Good Utility Practice, applicable NERC/NPCC Requirements, and applicable Law (including the Federal Power Act); provided that
>
> (i) Except as provided in 2.05(ii) below, each *PTO shall engage in good faith negotiations as to the terms and conditions of such Interconnection Agreement with any such non-Party, but, except as may be required pursuant to regulations issued by FERC*, a PTO shall not be required to enter into any Interconnection Agreement containing terms and conditions unacceptable to such PTO and shall reserve the right to resolve any disputes, and/or make any filings with FERC, with respect thereto."[19] (emphasis added)

Section 2.05 makes clear that a Participating Transmission Owner must interconnect transmission equipment and engage in good faith negotiations to do so.

In turn Section 2.05 of the TOA is governed by the supremacy of federal law. This is called out in the TOA provision itself: "the Federal Power Act and any applicable regulations issued by FERC."

Section 210 of the Federal Power Act[20] states:

> **(1)** Upon application of any electric utility, Federal power marketing agency, geothermal power producer (including a producer which is not an electric utility), qualifying cogenerator, or qualifying small power producer, the Commission may issue an order requiring—
> **(A)**
> the physical connection of any cogeneration facility, any small power production facility, *or the transmission facilities of any electric utility, with the facilities of such applicant*,
> **(B)**

[19] Note, the section that follows covers generator interconnection agreements. "Interconnection Agreements" as the term is used in the TOA covered interconnection of all types of interconnection facilities, including transmission-element interconnection agreements.
[20] 16 U.S.C. § 824i (2012).

such action as may be necessary to make effective any physical connection described in subparagraph (A), which physical connection is ineffective for any reason, such as inadequate size, poor maintenance, or physical unreliability,

(C)

such sale or exchange of electric energy or other coordination, as may be necessary to carry out the purposes of any order under subparagraph (A) or (B), or

(D)

such increase in transmission capacity as may be necessary to carry out the purposes of any order under subparagraph (A) or (B). (emphasis added)

In this case, the Federal Power Act grants authority to ensure interconnection of transmission equipment on the existing grid. While that equipment may be installed at the W. Amesbury substation pursuant to TOA Section 2.05 after good faith negotiation and funding of equipment and work by Anbaric as an initial implementation approach as required by the RFP, it could also take the form of being electrically connected at that location anywhere along the W. Amesbury – King Street 115kV line as noted in Section 7.1 of the Anbaric AC Proposal.

The system additions here are Reliability Transmission Upgrades to the existing grid and accommodation and interconnection of these is contemplated and directed by the transmission operating agreement as backstopped by FERC-authority to direct interconnection of transmission equipment under Section 210 of the Federal Power Act. These system additions are not, and cannot be, barred by the terms of the RFP or ISO-NE's interpretation. Such a bar would be illegal under federal law and FERC-approved documents, such as the Transmission Operating Agreement and Attachment K, issued pursuant to those statutes and regulations.

As described above, the ISO's erroneous reading of the provisions cited -- which do nothing more than note that an Order No. 1000 solicitation conducted pursuant to Attachment K cannot modify other laws -- is being used to impermissibly modify other laws. ISO-NE must correct that error, which was used to disqualify Anbaric's AC and HVDC projects along with *20 other projects*.

E. ISO-NE Incorrectly Asserts that Projects are Not Competitive for Reasons of Cost. The Order No. 1000 Standard is "More Efficient or Cost-Effective" and Not Least Capital Cost; Least Capital Cost May Be Significantly More Expensive to Consumers.

Having eliminated Anbaric's AC and HVDC projects based on the erroneous exclusions set out above, ISO-NE never reached an evaluation of the two Anbaric Projects based on the evaluation criteria set out to implement the "more efficient or cost-effective" standard of FERC's Order No. 1000.

However, once the errors described above are addressed, project costs and benefits become an issue. While two-thirds of the submitted proposals were eliminated based on non-cost matters, ISO-NE notes that those that remained were then eliminated based on cost. The

ISO asserts on slide 43 of the ISO-NE Presentation that the next most expensive installed cost was $45M more than the incumbent backstop.[21]

Cost aside, ISO-NE sets out a series of related reasons on slide 44, including:

- QTPS costs associated with all Phase Two Solutions are eligible for cost recovery
- Additional costs would be incurred with the ISO's review of the Phase Two Solutions, which will include the cost of multiple consultants
- Continuing on with the Phase Two Solutions process would add at a minimum of 4 months to the process

However, these appear to be issues with FERC's Order No. 1000, and not reasons that allow ISO-NE to circumvent the requirements of Order No. 1000. While refusing to evaluate 35 of 36 competitive proposals may be convenient for ISO-NE, it is looking at "costs" in ways that disregard FERC's intentions in promulgating Order No. 1000 to enhance regional planning.

1. Order No. 1000 Does Not Require the Selection of the Cheapest Project, but the "More Efficient or Cost Effective" Project

In Order No. 1000, the Federal Energy Regulatory Commission was addressing issues that still may remain in RTOs and other areas where incumbent utilities had the right to build transmission facilities to the exclusion of competition.

The rule, among other things required:

- Each public utility transmission provider must participate in a regional transmission planning process that satisfies the transmission planning principles of Order No. 890 and produces a regional transmission plan.
- Local and regional transmission planning processes must consider transmission needs driven by public policy requirements established by state or federal laws or regulations. Each public utility transmission provider must establish procedures to identify transmission needs driven by public policy requirements and evaluate proposed solutions to those transmission needs.[22]

[21] *But see* fn. 3. The $49 million project cost is achieved using a usually disallowed remedial action scheme, as defined by NPCC in its Glossary of terms: "Special Protection System (SPS) – A protection system designed to detect abnormal system conditions and take corrective action other than the isolation of faulted elements. Such action may include changes in load, generation, or system configuration to maintain system stability, acceptable voltages or power flows. However, the following are not considered SPS's:
-Automatic underfrequency load shedding;
-Automatic under voltage load shedding, and
-Manual or automatic locally controlled shunt devices."
It is not clear why such an option is being considered as an acceptable reliability solution, vs. construction of new transmission lines to address the K-163 overload, given ISO-NE's planning practices to date.

[22] See FERC's summary of Order No. 1000 at the following URL: https://www.ferc.gov/industries/electric/indus-act/trans-plan.asp

The purpose of Order No. 1000 was in part to ensure *regional* planning. FERC has directed regional planning because simply focusing on small area issues is often inefficient. Sound regional planning may lead to selection of projects that do more to address a variety of issues at a lower cost than resolving specific issues individually. To this end, transmission owners are required to participate in a transparent, regional planning processes[23] so that transmission planning would meet the "*region's needs*."[24]

This big picture planning was clearly and expressly intended by FERC "to evaluate, in consultation with stakeholders, alternative transmission solutions that might meet the needs of the transmission planning region more efficiently or cost-effectively than solutions identified by individual public utility transmission providers in their local transmission planning process. This could include transmission facilities needed to meet reliability requirements, address economic considerations, and/or meet transmission needs driven by Public Policy Requirements… ."[25]

Throughout Order No. 1000, it is clear is that "more efficient or cost-effective" may not be the least costly capital installation to address a narrow issue. In fact, again and again, FERC indicates that a narrow solution may be an inefficient way to address system needs.[26]

In the case of the reliability issues created by the closure of the 2,000 MW Mystic power plant, it may be more efficient or cost-effective to select projects that eliminate clearly visible future upgrades, lower consumer electric costs, incorporate renewable energy requirements that are not speculative but that are set out in the laws of states in which ISO-NE does business.

Both the Anbaric AC and HVDC Projects enable the integration of more offshore wind energy. In its presentations to the Planning Advisory Committee,[27] ISO-NE has already identified over-land transmission upgrades that will be needed to integrate offshore wind energy

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[23] *See* Order No. 1000 at P 146 "The Final Rule requires that each public utility transmission provider participate in a regional transmission planning process that produces a regional transmission plan and that complies with the transmission planning principles of Order No. 890 identified below. We determine that such transmission planning *will expand opportunities for more efficient and cost-effective transmission solutions for public utility transmission providers and stakeholders.* This will, in turn, help ensure that the rates, terms and conditions of Commission-jurisdictional services are just and reasonable and not unduly discriminatory or preferential." (emphasis added)

[24] See *id*. at P 11 "At its core, the set of reforms adopted in this Final Rule require the public utility transmission providers in a transmission planning region, in consultation with their stakeholders, to create a regional transmission plan. This plan will identify transmission facilities that more efficiently or cost-effectively meet the region's reliability, economic and Public Policy Requirements." (emphasis added)

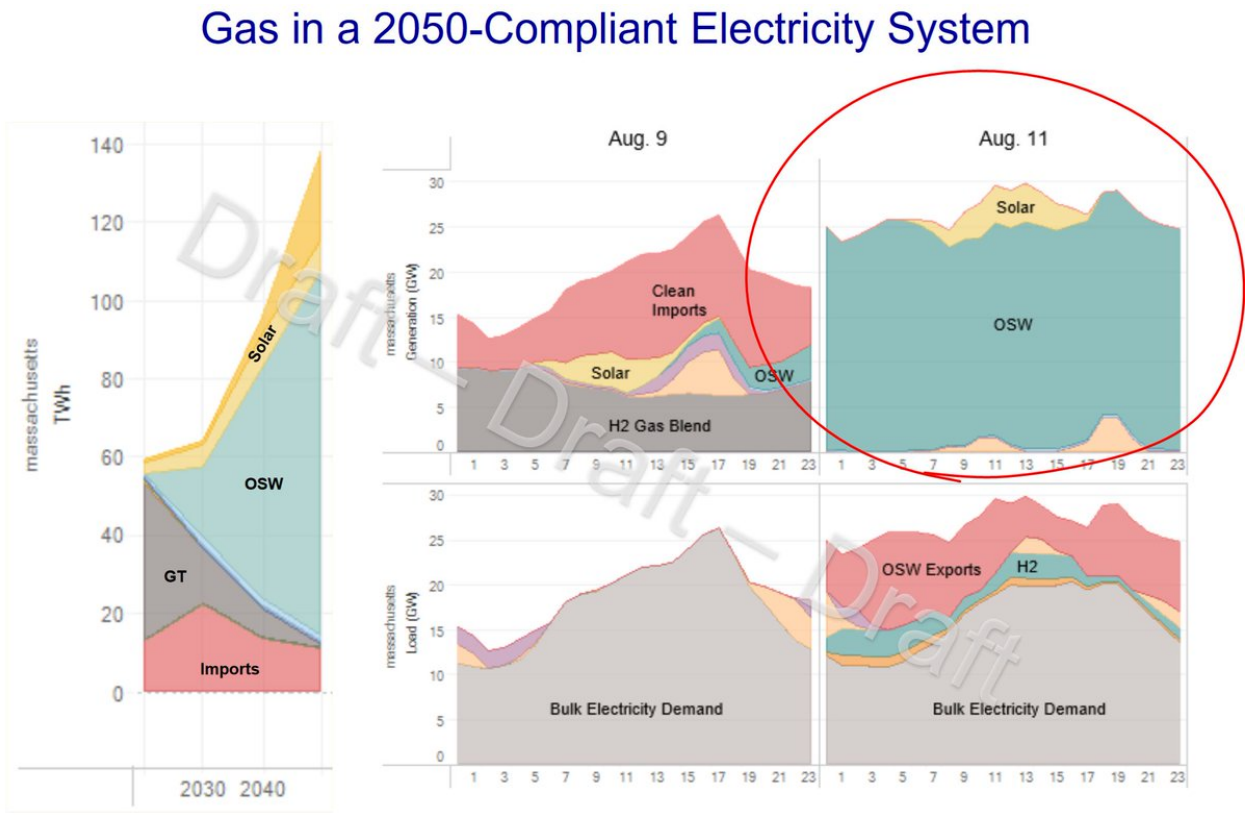
[25] *See id.* at P. 148.

[26] *See id.* at P 890. "These reforms work together to ensure that public utility transmission providers in every transmission planning region, in consultation with stakeholders, evaluate proposed alternative solutions at the regional level that may resolve the region's needs more efficiently or cost-effectively than solutions identified in the local transmission plans of individual public utility transmission providers."

[27] This estimate was developed by Anbaric engineering firm consultants.

that has already been selected and will connect into southeastern Massachusetts.[28] Among these upgrades is a new 345kV circuit between the SEMA and NEMA zones which is likely to cost $620 million[29] and take years to design, permit and complete.

New England states already have climate laws setting out ambitious offshore wind energy procurements. For example, in early June, David Ismay, Massachusetts Undersecretary for Climate Change, presented the initial results of the Decarbonization Roadmap, showing 25 GW of wind in 2050, as laid out and circled on the following slide from the draft report.[30]



Other third-party work has shown even larger renewable integration needs. In September 2019, The Brattle Group released a study looking at electrification and energy goals in the region. That study noted that New England would need to add 1,500 MW of offshore wind per

[28] *See* ISO New England 2019 Economic Studies, Detailed Assumptions August 8, 2019. https://www.iso-ne.com/static-assets/documents/2019/08/a8_2019_economic_studies_detailed_assumptions.pptx at slide 6. In particular see, 345 kV reinforcement line #2. These results have been reiterated in subsequent presentations. *See e.g.*, https://www.iso-ne.com/static-assets/documents/2020/05/osw-econstudy-transmission-interconnection-analysis-may-2020-nonceii.pdf at slide 18 "Significant new transmission would be needed to resolve all of the issues" and noting a new 345 kV circuit from Cape Cod to K Street in Boston. This is electrically the same connection made by both the Anbaric AC and HVDC Projects.

[29] This cost estimate was developed Anbaric engineering firm consultants.

[30] http://www.raabassociates.org/Articles/Ismay%20Presentation%206.12.20%20for%20posting.pdf

year from 2020 to 2050, in addition to other renewables, to meet the then-current targets.[31] Since that time, less than a year ago, clean energy targets in the region have become more aggressive. Rhode Island is now targeting 100% clean energy by 2030,[32] Connecticut by 2040,[33] and Massachusetts by 2050.[34] These targets the law of the states in which ISO-NE does business and these laws will control the resource mix. A failure to address these requirements through regional system planning is not only an abdication of the role of system planner and inconsistent with Order No. 1000, but would also likely be imprudent given the information known today.[35]

As described in the bids, Anbaric's AC and HVDC Projects not only comprehensively solve the Mystic retirements reliability problems, but also enable New England consumers to avoid the need for near-term, extremely expensive onshore upgrades to incorporate more offshore wind, and lower consumer costs by integrating up to 2,400MW[36] of low cost renewable energy. Indeed, given that fuel is the largest part of most power bills in New England, a project that is less than thirty cents on an average bill per month, as is the in the Anbaric AC Project, could actually *cost consumers less in overall rate impacts than* a $49 million band-aid project ISO-NE summarily selected, and provide far greater system reliability.

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[31] https://brattlefiles.blob.core.windows.net/files/17233_achieving_80_percent_ghg_reduction_in_new_england_by_20150_september_2019.pdf

[32] https://governor.ri.gov/documents/orders/Executive-Order-20-01.pdf

[33] https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-3.pdf

[34] https://www.mass.gov/news/baker-polito-administration-issues-letter-establishing-net-zero-emissions-target and https://www.mass.gov/doc/final-signed-letter-of-determination-for-2050-emissions-limit/download; Municipalities with the Commonwealth are also issuing their own 100% renewable energy policies: https://www.boston.gov/news/city-council-continues-push-100-renewable-energy

[35] *See New England Power Co.*, 31 FERC ¶ 61,047, at 61,084 (1985) where the Commission set out the now well-established prudence standard: "[M]anagers of a utility have broad discretion in conducting their business affairs and in incurring costs necessary to provide services to their customers. In performing our duty to determine the prudence of specific costs, the appropriate test to be used is whether they are costs which a reasonable utility management [] would have made, in good faith, under the same circumstances, at the relevant point in time." The necessary evidence to establish a serious doubt of prudence requires more than bare allegations, *see e.g. Iroquois Gas Transmission Sys., L.P.*, 87 FERC ¶ 61,295, at 62,168 (1999), and *Mid-America Pipeline Co., LLC*, 124 FERC ¶ 63,016, at P 976 (2008) (*Mid- America*), *aff'd* 130 FERC ¶ 61,123 (2010). Establishing a serious doubt regarding prudence requires "reliable, probative, and substantial evidence." *Wis. Elec. Power Co.*, 73 FERC ¶ 63,019, at 65,225 (1995), *aff'd in relevant part*, 98 FERC ¶ 61,233 (2002) (citing Section 7(c), Administrative Procedure Act, 5 U.S.C. § 556(d) (2012)). The facts as they have been known over the past several months provide reliable, probative and substantial evidence that the Boston 2028 RFP is be truncated in an imprudent manner.

[36] Both the Anbaric AC and HVDC projects incorporate a separate set of empty ducts avoiding the need for more permitting and significant road construction (and the associated costs of both) to bring another 1,200 MW of offshore wind into the Boston area. As noted in both the AC and HVDC bids, the costs of those spare ducts are *not* added to the project and the RNS rate.

This impact is even more significant when other retirements identified in ISO-NE's evaluation criteria document are factored in, such as the Kendall unit in Boston and Canal Units 1 and 2. The Anbaric AC and HVDC Projects both allow for significant injections of power into the Boston area, and both allow system operators to control flow direction – the AC Project via phase angle regulators, and the HVDC Project via the voltage source converters. This allows system power to be pushed to SEMA when needed. The Anbaric AC Project provides the required reactive power via a combination of the STATCOM and shunt reactors, while the HVDC provides ~400+/- MVAr of reactive power on BOTH ends of the circuit, which would replace significant fossil generation capability, a characteristic that will be needed.[37]

However, without inclusion of Anbaric's proposals in the Phase II process, their benefits and avoided costs are not even considered. By summarily disqualifying Anbaric's projects, ISO-NE is not able to review the Anbaric projects that may be efficient and cost-effective for regional planning,[38] as required by Order No. 1000.

2. The ISO is Imprudently Ignoring Known System Risks that May Make the Selected Incumbent Backstop Project Obsolete to Address the Mystic Retirement Needs Before it is Even Constructed

Before ISO-NE updated its current Boston 2028 Needs Assessment, it had produced a prior version in 2019 that noted additional upgrades would be required to meet transmission security needs when the Mystic 8 and 9 units retire if the NECEC project were not in-service.[39] That needs assessment showed needs associated with the Stoughton – K Street 345 kV cables, which were overloaded in the cases with lower North-South transfers and moderate SEMA/RI export levels (~1,050 MW).

Once the New England Clean Energy Connect project or "NECEC" sponsors executed an RFP contract with utilities, ISO-NE added the project to its base case. However, since that time, opposition has grown to the project in Maine and there have been legal challenges in both Maine and Massachusetts. The most significant issue is referendum in Maine in November 2020. Opponents of the project gathered enough signatures to place the measure on the ballot,[40] and a

[37] The ability for projects to enable the retirement of other legacy generation, both in the Boston area and on Cape Cod, was identified along with several other factors ISO-NE's "Request for Proposal Reliability Transmission Upgrade, Part 1 – Appendix A Evaluation Factors" available at the following URL: https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_documents.zip

[38] *See e.g.* Order No. 1000 at P 148.

[39] *See* https://www.iso-ne.com/static-assets/documents/2019/05/pac_notice_draft_boston_2028_na_and_updated_pac_presentation_rev1_clean.pdf The draft Needs Assessment and Supporting files are marked as Critical Energy Infrastructure Information. Questions about the NECEC treatment in the Needs Assessment were addressed here: https://www.iso-ne.com/static-assets/documents/2019/06/response_to_stakeholder_comments_on_draft_boston_2028_na.pdf The final Boston 2028 Needs Assessment without NECEC in the base case is available here as a CEII document: https://smd.iso-ne.com/operations-services/ceii/pac/2019/06/ceii_boston_2028_na.pdf

[40] https://www.pressherald.com/2020/02/03/cmp-corridor-opponents-submit-signatures-for-referendum-vote/

judge has certified that the ballot question may go forward, [41] which has been affirmed by the Maine Supreme Court.[42]

Anbaric has pointed out that both the Anbaric AC Project and the HVDC Project address all system needs with *or without* NECEC. If NECEC is cancelled, or even delayed,[43] the backstop incumbent project that has been summarily selected by ISO-NE will *not* enable Mystic units 8 and 9 to retire. As a result, ISO-NE will have to conduct another RFP, or simply award more system upgrade work to the incumbents. Even if incumbents are awarded yet more upgrades, those upgrades may be built through towns that have delayed the Greater Boston Reliability Project for several years through court and regulatory challenges. Siting in the for parts of the project began five years ago and was only approved in December 2019. The project, already due to be in service to address system "year of need" issues before 2015, is still not constructed.[44] With all of this information, ISO-NE should have at least sought to maintain projects in Phase II of the current RFP that can address this range of known issues. It could then retain or dismiss those Phase II projects that are no longer useful based on what occurs with the referendum a few months from now. ISO-NE's failure to do so risks selecting a project that may be worthless for even the narrowest version of ISO-NE's stated needs: allowing the Mystic 8 and 9 plant to retire. This would either lead to an extended RMR, so-called gap RFP under the ISO-NE tariff which likely only the Mystic units could satisfy the terms of, or exposure to system issues giving rise to this RFP that can be managed through load shedding.

While selection of the least capital cost project may equate to wasting $49 million dollars of ratepayer money on a band-aid project that does not address even near-term grid needs efficiently, or avoids more expensive system upgrades that were not addressed through more efficient and cost effective projects, it may also result in additional multi-hundred million dollar supply subsidy costs to the region while other reliability needs are addressed.

3. The Public Policy Planning Rules Are Not a Shield to Considering Public Policies When Doing System Reliability Planning; Order No. 1000 Directs that Such Considerations are Part of More Efficient and Cost-Effective System Planning

ISO-NE errs in a fundamental misunderstanding of factors that are to be considered as part of system planning even for reliability projects under Order No. 1000. Order No. 1000 directs that planning must provide for more "efficient and cost-effective transmission solutions

[41] https://bangordailynews.com/2020/04/13/business/judge-sides-with-cmp-corridor-opponents-allowing-anti-powerline-referendum-on-ballot/

[42] https://www.mainepublic.org/post/maine-supreme-court-rules-anti-cmp-corridor-referendum-signatures-were-valid

[43] Central Maine Power is challenging the ballot measure and more litigation can be expected. *See e.g.,* https://www.wbur.org/news/2020/05/16/mass-hydro-stymied-in-maine

[44] https://www.eversource.com/content/nh/about/projects-infrastructure/projects/massachusetts-transmission-projects/sudbury-to-hudson-project

for public utility transmission providers and stakeholders."[45] ISO-NE is required to ensure that public policies are accounted for in regional transmission planning.[46]

However, this requirement to consider public policies in regional transmission planning has been misinterpreted to only apply in specific planning studies looking only at public policy needs. This misapplication of Order No. 1000 is stated in the June 12, 2020 letter from Gordon van Welie to United States Senators Edward Markey and Elizabeth Warren.[47] Senators Markey and Warren had written to ISO on June 5, 2020 to provide input on what would make a more efficient and cost-effective project.[48] In that letter, the Senators asked that ISO focus on environmental attributes of projects as well as public health impacts. The response from ISO-NE parried the concerns raised, instead redirecting that there is another process for policy considerations to be looked at in grid planning, pointing to the Public Policy Planning Process. However, this balkanization of policy considerations is inefficient and unnecessary under Order No. 1000.

The position of ISO-NE appears to be that the energy policies, public health impacts and costs, and environmental impacts of the states in which ISO-NE operates will not be acknowledged or incorporated unless the states make the request through the public policy planning mechanism. However, the public policy planning tool was designed to be used where reliability planning was not otherwise meeting public policy goals. That is, public policy planning provides a non-reliability trigger to start project planning. This does not mean that reliability planning can ignore public policy requirements. This balkanization virtually guarantees that the projects ISO-NE selects in the reliability planning process will neither be more efficient nor cost-effective. The policy planning to enable energy system mandates will still have to happen anyway – it is not optional – but it will be on top of the dollars already spent, missing the opportunities for two-for-one, three-for-one projects. This will not be a "cost effective solution for the consumers who will ultimately bear the cost of the project."[49]

F. The Process Has Not Been Transparent as Required by Order No. 1000

Contrary to the requirements of Order No. 1000, to be open and transparent, the RFP process has been opaque from inception. The decision to withhold non-confidential information has had a negative practical effect for rate payers. The choices made by ISO-NE have resulted in several months of lost time for ISO-NE to ask questions and receive feedback which may have avoided some of the errors discussed above. ISO-NE has lost time in being able to hear from the stakeholders that Order No. 1000 talks about, who were not able to see the proposals and provide ISO-NE with the required meaningful input on what may be more efficient or cost-effective

[45] *See* Order No. 1000 at P Order No. 1000 at P 146.

[46] *See id.* at PP 146-148.

[47] This June 12, 2020 letter from Gordon van Welie to Senators Market and Warren is attached as Attachment C. ("June 12 Letter to U.S. Senators")

[48] This June 5 letter from Senators Markey and Warren to Gordon van Welie is attached as Attachment B.

[49] June 12 Letter to U.S. Senators at page 1.

solutions based on a range of issues. This lack of transparency has now led to a compounding of lost time, not only have the afore mentioned opportunities afforded by an open an transparent planning process been lost, but the process has been seriously damaged and delayed by the erroneous results arrived at by that process: the summary elimination of 35 of 36 proposed projects submitted into the RFP.

Order No. 1000 states:

> "Because of the increased importance of regional transmission planning that is designed to produce a regional transmission plan, stakeholders must be provided with an opportunity to participate in that process in a timely and meaningful manner. Therefore, we apply the Order No. 890 transmission planning principles to the regional transmission planning process, as reformed by this Final Rule. This will ensure that stakeholders have an opportunity to express their needs, have access to information and an opportunity to provide information, and thus participate in the identification and evaluation of regional solutions… Greater access to information and transparency also will help stakeholders to recognize and understand the benefits that they will receive from a transmission facility in a regional transmission plan."[50]

And

> "Our intent is to enhance transmission planning processes prospectively to provide greater openness and transparency in the development of regional transmission plans."[51]

The ISO-NE competitive solicitation process was designed to be open, allowing for everything but very limited commercially sensitive data, *e.g.*, a component specific negotiated price with a vendor or potential vendor, to be posted publicly.

In Part 2 of the RFP Instructions, ISO-NE recognizes this and states:

> "Phase One Proposal answers provide a high-level description of the QTPS Respondent's proposal and cost estimates. The ISO has marked the questions that it anticipates may contain confidential information as part of the response. If the QTPS Respondent submits confidential information in response to a question, that information will be treated as confidential under the ISO New England Information Policy. Any responses or attachments in response to questions containing confidential information must be marked "Confidential Information" as the first two words of the answer or at the top of the attachment. The specific confidential information in the answer or on the attachment must be highlighted in yellow. Confidential information submitted in response to questions shall not include the following:

1. The high-level design of the solution;

[50] Order No. 1000 at P 150.

[51] Order No. 1000 at P 162

2. The total estimated installed costs for the solution;
3. The estimated Annual Transmission Revenue Requirement;
4. Information relating to any cost-containment measures, cost-caps and rate incentives;
5. Information regarding the proposed in-service date for the solution; and
6. Any information that QTPS Respondent makes publicly [sic] available"

ISO-NE is clear – consistent with the ISO-NE Information Policy[52] – information marked as confidential will be treated as such, describing how such information is to be marked for redaction (*i.e.*, a yellow highlight and attachment label). Non-highlighted information submitted in response to the RFP *not* confidential under the Information Policy.[53] ISO-NE further provides a list of information that may *not* be marked for confidential treatment in RFP bids, enumerating six information types.

After submission of the bids on March 4, 2020, Anbaric and other bidders sought an update from ISO-NE regarding when the public version of the bids would be posted. At the March 2020 Planning Advisory Committee meeting, Anbaric and others repeated this request. ISO-NE noted that multiple inquiries had been made about posting in the RFP365 software. PAC was then informed that bids would not be posted publicly, and that ISO-NE would post a memorandum explaining the reasons for this that decision.

The ISO posted that memorandum on March 19, 2020.[54] Among the reasons stated, none have a basis in the Attachment K, the RFP documents, FERC orders, or the ISO-NE Information Policy, under which all submissions – unless otherwise marked – are not confidential documents. Among the reasons given are:

- Rather than describing the project, some responses are written as an advertisement for the project
- Some responses include language that criticizes other possible proposals
- Some responses refer to specific technologies that would essentially identify the QTPS. Masking this information would remove a significant portion of the response

The ISO concludes: "Due to the concerns with the proposals and the responses to Question 2, the *ISO does not believe that it is appropriate* to provide the list of Phase One Proposals without including the ISO's draft findings." (emphasis added)

ISO-NE thus provides a list that reads as expressing a preference but identifies no reason to not release the information. For example, there is no ISO-NE tariff, RFP or Order No. 1000 reason, and certainly no requirement, as to why QTPS sponsors should be treated as confidential information. While the ISO conducts its business as a private corporation, it has some of the aura of a quasi-governmental entity, being given the public trust to carry out certain functions

[52] The ISO New England Information Policy is the FERC-approved document that governs how ISO-NE handles information it possesses. ISO-NE may not alter the Information Policy without a FPA Section 205 filing to FERC and a subsequent order issued by the Commission approving the change.

[53] The ISO-NE Information Policy is Attachment D to the ISO-NE tariff.

[54] https://www.iso-ne.com/static-assets/documents/2020/03/boston-2028-rfp-posting-of-phase-1-proposals-final.pdf

under regulatory oversight. It therefore has no FOIA statute. However, in the place of FOIA, the Information Policy provides the limited and prescribed circumstances regarding when information in the possession of ISO-NE is confidential. In this case, none of those reasons apply or are asserted. The ISO thus has chosen to withhold submitted bids not because they are confidential under the Information Policy, but because "it does not believe it is appropriate" to release the non-confidential information.

As noted, the effect of these decisions to withhold information has cost the region months of time. While lost time cannot be made up, there is no reason to exacerbate the error and continue down this course.

ISO-NE should post the redacted public versions of *all* bids as submitted into the regional planning process. Both of Anbaric's public version bids as prepared for posting by ISO-NE back in early March, are attached to these comments at Attachment C and Attachment D.

III. Conclusion

For the reasons reviewed above, ISO-NE must correct the identified errors, restore Anbaric's and similarly affected projects to consideration through a robust competitive transmission process that aligns with the Commission's directives in Order No. 1000. Considering the avoided multi-hundred-million-dollar system upgrades between NEMA and SEMA on the near-term horizon to integrate state-procured offshore wind resources, both Anbaric's AC and HVDC projects may be more efficient and cost-effective than the current proposed solution. Further, given the pending referendum on the November ballot in Maine, the current preferred $49M backstop solution could soon be rendered ineffective to address system reliability needs created by the Mystic 8 and 9 retirement. Should the NECEC not move forward or be delayed in litigation, the backstop solution simply will not address the transmission security needs on the Stoughton to K Street 345kV lines.

/s/ *Clarke Bruno*
Clarke Bruno, CEO
Anbaric Development Partners, LLC
401 Edgewater Place, Suite 680
Wakefield, MA 01880

CC: Gordon van Welie, President and CEO, ISO New England Inc.
Board of Directors, ISO New England Inc.

Attachment A: Affidavit of Dwarakesh Nallen, MS, EE Regarding In-Service Date
Attachment B: Letter from United States Senators Markey and Warren
Attachment C: Letter from Gordon van Welie to Senators Markey and Warren
Attachment D: Public Version of Anbaric AC Project – Mystic Reliability Wind Link
Attachment E: Public Version of Anbaric HVDC Project – Mystic Reliability Wind Link
Attachment F: State Representative Letters of Support

AFFIDAVIT OF DWARAKESH NALLAN

I. Qualifications and Purpose

1. My name is Dwarakesh Nallan. My business address is 370 Main St Suite 325, Worcester MA 01608. I am a Senior Consultant and Manger of Market Analytics at Daymark Energy Advisors (Daymark). I am submitting this affidavit on behalf of Anbaric in support of its comments to ISO New England (ISO-NE) concerning the recently published Boston 2028 RFP – Review of Phase One Proposals[1] under the Boston 2028 Request for Proposal (Boston 2028 RFP). Specifically, I am providing support for Anbaric's argument that ISO-NE has incorrectly asserted that the two Anbaric Projects (AC Project and HVDC Project) would be unable to meet the June 1, 2024 in-service date required for Phase One proposals.

2. As a Senior Consultant at Daymark, I provide clients with technical and market advisory services based on my transmission planning and wholesale markets expertise. I work with clients on matters including transmission and distribution planning, integrated resource planning, generator interconnection and deliverability, smart-grid initiatives and grid-modernization, energy and capacity markets, as well as stakeholder support. As the Manager of Market Analytics, I oversee the consistency and quality of Daymark's analysis and the development of Daymark's analytical team.

3. Before joining Daymark in November 2016, I worked for over five years at ISO-NE on the system planning team as a senior engineer, concentrating on projects related to generator

[1] Boston 2028 RFP – Review of Phase One Proposals, June 12, 2020: https://www.iso-ne.com/static-assets/documents/2020/06/a2_boston_2028_rfp_phase_one_proposal_review.pdf

and transmission interconnections, and wholesale electric markets. Prior to joining ISO New England, I was a transmission planning engineer for National Grid.

4. I hold a Master of Science degree in Electrical Engineering from Clemson University and a Bachelor of Engineering degree in Electrical and Electronics Engineering from Anna University in Chennai, India.

II. Transmission Outage Schedule

5. ISO-NE assertion of the inability of the Anbaric AC Project and the Anbaric HVDC Project to meet the in-service date of June 1, 2024 due to the anticipated outages of the Mystic 8 or the Mystic 9 unit is incorrect.

6. New England is a summer-peaking system. Demand levels during the summer months and even in the winter months tend to be significantly higher than demand levels during the fall and spring "shoulder" seasons, when demand for space conditioning (heating or cooling) is low. Given much lower demand in the spring season, a significant amount generation maintenance and transmission outage and construction is scheduled during this time of the year. As quoted by ISO-NE from the 2016 New England Power Grid Summer Outlook,[2] during "March, April, and May, when consumer demand is typically lower, New England's power plant and transmission owners schedule equipment outages to 'tune up' their equipment before the peak summer season."

7. As common in most New England transmission upgrade schedules, the planned generation and transmission outages associated with either of the two Anbaric Projects (Anbaric AC Project and Anbaric HVDC Project) for the cutover at the Mystic substation would be

[2] New England Power Grid Summer Outlook, April 26, 2016: https://www.iso-ne.com/static-assets/documents/2016/04/20160426_summer_outlook_final.pdf

scheduled in the spring months of 2024, prior to the desired June 1, 2024 in service date. This outage scheduling remains consistent with typical practice implemented by ISO-NE in coordination with transmission owners and independent power producers under current system operations in accordance with ISO-NE Operating Procedure OP-3 -Transmission Outage Scheduling and ISO-NE Operating Procedure OP 5 - Resource Maintenance and Outage Scheduling. Given nearly 4 years of advanced notice on this schedule, ISO New England has sufficient time to properly coordinate this effort with the impacted transmission and generation owners.

III. Reliability Impacts

8. Additionally, Anbaric has proposed a two-stage cutover for the integration of either of the two Projects (AC Project or HVDC Project) to further address reliability impacts associated with the concurrent unavailability of both Mystic 8 and 9 generating units to the Northeastern Massachusetts-Boston transmission system. The two-stage process would remove only one of the Mystic generating units (Mystic 8 or 9) from the transmission system at a time, while keeping the other Mystic generating unit online and fully available to ISO-NE system operations. As identified in the ISO-NE Boston 2028 Needs Assessment studies, the availability of at least one of the two Mystic generating units under peak load conditions would not trigger adverse impact to the transmission system. Given spring load conditions considerably below summer peak conditions, the two-stage cutover process for the Anbaric Projects would protect, not adversely affect, transmission system reliability in the greater Boston area.

Signature appears on the next page

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 16, 2020.

Dwarakesh Nallan

United States Senate

June 5, 2020

Gordon van Welie
President and Chief Executive Officer
ISO New England
One Sullivan Road
Holyoke, MA 01040

Dear Mr. van Welie,

We write concerning ISO New England (ISO-NE)'s Boston 2028 Request for Proposals (RFP) for transmission projects to help maintain grid reliability in the greater Boston area following the scheduled retirement of the Mystic Generating Station in Everett, Massachusetts.[1] We are encouraged by this effort to use competitive bidding to provide new transmission solutions and reduce consumer costs. As part of ISO-NE's evaluation of proposals, we urge you to prioritize the effects that projects may have on state climate, energy, and health goals. Currently, "environmental impact" is listed in the lowest priority category for the Boston 2028 RFP evaluation, and public health impacts are not called out at all.[2] As Massachusetts and other New England states work to reach decarbonization targets and respond to the ongoing COVID-19 pandemic, it is more important than ever that regional transmission organizations consider these impacts as part of electric-grid planning.

The Mystic Generating Station is an oil- and natural gas-fired power plant that is scheduled for full retirement by 2024. Initially, in March 2018, Exelon, the plant's owner, decided to shutter the plant, citing a lack of profitability and economic concerns, but in December 2018, the Federal Energy Regulatory Commission (FERC) approved a petition for short-term cost recovery. That plan allows ISO-NE to direct additional ratepayer payments to flow to the plant over the next several years in order to keep it open. A near-term transmission replacement for this uneconomic plant will benefit ratepayers, improve grid reliability, and protect nearby communities from air pollution.

In particular, the eventual retirement of this power plant, which is the largest fossil fuel plant in New England, presents an opportunity to continue cleaning up the New England power grid and safeguarding public health. The six New England states have all committed to achieving at least a 75-percent reduction in their greenhouse gas emissions by 2050.[3] The Carbon Free Boston

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[1] Brent Oberlin, *Issuance of the Boston 2028 Request for Proposal*, ISO New England, (Dec. 20, 2019), https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_announcement.pdf.
[2] *Request for Proposal Reliability Transmission Upgrade: Part 1 – Appendix A Evaluation Factors*, ISO New England, (Dec. 20, 2019), https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_documents.zip.
[3] *The New England states' frameworks for reducing greenhouse gas emissions continue to evolve*, ISO New England, (Oct. 2, 2019), http://isonewswire.com/updates/2019/10/2/the-new-england-states-frameworks-for-reducing-greenhouse-ga.html.

initiative aims to reach a target of carbon neutrality for the city by 2050.[4] As part of the Boston 2028 RFP, ISO-NE should consider and prioritize these targets.

Additionally, as Massachusetts and other New England states continue efforts to limit and stop the spread of COVID-19, it is important to consider the public health effects of various kinds of electricity generation. Research continues to show a link between air pollution and higher COVID-19 death rates, placing a premium on regional transmission organizations' factoring air quality into their grid-planning decisions — particularly for communities that are disproportionately affected by COVID-19 and the historic burden of air pollution.[5,6]

Clean energy and clean air are both important policy objectives for Massachusetts and the broader New England region, and those priorities should be reflected appropriately among the evaluation criteria for the Boston 2028 RFP. Fossil fuel plants are increasingly uneconomic, particularly as the cost for new renewable electricity generation declines, and after factoring in the costs to public health from air pollution. In pursuing transmission solutions to meet electricity demand and address reliability needs, ISO-NE can also strive to better integrate low- or no-carbon generation projects, with the added benefit of saving ratepayers money and avoiding the need to bail out uneconomic plants. As ISO-NE continues to the next phase of this important process to meet demand and enhance reliability, we urge you to consider and prioritize climate and public health goals.

Sincerely,

Edward J. Markey
United States Senator

Elizabeth Warren
United States Senator

[4] Kat Eshel, *Reducing Emissions*, City of Boston, (Oct. 8, 2019), https://www.boston.gov/environment-and-energy/reducing-emissions.
[5] Xiao Wu, Rachel Nethery et al., *Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study*, Harvard T.H. Chan School of Public Health, (Apr. 24, 2020), https://projects.iq.harvard.edu/covid-pm.
[6] Edoardo Conticini, Bruno Frediani, Dario Caro, *Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy?*, Environmental Pollution, (June 2020), https://www.sciencedirect.com/science/article/pii/S0269749120320601?via%3Dihub.

Gordon van Welie
President and Chief Executive Officer

June 12, 2020

The Honorable Edward Markey
255 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Elizabeth Warren
309 Hart Senate Office Building
Washington, DC 20510

Dear Senators Markey and Warren:

Thank you for your June 5 letter regarding the development of competitive transmission solutions to address reliability needs in the Boston area. ISO New England, in its role as the Regional Transmission Organization, is required to facilitate a process for ensuring the development of transmission infrastructure solutions that are essential for maintaining power system reliability.

On December 20, 2019, ISO New England issued the region's first Request for Proposal (RFP) for competitively developed transmission solutions to address reliability needs pursuant to the Federal Energy Regulatory Commission's Order 1000. The RFP was issued in accordance with rules outlined in Attachment K of the ISO New England Open Access Transmission Tariff. ISO New England identified these reliability needs in its Boston 2028 Needs Assessment Update and Addendum following the announced retirement of Mystic Generating Station.

The deadline for "Phase One" proposal submissions relative to the RFP was March 4, 2020. In response, the ISO received 36 Phase One proposals from eight Qualified Transmission Project Sponsors. The installed cost estimates provided in the proposals range from approximately $49M to $745M, with in-service dates ranging from March 2023 to December 2026 and incorporating a number of different technologies.

Stakeholder Discussion Scheduled for June Planning Advisory Committee Meeting

Throughout this process, the ISO has outlined for stakeholders and project sponsors the requirements for the Boston 2028 RFP solicitation. The project ultimately chosen through the RFP must provide a comprehensive solution to the reliability needs identified in the needs assessment, and it must be a cost-effective solution for the consumers who will ultimately bear the cost of the project. These attributes include meeting the region's reliability needs by completing construction and being operational by June 1, 2024 when the Mystic Generating Station retires. As you note in your letter, the Mystic facility is a natural gas-fired power plant (one of the largest generators in New England and fed by liquefied natural gas imports), and upon successful integration of the project developed through the Boston 2028 RFP, Mystic will retire without compromising regional reliability.

The ISO recently posted the results of the Phase One analysis, with the intent of discussing those results with New England stakeholders at the next Planning Advisory Committee (PAC) on June 17. PAC meetings are open to all interested stakeholders, subject to restrictions on materials designated as Critical Energy Infrastructure Information. Most of the Phase One proposals were excluded following a preliminary review because the proposals did not address the identified needs or failed to meet requirements in our regional tariff and/or the RFP. Ultimately, five proposals addressed the reliability needs identified in the RFP – ranging in cost from $49 million to $121 million.

The ISO is recommending that we move forward with the least-expensive project that fulfills the needs identified in the original solicitation. (The next least-expensive proposal is $94 million, nearly double the cost of the least-expensive project.) We believe it is unlikely that further review of the other four proposals would lead to their selection; therefore, we are recommending that they not advance to the next phase and incur additional costs for New England's consumers. However, we will listen to feedback from stakeholders at the June 17 PAC meeting before making a final decision.

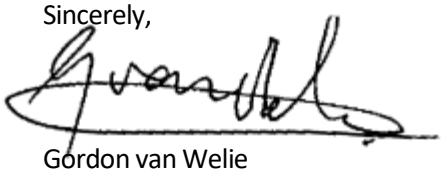
Transmission Investment to Meet Public Policy Goals

I appreciate your thoughts on the importance of investing in transmission to meet public policy goals for both renewable energy and economy-wide carbon reduction. A separate section of Order 1000 establishes a regional process to identify public policy requirements that may drive a need for transmission solutions. In accordance with the timetable articulated in Order 1000, last month the New England States Committee on Electricity (NESCOE) relayed to the ISO that it does not believe that a public policy transmission study is warranted at this time. The NESCOE submittal to the ISO includes responses from all six New England states agreeing that there is no current need to commence the study process.

In my February 27, 2020 letter to Senator Markey, I noted that a separate initiative, a discussion on New England's *Transition to the Future Grid,* would soon commence with regional stakeholders. The initiative is a joint effort by NESCOE, the New England Power Pool, and the ISO to further assess and explore potential market and reliability issues in light of evolving state energy and environmental policies. Stakeholder meetings began in April and the next meeting is planned for July 1. Further meetings are planned throughout 2020.

Thank you again for your recent letter and your continued interest in the reliable operations of New England's bulk power system and considerations for other policy objectives for the New England region.

Sincerely,



Gordon van Welie
President & Chief Executive Officer

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

MATHEW J. MURATORE
STATE REPRESENTATIVE
1ST PLYMOUTH DISTRICT

STATE HOUSE, ROOM 39
TEL. (617) 722-2014
Mathew.Muratore@MAhouse.gov

Committees:
Tourism, Arts and Cultural Development
Health Care Financing
State Administration and Regulatory Oversight
Municipalities and Regional Government

April 14, 2020

Gordon van Welie, President and CEO
Kathleen Q. Abernathy, Board Chair
ISO New England, Inc.
One Sullivan Road
Holyoke, MA 01040

RE: Support for the Mystic Reliability Wind Link Project

Dear Mr. van Welie and Ms. Abernathy,

As state representative for the town of Plymouth, Massachusetts, I am writing to express my support for the Mystic Reliability Wind Link Project (or "Project") being developed by Anbaric. As the long-time home of the Pilgrim Nuclear Power Station which closed last year, Plymouth has a history of hosting major electric infrastructure facilities within our community. One of the Town's top priorities is finding and supporting projects that would reuse the industrial portion of the Pilgrim site. Anbaric's plan to repurpose the existing property with minimal disruption to the community has great merit and should be given your closest attention.

Over the past several years the legislature has worked with Governor Baker to enact several statutes to move the Commonwealth toward a 21st century energy economy particularly with the development and deployment of largescale renewable energy resources, such as offshore wind. I have observed how most of the new offshore wind projects proposed in Massachusetts would connect to nearby Cape Cod and feed into the existing infrastructure that was developed around Pilgrim Station. The Mystic Reliability Wind Link would enable the Plymouth site to move wind energy from here underwater directly to Boston. This strikes me as an efficient way to move energy while avoiding contentious new and expensive overhead lines on land. Investing money now that solves Boston's reliability problem while at the same time avoids future land-based upgrades provides a solution that will save ratepayers more overall, is smart planning, and good stewardship of consumer dollars.

I am also aware that the closure of the Mystic Generating Station is closely linked to the development of the Northeast Clean Energy Connect ("NECEC") project to import Canadian

hydro down through Maine. As a Massachusetts initiative, I hope the NECEC project moves forward to completion. However, it is now facing challenges before both the Massachusetts and Maine supreme courts and is the subject of a voter referendum in Maine this coming November.

If that project is not realized, I am concerned that the hundreds of millions of dollars consumers are paying to keep the Mystic plant open will continue without end. I believe the Mystic Reliability Wind Link solves the reliability issues, does so at no additional cost and potentially saves millions of consumers' hard-earned and currently hard to come by dollars.

Prior to my current role in the legislature, I was a Selectman for the Town of Plymouth. I know that this sort of redevelopment and role for the town as a conduit for large-scale, homegrown renewable energy is an area that has strong support. I have been impressed how Anbaric has actively reached out to many in the Plymouth community. In addition to me and other representatives who serve the area, they have met with the Town Manager and Chairman of the Select Board, as well as local lobstermen, to brief them on the project and gather feedback. I want to emphasize that from my office, this feedback is extremely supportive.

Plymouth is known as America's hometown. This year it celebrates its 400th anniversary. As it looks forward to the next 400 years during this time of change, I see it as a community that continues its leadership role and can be an important conduit for bringing renewable energy to the Commonwealth. Please count me among those who support the Anbaric Mystic Reliability Wind Link project.

Sincerely,

Mathew J. Muratore

Mathew J. Muratore
Massachusetts State Representative

Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON, MA 02133-1054

ROSELEE VINCENT
STATE REPRESENTATIVE
REPRESENTING THE PEOPLE OF THE
16TH SUFFOLK DISTRICT
REVERE • CHELSEA • SAUGUS

ROOM 473F
TEL:(617)722-2210
FAX:(617)722-2837
RoseLee.Vincent@MAhouse.gov

VICE CHAIR
Bonding, Capital Expenditures
and State Assets

Joint Committees on:
Revenue
Cannabis Policy

April 22, 2020

Gordon van Welie, President and CEO
Kathleen Q. Abernathy, Board Chair
ISO New England, Inc.
One Sullivan Road
Holyoke, MA 01040

RE: Support for the Mystic Reliability Wind Link Project

Dear Mr. van Welie and Ms. Abernathy,

As the State Representative whose district includes both Revere and Chelsea, Massachusetts, I am writing to express my strong support for the Mystic Reliability Wind Link Project (or "Project") proposed by Anbaric. As a legislator whose tenure in the House has centered on protecting and preserving the environment, it is encouraging to know that a fossil fired energy plant will be coming offline over the next few years. As a Revere resident who lives on Revere Beach, I have met with representatives from Anbaric, the developer of this project. I found them to be qualified, eager to address the concerns of the impacted neighborhoods and most important, focused on establishing a real partnership with the cities I represent.

As you are aware, Massachusetts has worked hard to move our state into the 21st century in a variety of areas – with a particular emphasis on the "energy economy". The need to expand the footprint of largescale renewable energy resources, such as offshore wind, is real. Offshore wind projects that connect the Cape with the southeast and northeast areas of Massachusetts makes sense. The Project Anbaric proposes is efficient, cost effective and unobtrusive way to solve greater Boston's reliability problem while at the same time saving ratepayers money. And, because this Project will also diminish the area's carbon footprint, it is a win-win for all.

I believe Anbaric has made a very positive impression with leaders and residents of the communities I represent. Their early outreach to my colleagues in government as well as active citizens in abutting neighborhoods demonstrates a commitment to our community. They are local people who will employ local workers and companies. In these uncertain times of economic stress, knowing that my constituents will have a hiring preference is critical. I appreciate the leadership of Anbaric's executive team, and hope you will award them the contract to develop the Project. Please feel free to reach out should you wish to discuss further. Thank you for your consideration, and I hope you stay well.

Sincerely,

RoseLee Vincent
State Representative
Sixteenth Suffolk District

Appendix B: SP Transmission Comments

A. COMMENT TO ISONE RFP

SP Transmission, LLC ("SPT") submits the following comment and question with respect to its "Failing Preliminary ISO Review" under the Request for Proposal Reliability Transmission Upgrade, Boston 2028 RFP.

SPT's failure was listed because "QTPS Respondent did not demonstrate access to or commitment to procure land for the installation of the series reactors and STATCOM."

SPT does not see the specific requirement underlying this failure included in Phase I of the RFP. We will note below where we did identify requirements to show proposals and plans for land procurement, but the actual requirement to "demonstrate access" or a specific "commitment to procure" land seemed absent on our review.

We ask that ISONE please specify and communicate with SPT with respect to the reasoning for rejecting SPT's proposal, so that SPT can better understand the RFP requirements for this and future processes.

Because this item was the only deficiency noted in the report regarding SPT's submission, based on your thoughts and response, we would like for ISONE to reconsider our proposal. SPT is very much interested in working with ISONE on this and other projects in the future.

B. ORIGINAL RFP LANGUAGE

Particularly, SPT notes the following instances in the Phase I RFP requirements mentioning procurement of land and land rights:

OATT Attachment K 4.3.c.iii:

[information required for Phase One proposal includes] the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;

OATT Attachment K 4.3.c.iv:

[information required for Phase One proposal includes] right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained;

OATT Attachment K 4.3.e.iii:

[ISONE will evaluated whether proposed solution] is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe;

OATT Attachment K 4.3.f:

If the ISO identifies any minor deficiencies in meeting the requirements of Section 4.3(e) in the information provided in connection with a proposed Phase One Proposal, the ISO will notify the Phase One Proposal Qualified Transmission Project Sponsor and provide an opportunity for the sponsor to cure the deficiencies within the timeframe specified by the ISO. Upon request, Qualified Transmission Project Sponsors of Phase One Proposals shall provide the ISO with additional information reasonably necessary for the ISO's evaluation of the proposed Phase One Proposals. This identification and notification will occur prior to the publication by the ISO of any Phase One Proposals. In providing information under this subsection (f), or in Phase Two Solutions, the Qualified Transmission Project Sponsor may not modify its project materially or submit a new project, but instead may clarify its Phase One Proposal. Phase Two Solutions reflecting a material modification to a Phase One Proposal or representing a new project will be rejected.

RTU and METU_Part 1_RFP Overview 4.2.A.3:

[ISONE will review] the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution

RTU and METU_Part 1_RFP Overview 4.2.A.4:

[ISONE will review] right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained

RTU and METU_Part 1_RFP Overview 4.2.C:

[ISONE will review whether project] is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe

RTU and METU_Part 2_RFP Instructions Section 2 Phase One Proposal Executive Summary Footnote 5

The proposed schedule includes key high-level milestones for development, siting, procurement of real estate rights, permitting, construction and completion of the Phase One Proposal.

RTU and METU_Part 2_RFP Instructions Section 4

Section 4.4 and Sections 4.6 through 4.22 require the QTPS Respondent to submit installed cost estimates for either the entire Phase One Proposal or an individual component of the Phase One Proposal. The cost estimates shall include material, labor and equipment, right of way, engineering/permitting/indirects, escalation, AFUDC, and contingency.

RTU and METU_Part 2_RFP Instructions Section 6.2.d

[the installed cost workbook shall include cost assumptions for] right of way

RTU and METU_Part 2_RFP Instructions Section 7.5

Provide the proposed schedule of the Phase One Proposal including key high-level milestones for development, siting, procurement of real estate rights, permitting, construction and completion of the Phase One Proposal.

RTU and METU_Part 2_RFP Instructions Section 7.6 Real Estate

Provide information on the right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the Phase One Proposal or the means and timeframe by which such would be obtained.

The responses shall be submitted in a narrative form and not in an uploaded file.

In addition to solving the identified needs, the QTPS Respondent shall provide real estate information that pertains to their Phase One Proposal. The QTPS Respondent shall describe the need for real estate in their Phase One Proposal and any issues that may exist that would impact the procurement of the real estate and risk mitigation plans if certain obstacles do occur.

Part 1 - Appendix A Evaluation Factors, Group 1 – Highest Priority

Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate. […] Potential siting/permitting issues or delays

C. SPT's RESPONSE TO THE RFP

In response, SPT provided the following responses, we believe satisfying the prompts of the RFP:

2. Executive Summary:

[…]

Based on ISO-NE's posted RFP timeline, final selection of the Project Sponsor and execution of the SQTPSA will not be completed until mid-2021. During Phase Two proposal development, Purchase Option Agreements for needed real-estate (three small substation parcels) will be negotiated, preliminary permitting discussions and planning will begin, and much of the detailed design and engineering will be completed. Immediately following SQTPSA execution, real-estate acquisition will be completed (2-3 months), permitting will begin in earnest and will take approximately one year, and engineering and procurement will be completed (expected to take about 12-14 months). Construction and commissioning are expected to take 9-10 months, with some equipment procurement and delivery continuing while construction proceeds. Total duration from SQTPSA execution to commercial operation is expected to be about 20 months, which would beat the required 6/1/2023 in-service date by about three months.

[…]

3. Project Management and Scheduling:

[…]

SP Transmission's projects will be supported by Southern Company and its affiliates who own, operate, and maintain over 18,000 miles of high voltage transmission lines and more than 1,100 high voltage transmission substations. Southern Company and its affiliates have constructed or managed construction of the vast majority of these facilities. Southern Company's 29,000+ employees will be available to support the successful design, construction, operation and maintenance of SP Transmission's projects. Specifically, Southern Power Company (SPC) employees will manage SP Transmission's projects and lead all related efforts on behalf of SP Transmission. SPC has extensive experience developing, constructing, owning, operating, and maintaining facilities across the United States.

SPC will perform all aspects of development, from initial site selection, assessment and acquisition and permitting through the engineering, procurement, and construction, and eventually leading to commissioning and commercial operation. SPC provides in-house expertise and draws on the vast resources of the Southern Company Services (SCS) organization and existing relationships with many consultants and contractors.

[…]

Contractors and consultants for activities such as EPC, local legal support, real-estate acquisition, environmental studies and analysis, and permitting will likely also be utilized to support SP Transmission's projects. Additional resources from Southern Company's employees and extensive external contacts will be brought in as needed in order to deliver the projects on schedule, on budget, and designed and built for high reliability.

[…]

4.2 Geographic Map

[In the attached map, see 2-3 identified alternative parcels on which each aspect of the project could be located.]

SP Transmission_Q4-2_(

6 Installed Cost Estimate Workbook

[*In the attached spreadsheet, $298,000 is included in the estimate for Right of Way.]*

SP Transmission_Q6_Ins

7.2 Feasibility

SP Transmission's Phase One Proposal does not include any transmission line ROW (except for the short 0.08 mi tie-line from the STATCOM to the adjacent Tewksbury substation), but only calls for three small substations – all in Middlesex and Essex Counties, Massachusetts. Local consultants and attorneys with experience in transmission project support will be engaged to assist in real-estate acquisition, site surveys and studies, and permitting.

As shown in the maps attached in response to Question 4.2, primary and backup target parcels have been identified for each of the three stations, with only 1-3 acre tracts needed for each station. Based on desktop analysis of these parcels, topography and wetlands are not expected to be major concerns.

7.3 Expandability

Sufficient land is available in each of the target areas (shown in map attached in response to 4.2) for SP Transmission's proposed STATCOM to add an additional STATCOM block in the future. The 345 kV overhead transmission line tying the STATCOM to Tewksbury station will be oversized to allow for future STATCOM expansion as well.

The reactor stations are designed specifically for the proposed series reactors but could be expanded in the future if needed to accommodate different sized reactors or to incorporate additional equipment or different configurations if needed. Land in the Woburn area is scarce, so any future expansion of the 345 kV reactor station would need to be evaluated.

7.5 Schedule

A list of key high-level milestones and estimated completion dates for SP Transmission's Phase One Proposal are as follows:

05/01/2021	*SQTPSA Execution*
06/01/2021	*EPC Agreement Execution*
07/01/2021	*Real-estate Acquisition Complete*

08/01/2021	*System Studies and Final System Design Complete*
08/15/2021	*Order long-lead Equipment (reactors, transformers, etc…)*
06/01/2022	*Permitting Complete*
06/01/2022	*Final Civil and Electrical Design*
06/15/2022	*Move-on site for Construction*
01/01/2023	*Construction Complete*
03/01/2023	*Commissioning Complete*
03/01/2023	*Commercial Operation*

Three separate stations make up this proposal. The STATCOM station is expected to be the longest duration, so that is the schedule captured above. The 345 kV reactor station would likely be on a very similar timeline, but the 115 kV reactor station is expected to have a shorter construction and commissioning schedule and less lead-time for equipment procurement, otherwise, the schedule is expected to be similar.

Detailed design, real-estate negotiation, and preliminary permitting discussions can begin during Phase Two Process, but as many of the key activities (such as closing on real-estate, executing EPC agreements, and completing permitting activities to name a few) would not be feasible to complete prior to final selection of the QTPS and execution of the Selected Qualified Transmission Project Sponsor Agreement (SQTPSA), completion of the RFP process and SQTPSA execution is the gating item upon which all of the other milestones listed above depend.

Following SQTPSA execution, procurement of the step-up transformers for the STATCOM as well as permitting and regulatory approvals will be the critical path activities leading to start of construction. Construction and commissioning should be relatively simple and straight-forward. Consideration will have to be given to likely constructing during winter weather conditions.

7.6 Real Estate

SP Transmission's Phase One Proposal consists of three separate stations, one located near Tewksbury, one near Woburn, and one near W. Amesbury. For each of these sites, SP Transmission will work with a local real-estate consultant to identify, contact, and negotiate with land-owners to pursue an option to purchase parcels of sufficient size to construct the proposed stations and for ROW for the overhead line to access the existing 345 kV Tewksbury station (if needed). Once the SQTPSA is executed and site diligence has been completed, in order to identify any potential fatal flaws of the site, SP Transmission would exercise the options and purchase the target parcels. It is anticipated that site surveys would be kicked off as soon as the SQTPSA is executed and would be completed within a couple of months. As long as no major issues were identified, closing could occur quickly thereafter. The map attached in response to Question 4.2 shows parcels that have been identified as targets for each of the three locations.

The "Tewksbury STATCOM" station requires a footprint of approximately 300'x322' (about 2.5 acres) as well as an easement for the 345 kV overhead line to the existing Tewksbury station. As indicated on the attached map, the primary target parcel is a ~200 acre parcel owned by New England Power Company that is adjacent to the existing Tewksbury station. The new station

could be located as needed within that area to accommodate future plans of New England Power Company or to avoid any problematic site conditions in certain areas. In the event that parcel does not work out, two other sites within less than a mile were identified as backups.

The "Woburn Reactors" station requires a footprint of approximately 400'x300' (about 3 acres). As indicated on the attached map, the primary target parcel is of sufficient size and is adjacent to the existing Woburn – N. Cambridge underground 345 kV cable ROWs. In the event that parcel does not work out, two other sites along the ROW were identified as a backups.

The "W. Amesbury Reactor" station requires a footprint of approximately 200'x100' (about 0.5 acres). As indicated on the attached map, the primary target parcel is of sufficient size and is adjacent to the existing W. Amesbury – King St. 115 kV transmission line ROW. In the event that parcel does not work out, two other sites along the ROW were identified as a backups.

D. RELEVANT PHASE TWO INFORMATION

In fact, and in seeming contrast to the reason for SPT's RFP failure, the RFP requirements for Phase Two list the following and specifically note certain information as not required in Phase One:

RTU and METU_Part 1_RFP Overview 4.4 Phase Two Evaluation:

> *Although **this information or level of detail is not required for a Phase One Proposal in response to this RFP**, the following information is required to be submitted to the ISO by the date specified in Section 1.3 […]*
> *g. **description of the authority the sponsor has to acquire necessary rights of way**;*
> *h**. experience of the sponsor in acquiring rights of way;***
> *i. **status** of acquisition of right, title, and interest in rights of way, substations, and other property or facilities, if any, that are necessary for the proposed Phase Two Solution [emphasis added]*

E. SUMMARY

SPT believes that it responded appropriately to the requirements of the RFP and asks that ISONE please help explain if we have misunderstood any of the RFP requirements or were deficient in responding to those particular prompts.

Appendix C: Joint Eversource and National Grid Comments

July 2, 2020

Mr. Brent Oberlin
Director, Transmission Planning
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
pacmatters@iso-ne.com

Re: Draft Listing of Qualified Phase One Proposals

Dear Mr. Oberlin:

Eversource Energy Service Company ("Eversource"), on behalf of its subsidiary NSTAR Electric Company, and National Grid USA ("National Grid"), on behalf of its subsidiary New England Power Company, appreciate the opportunity to file these comments in response to the request for comments by ISO New England Inc. ("ISO-NE") in its presentation to the PAC on June 17, 2020.

ISO-NE has an obligation to identify projects which maintain New England's electric grid reliability at the lowest reasonable cost to customers, taking into consideration electrical performance, future system expandability, and feasibility in a manner that meets the identified need in the required timeframe. Eversource and National Grid believe that the ISO-NE's report – "Draft Boston 2028 Request for Proposal (RFP) - Review of Phase One Proposals" that lists the Qualifying Phase One Proposal achieves those goals. ISO-NE's conduct of Phase One of the Boston 2028 RFP was exhaustive and balanced, and eliminated less-desirable proposals in three cumulative stages, based on a review of many technical, cost, schedule, and other factors. Consistent with requirements in Attachment K to the ISO-NE Transmission, Markets and Services Tariff, ISO-NE's Boston 2028 RFP announcement included links to extensive background information, including ISO-NE's transmission planning process and requirements for competitive solicitations generally, as well as the specifics of the Boston 2028 Needs Assessment, and requirements for responsive proposals to it. The two most important evaluation factors: "cost and speed" were emphasized throughout the process. In fact, all but one of the Group One evaluation factors in Part One, Appendix A of the RFP materials related to cost and in-service date.[1] Moreover, ISO-NE noted that "consideration of all evaluation factors,

[1] Part One, Appendix A, "Evaluation Factors" of the RFP materials released on December 20, 2019, available at https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission-projects/ under the "Boston 2028 RFP Documents" tab dated Dec. 20, 2019.

especially those in groups of lower importance, may not be necessary to make [the] determination" of the winning proposal.[2]

ISO-NE's Phase One Review Presentation (cited *supra* note 2) to stakeholders on June 17, 2020, fully details all the factors that ISO-NE used to screen all the Phase One proposals in an even-handed, non-discriminatory manner to reach its conclusions. Based on this review, ISO-NE and its consultants correctly confirmed that for the BOS-017 proposal:

– The identified needs are solved;

– The cost estimate is reasonable[3];

– There is no transmission line siting required;

– All real estate rights are in place;

– Only limited permitting is required;

– The in-service date of October 2023 is reasonably achievable; and

– Completing the selection process early increases the likelihood of meeting the proposed in-service date.[4]

Eversource and National Grid support ISO-NE's continued adherence to its Attachment K process in a manner that efficiently moves toward resolving the reliability issues identified in its Needs Assessment and the Boston 2028 RFP. If ISO-NE concludes in its July 17, 2020 final listing that BOS-017 is the preferred solution, then consistent with Section 4.1(f) of Attachment K, ISO-NE should move to the Solutions Studies phase without further delay or additional unnecessary cost.[5] As proponents of the BOS-017 proposal, Eversource and National Grid affirm our commitments to execute the project on-time and on-budget if this proposal remains ISO-NE's preferred solution in its final listing on July 17, 2020.

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[2] Boston 2028 RFP – Review of Phase One Proposals by Brent Oberlin, ISO-NE Director of Transmission Planning, at 9 (June 17, 2020) ("Phase One Review Presentation"), *available at* https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission-projects/ under the "2020-06-17 PAC A02 Draft Boston 2028 RFP - Review of Phase One Proposals" tab dated June 16, 2020.

[3] "Compared to the [BOS-017 proposal], the next Phase One Proposal in order of increasing costs is 92% ($45M) more expensive." Phase One Review Presentation, at 32.

[4] *See id.* at slide 49.

[5] Attachment K, § 4.1(f) specifically provides that where "only one proposed solution [] is selected to move on as a Phase Two Solution, the ISO will evaluate the adequacy of proposed regulated solutions by performing Solutions Studies, as described in Section 4.2 of this Attachment."; *see also* Phase One Review Presentation at slide 48.

Eversource and National Grid thank ISO-NE for its consideration of this letter.

Very truly yours,

National Grid USA

/s/ James G. Holodak

James G. Holodak
VP FERC & Wholesale Regulation
National Grid USA
1 MetroTech Center
Brooklyn, NY 11201
(929) 324-4599
Email: James.holodakjr@nationalgrid.com

Eversource Energy Service Company

/s/ William J. Quinlan

William J. Quinlan,
President, Transmission
Eversource Energy Service Company
56 Prospect Street | Hartford, CT 06103
(603) 634-2761
Email: William.quinlan@eversource.com

Appendix D: Transource New England Comments

Transource New England, LLC
1 Riverside Plaza
Columbus, OH 43215

Date: July 2, 2020
Subject: Transource New England, LLC Comments to the PAC Regarding Boston 2028 RFP

To the Planning Advisory Committee:

Transource New England, LLC (Transource) is an experienced participant in competitive FERC Order No. 1000 transmission processes. Formed in 2014, Transource's parent company Transource Energy was one of the first entrants into the competitive market, and to date, has actively participated in the competitive transmission planning and Request for Proposal (RFP) processes in PJM, SPP, MISO, NYISO, and CAISO. Transource submitted 3 proposals into the Boston 2028 RFP.

While Transource supports the competitive framework established in Attachment K of the ISO-NE Tariff and does not dispute the ISO-NE's recommended project for the Boston 2028 RFP, Transource does offer the following comments on the RFP evaluation process and the application of certain Tariff language.

Use of Mystic 8 Terminal

First, with respect to Phase One proposals that were eliminated if they were deemed "unable to access facilities for construction" through their use of the Mystic 8 terminal, Transource suggests that in future solicitations, ISO-NE give additional consideration to outage planning as a potential mitigation to disruptions of generation or transmission service. Outage planning is a necessary requirement for nearly every transmission construction project and it is not clear why ISO-NE determined that proposals requiring work at the Mystic 8 terminal were not at all feasible. If this requirement was truly appropriate as a threshold requirement, it should be clearly and explicitly stated.

Additionally, based upon a review of the executive summaries provided in Appendix A[1], it appears that the application of this evaluation factor, in the context of the inability to use the Mystic 8 terminal, may not have been uniformly applied to all bids. While five Phase One proposals were eliminated due to this preliminary evaluation factor, at least 4 additional proposals[2] appear to include use of the Mystic 8 terminal in their bids, but were not eliminated for this reason.

Relying on Incumbent Land

Twenty-two of the 36 proposals submitted in the Boston 2028 RFP were eliminated due to perceived violations of land ownership provisions in their proposals. Of the remaining 14 proposals, 8 of these proposals were submitted by the incumbent transmission owners. As such, only 6 non-incumbent

[1] draft_boston_2028_rfp_review_of_phase_one_proposals_appendix_a.docx
[2] BOS-003, BOS-033, BOS-045 and BOS-039

proposals were not eliminated due to the perceived violations of land ownership provisions, which represents 16% of the bids.

ISO-NE has referenced the language included in Attachment K, Sections 4.3(a) and 4.3(b), as the operative language to eliminate the 22 bids. As excerpted from ISO-NE's Phase One Proposal Review document, Section 4.3(a) states,

> "A Qualified Transmission Project Sponsor may propose a comprehensive solution to address the identified needs that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). … The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process."

Section 4.3(b) states,

> "Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project."

Particular emphasis was given to the word "existing" coupled with an extremely narrow interpretation of "transmission system" in an effort to explain that non-incumbent developers were prohibited from *proposing* any transmission projects other than those that only included like-for-like equipment replacements. Given that the developers of the 22 eliminated bids did not reach the same conclusion as the ISO when interpreting this Tariff language, it seems that the language is too ambiguous to make such determination.

In contrast to the competitive sponsorship processes undertaken in other regions, including PJM, which has run multiple windows that have received robust responses from market participants, incumbent upgrades are allowed to be submitted as part of comprehensive solutions. If these proposals are selected, elements which qualify for non-incumbent award are awarded to the entity proposing the solution while all incumbent upgrades or equipment on incumbent-owned land are awarded to the incumbent transmission owner. Nothing in the ISO Tariff precludes this application, and the alternative interpretation significantly discourages non-incumbents from participation in the ISO's competitive processes as it is a rarity that any significant transmission need would be able to be met without equipment changes on incumbent land.

Should the ISO continue to apply the Tariff language in this same manner in future competitive RFP solicitations, it may result in a significant reduction of competitive participants as non-incumbent developers would not be afforded the opportunity to plan and propose the most cost-effective and efficient transmission solutions.

Thank you for consideration of these comments.

Sincerely,

DocuSigned by:
1647F7406F2840F...

Adam Hickman
Director, Transmission Business Development
Transource Energy, LLC

Appendix E: State of Connecticut Office of Consumer Cousel Comments

STATE OF CONNECTICUT
OFFICE OF CONSUMER COUNSEL

TEN FRANKLIN SQUARE
NEW BRITAIN, CONNECTICUT 06051

TELEPHONE
(860 827-2900
VOICE AND TDD
WWW.CT.GOV/OCC

Richard E. Sobolewski
Direct Dial: (860) 827-2907
Email: richard.sobolewski@ct.gov

June 30, 2020

Mr. Brent Oberlin
Director of Transmission Planning
ISO-New England
1 Sullivan Road
Holyoke, MA 01040

Re: **ISO-NE Request for Competitive Transmission Solutions – Greater Boston Ready Path Solution.**

Dear Mr. Oberlin:

I hereby submit the following letter to express the support of the Connecticut Office of Consumer Counsel ("OCC"), the State of Connecticut's statutorily designated ratepayer advocate, for ISO-NE's recent selection of the Eversource and National Grid solution to address anticipated transmission constraints associated with the slated retirement of the Mystic Generating Station in 2024.

In my current capacity as Acting Consumer Counsel for Connecticut's electric ratepayers, my continual focus is to ensure that Connecticut ratepayers have uninterrupted access to safe, reliable, and affordable electric utility services. As amply demonstrated by current events, affordable electric service is a necessity for the requirements of modern life.

The proposed Eversource and National Grid "backstop" solution both addresses the recognized need for certain transmission system enhancements following the retirement of Mystic and approaches those needs in a way that delivers a solution to ratepayers at the lowest potential cost. Indeed, of the 36 proposals submitted to ISO-NE, the proposed Eversource and National Grid solution delivers the lowest cost remedy to ratepayers by far. As such, Connecticut ratepayers—as well as other ratepayers in the region—will not be unduly burdened with higher rates than necessary.

On behalf of Connecticut electric ratepayers, I thank you for the continued consideration of this issue.

Very truly yours,

RICHARD E. SOBOLEWSKI
ACTING CONSUMER COUNSEL

By: /s/ Richard E. Sobolewski
Richard E. Sobolewski

Appendix F: New England Energy Connection Comments

NEW ENGLAND ENERGY CONNECTION

16150 Main Circle Drive, Suite 310
St. Louis, MO 63017

Via Email pacmatters@iso-ne.com

July 2, 2020

RE: Comments on Boston 2028 RFP –Review of Phase One Proposals

New England Energy Connection, LLC ("NEEC") offers the following comments regarding the Boston 2028 Request for Proposal (RFP) – Review of Phase One Proposals ("RFP Review Report") dated June 16, 2020 and presented to the Planning Advisory Committee on June 17, 2020.

NEEC does not dispute the primary recommendation of the RFP Review Report. However, NEEC has identified several serious flaws must be addressed to ensure future solicitations are fair, transparent, and result in selection of the most efficient and cost-effective solution.

The ISO-NE's winnowing process unfairly eliminates proposals from consideration without a full evaluation based on criteria that are unsupported (e.g., prohibition on utilizing incumbent real estate) or alleged deficiencies without an opportunity to cure. In addition, the process should be revised to allow bids to address a single element of the stated need, rather than require all proposals to meet multiple needs. ISO-NE must either remedy the deficiencies and reissue the RFP Review Report, or initiate a "lessons learned" process and incorporate changes in processes or the Tariff to ensure a level playing field for future solicitations.[1]

ISO-NE's Winnowing Process

The RFP Review Report and June 17 PAC presentation describe a winnowing process that suggests a goal of eliminating rather than evaluating proposals. The absurd result is a series of tables eliminating all but one proposal: Table 3-2 eliminates 26 out of 36 proposals; Table 4-3 eliminates five of ten remaining proposals; and Table 5-1 eliminates four of five remaining proposals.

The RFP identifies evaluation factors. The highest priority evaluation factors include cost, cost cap, in-service date, potential siting/permitting issues, system performance, and impact on NPCC BPS classification. Rather than using these factors for an evaluation, ISO-NE uses some to eliminate proposals (e.g., in-service date and cost) and, through elimination of all but one proposals, does not evaluate other factors (e.g., cost cap and system performance). It would have been reasonable for bidders and other stakeholders to expect the ISO-NE evaluation report would include a table of all 36 bids evaluated based on the highest priority evaluation factors. NEEC does not claim that a more complete evaluation table would result in the selection of any of its proposals in the case of the Boston 2028 RFP. However, a complete evaluation demonstrates a fair, full evaluation, which would provide confidence in the process. Confidence in the process is important for confidence in the current selection, and to encourage participation in future processes.

[1] ISO-NE indicated an intent to conduct a lessons learned process in the Response of ISO New England, Inc. To Order Instituting Section 206 Proceedings, Docket No. EL19-90-000 at 19 (filed on Dec. 27, 2019) at 19.

Preliminary Review Factor-Relying on the Incumbent and/or the Incumbents Land

One factor in the winnowing process that must be addressed is eliminating proposals that require access to incumbent real estate. The use of incumbent real estate is not prohibited by the tariff. The RFP Review Report primarily refers to Attachment K, Section 4.3(a) to support this claim, as quoted below:

> "4.3(a) A Qualified Transmission Project Sponsor may propose a comprehensive solution to address the identified needs that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). … The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process."

The first sentence quoted above cannot be more clear that a QTPS may propose a solution that includes an upgrade located on a PTO's existing transmission system, even where the QTPS is not the PTO. NEEC fails to see how emphasis on the word "existing" in that sentence changes the clear meaning of the sentence. Further, there was significant debate over the development of this provision, which in prior drafts proposed a requirement for a QTPS to procure an agreement with the incumbent, a potential competitor, prior to making such a proposal. The resolution of this clearly anti-competitive provision was that no such requirement would be included, as described in the second sentence quoted above. Why would this sentence be included, that the QTPS is not required to procure an agreement with the incumbent, if this type of proposal is strictly prohibited?

ISO-NE's interpretation of this provision irreversibly tilts the playing field in favor of the incumbent. Often in transmission planning, the simplest, least cost solution includes new equipment in existing substations such as series reactors, series compensation, or adding a breaker (to resolve a stuck breaker contingency for example). This appears to have been the case for the Boston 2028 RFP. Under ISO-NE's strained interpretation of Section 4.3(a), bidders other than the incumbent would be limited to proposing new or reconductored transmission lines, or new substations just to house equipment that would be more efficiently located within an existing substation. The result is a playing field extremely tilted toward the incumbent. Whether this results from an interpretation of Section 4.3(a) or requires a tariff revision to Section 4.3(a), this issue must be addressed in the lessons learned process for future processes.

Opportunity to Cure

ISO-NE did not provide bidders with an opportunity to cure some of the alleged elimination factors. In LS Power's experience in every other RTO/ISO, if there is a perceived deficiency, the RTO/ISO would ask the bidder clarifying questions. It is wholly unfair to entirely eliminate a proposal from the evaluation based on a perceived deficiency without even asking the bidder to explain the situation, and possibly provide an opportunity to cure. This is especially true for with the opportunity to cure perceived modeling deficiencies such as ability to the dynamic reactive need. NEEC does not agree that its proposals failed to provide the required amount of dynamic reactive capability, and was surprised to find for the first time in the PAC meeting materials that its proposals were eliminated in part on this basis. NEEC proposed dynamic reactive devices with the support of international equipment suppliers that have confirmed the proposed equipment fully met the stated need. If there was a perceived deficiency in the modeling representation of the equipment, there should have been an opportunity to respond to the allegation of a deficiency, and cure such deficiency.

Separate Solutions for Discrete Needs

The Boston 2028 RFP was issued to address three discrete needs: an N-1 need near West Amesbury, an N-1-1 need related to the Northern Boston Cables, and a need for dynamic reactive power. These needs were electrically distant and unrelated to each other. During the stakeholder process prior to the finalization of the Boston 2028 RFP, there were several requests and clarifying questions if ISO-NE would require bids to address each of the three identified needs. The Boston 2028 RFP required each proposal to address all of the three needs. It is clear now that the better approach would be to solicit separate proposals for each discrete need while allowing proposals to address multiple needs.

First, it is not clear that a single proposal would represent the best solution for each discrete need. For instance, while a number of dynamic reactive devices were proposed that meet the identified need, it is unclear if the selected proposal includes the most efficient and cost-effective dynamic reactive device. Other proposals may have provided a dynamic reactive device that would perform better in a comparative evaluation with benefits such as cost caps and superior system performance. The requirement that each proposal contain solutions for every identified need, while totally unrelated, restricted ISO-NE's evaluation such that the best overall proposal may contain suboptimal individual solutions. An argument in support of requiring all proposals to meet all needs is that in some rare cases a single element could address multiple needs, such as a DC terminal for a DC line also acting as the dynamic reactive device. Allowing separate solutions for each discrete need would not prohibit a single element from addressing multiple needs.

Second, requiring each proposal to address all of the three different issues results in increased permutations of proposals. Many bidders identified several options for each of the three issues. If a bidder identifies just two solutions to each of the three issues, that would result in eight permutations of bid. This either burdens ISO-NE with a very large number of proposals, or requires bidders to choose to limit proposals. Allowing separate solutions for discrete needs eliminates this issue.

Conclusion

NEEC's review of the Boston 2028 RFP Review Report identifies several flaws in the review process that should be addressed for future processes. ISO-NE must initiate a "lessons learned" process and incorporating tariff or process changes for future processes. Without ensuring a fair process is in place, that places all bidders on a level playing field, and provides a fair evaluation, the number and quality of bids in any future process would be greatly diminished.

Please feel free to contact me with any questions you may have.

Sincerely,

Lawrence Willick

Lawrence Willick
Senior Vice President