

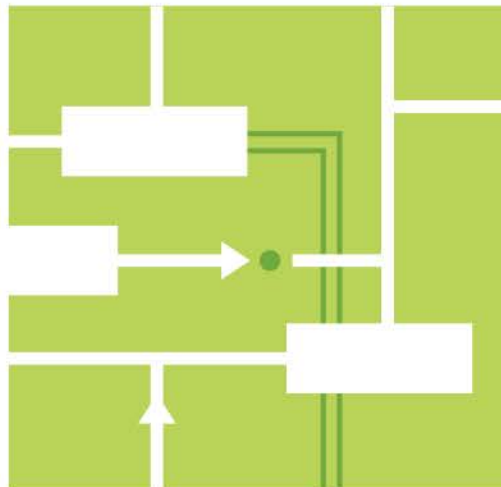
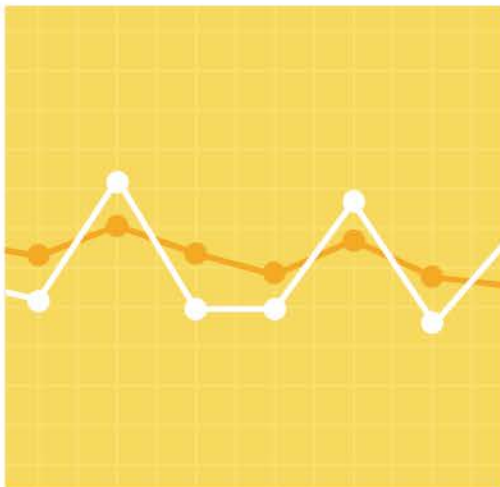


Request for Proposal Reliability Transmission Upgrade (RTU) Part 1

Boston 2028 RFP
December 20, 2019

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Section 1

Introduction and Summary

1.1 Purpose of this Request for Reliability Transmission Upgrade (RTU) Proposals

Pursuant to Attachment K Section 4.3 of the ISO New England Inc. (“ISO-NE” or the “ISO”) Transmission, Markets and Services Tariff (“Tariff”), the ISO is issuing this RTU Request for Proposal (“RFP”) to solicit Phase One Proposals from Qualified Transmission Project Sponsors (“QTPS”) to:

- a. comprehensively address the identified needs in the Boston study area as detailed in Sections 2 and 5 of this RFP, the Boston 2028 Needs Assessment Update posted on the ISO website on October 17, 2019¹, and the Boston 2028 Needs Assessment Addendum posted on the ISO website on October 17, 2019²; and
- b. own, operate, and maintain the projects.

The ISO has a two-step RFP evaluation process. The first step is the Phase One Proposal where QTPS respondents (“QTPS Respondents”) may submit Phase One Proposals in RFP360³ for consideration. Phase One Proposals need to be detailed enough to demonstrate they can solve the identified needs and provide information on the project costs and logistics. Phase Two Solutions require more detailed information in order to support the analyses that will be used to differentiate all the submitted solutions and select the preferred Phase Two Solution. Phase Two Solutions require a more detailed and rigorous effort to supplement the Phase One Proposal. If a Phase One Proposal meets the review criteria discussed in Section 4.2 and is chosen as discussed in Section 4.3 of this RFP, then it is eligible to move to the Phase Two Solution process.

This RFP initially only solicits Phase One Proposal information. Once the ISO has determined which Phase One Proposals will be evaluated in the Phase Two Solutions process, successful QTPS Respondents may submit the requested Phase Two Solution information into RFP360 such that the ISO can perform a detailed evaluation of the remaining proposals. See Section 4.4 for information pertaining to Phase Two Solutions.

1.2 Evaluation Factors

For this RFP, information regarding prioritization of the evaluation factors is described in Appendix A of this document. Additionally, descriptions of the evaluation factors, and any considerations specific to this RFP are also described in Appendix A.

1.3 RFP Key Dates and Meetings

Step	Event	No Later Than
1.	RFP for Phase One Proposals posted	Friday, December 20,

¹ Final Boston 2028 Needs Assessment Update, Oct. 2019, https://smd.iso-ne.com/operations-services/ceii/pac/2019/10/ceii_final_boston_2028_na_update.pdf

² Final Boston 2028 Needs Assessment Addendum, Oct. 2019, https://www.iso-ne.com/static-assets/documents/2019/10/final_boston_2028_na_addendum.pdf

³ RFP360 is a web based application the ISO uses to communicate with the QTPS Respondents and to collect RFP responses from the QTPS Respondents.

		2019
2.	Last day for QTPS Respondents to submit Phase One questions in RFP360	Friday, January 31, 2020
3.	Last day for the ISO to respond to Phase One questions in RFP360	Friday, February 21, 2020
4.	QTPS Respondents submit Phase One Proposals into RFP360 and wire study deposit must be received by the ISO by the specified date and time	Wednesday, March 4, 2019 @11:00pm EPT
5.	The ISO provides to PAC and posts a listing of qualifying Phase One Proposals	On or before 175 calendar days from step 4
6.	The ISO solicits PAC input on Phase One Proposals at PAC meeting	Approximately 5 calendar days after step 5
7.	PAC provides comments to the ISO concerning Phase One Proposals	15 calendar days after step 6
8.	The ISO posts the final listing of Phase One Proposals chosen for Phase Two and an explanation of why a Phase One Proposal was excluded	On or before 15 calendar days after step 7
9.	The ISO notifies the applicable PTO of proposed upgrades located on or connected to its existing transmission system where the QTPS Respondent is not the PTO for the existing system element(s). The ISO will specify the information the PTO must provide.	On or before 7 calendar days after step 8
10.	PTO's responds to the ISO's request related to the proposed upgrades located on or connected to its existing transmission system where the QTPS Respondent is not the PTO for the existing system element(s).	On or before 60 calendar days from step 9
11.	RFP for Phase Two Solutions posted	On or before 15 calendar days after step 8
12.	Last day for Phase Two Solution QTPS Respondents to submit Phase Two questions in RFP360	42 calendar days after step 11
13.	Last day for the ISO to respond to Phase Two questions in RFP360	On or before 21 calendar days after step 12
14.	Phase Two Solution information due from QTPS Respondents	75 calendar days after step 11
15.	The ISO identifies the preliminary preferred Phase Two Solution to PAC and seeks input on the selected preliminary preferred Phase Two Solution.	On or before 175 calendar days after step 14
16.	The ISO solicits PAC input on Phase Two Solutions at PAC meeting	Approximately 5 calendar days after step 15
17.	PAC provides comments to the ISO concerning the Phase Two Solutions	15 calendar days after step 16
18.	The ISO notifies the QTPS Respondent that it is the Selected QTPS and posts the preferred Phase Two Solution. The ISO also	On or before 30 calendar days after

	notifies the PTO of any upgrades located on or connected to its existing transmission system where the QTPS Respondent is not the PTO for the existing system element(s). Any remaining Phase Two Solutions, including the Backstop Transmission Solution, must stop all development.	step 17
19.	Selected Qualified Transmission Sponsor signs Selected Qualified Transmission Project Sponsor Agreement (SQTPSA) 30 days after being notified	On or before 30 calendar days after step 18

1.4 Questions and Communications from QTPS Respondents to ISO

All questions and communications related to this RFP must be addressed through RFP360. Please be aware that the ISO will post questions and/or communications it receives both in RFP360 and publicly at <http://www.iso-ne.com> > System Planning > Competitive Transmission Projects. The ISO may rephrase, combine or otherwise modify questions and communications for efficiency. The ISO will provide answer to the questions and communications in RFP360 and publicly at <http://www.iso-ne.com> > System Planning > Competitive Transmission Projects. Do not contact ISO staff directly with questions or communications related to the RFP. Questions or communications related to the RFP that are not submitted through RFP360 will not be answered.

After the date of the proposal submission deadline provided in Sections 1.3 and 3.3 of this RFP ("Proposal Submission Deadline"), the ISO will only respond to questions regarding procedural matters (*i.e.*, questions and/or requests for clarification regarding the procedural or timing requirements defined in the ISO Attachment K of the Tariff or the Transmission Planning Process Guide ("Process Guide")).⁴

Any questions concerning access to or issues with RFP360 shall be emailed to competitivesolution@iso-ne.com. The ISO will work with the individual QTPS Respondents to resolve any issues. If an issue is applicable to all QTPS Respondents, the ISO will respond through the RFP360 application. In the event that there is a communication issue with RFP360, QTPS Respondents will be contacted through the QTPS Transmission RFP Response Software Administrator as defined in Customer and Asset Management System.

1.5 Questions and Communications from ISO to QTPS Respondents

The ISO will communicate with the QTPS Respondents through the RFP360 application. In the event that there is a communication issue with RFP360, QTPS Respondents will be contacted through the primary contact email address(es) provided by the QTPS.

1.6 Deficiencies

If the ISO identifies any minor deficiencies in the information provided in connection with a Phase One Proposal or Phase Two Solution, the ISO will notify the QTPS Respondent and provide an opportunity for the QTPS Respondent to cure the deficiencies within the timeframe specified by the ISO. Proposals with deficiencies that are not addressed by the end of the cure period specified by the ISO will be deemed invalid and will not be evaluated or considered further. Consistent with Section 4.3(f) of Attachment K to the OATT, the QTPS Respondent may not modify its project materially or submit a new project, but instead may clarify its Phase One Proposal or Phase Two

⁴ https://www.iso-ne.com/static-assets/documents/2018/05/transmission_planning_process_guide_1_30_2018.pdf

Solution. A Phase Two Solution reflecting a material modification to a Phase One Proposal or representing a new proposal will be rejected by the ISO.

1.7 No Obligation to Continue a Phase One Proposal or Accept a Phase One Proposal

This RFP does not constitute an offer of any kind and is merely a request for the QTPS Respondents to submit information. The ISO may decline to accept any or all Phase One Proposals that do not meet the Tariff or RFP requirements.

1.8 Modification, Suspension or Cancellation of the RFP

The ISO may modify, suspend or cancel this RFP at any time. Further, the ISO may terminate a proposal from further consideration if, at any time, the ISO determines that the proposal is no longer competitive. Any costs associated with the Backstop Transmission Solution development for a Phase One Proposal shall be recovered pursuant to Section 4.3(a) of Attachment K to the OATT. Costs associated with development of Phase Two Solutions shall be recovered pursuant to Sections 3.6(c) and 4.3(i) of Attachment K to the OATT.

1.9 Additional Requirements and Considerations for the Preferred Phase Two Solution

The proposal identified for this RFP as the preferred Phase Two Solution will be studied and evaluated by the ISO in accordance with Sections I.3.9 and I.3.10 of the New England Transmission, Markets and Services Tariff to ensure that it does not have a significant adverse effect upon the reliability or operating characteristics of the transmission facilities of one or more Transmission Owners, or the system of one or more Market Participants. Other evaluations, approvals and permits may be needed to construct and interconnect the project due to requirements from entities other than the ISO, such as but not limited to:

- a. entities that administer transmission systems that neighbor the New England transmission system,
- b. the Northeast Power Coordinating Council,
- c. the North American Electric Reliability Corporation,
- d. the Federal Energy Regulatory Commission,
- e. the Department of Energy, where a proposal crosses an international border,
- f. other state and municipal government agencies, and
- g. interconnecting Transmission Owner for the interconnecting facilities.

The ISO reserves the right to cancel the preferred Phase Two Solution at any time. Any costs associated with solution development shall be recovered pursuant to Sections 3.6(c), 4.3(a) and 4.3(i) of Attachment K to the OATT.

1.10 Assignment of a Phase One Proposal or Phase Two Solution

A Phase One Proposal or Phase Two Solution may not be assigned in any manner, directly or indirectly (including by operation of law, merger, or sale of equity interests) without the express written consent of the ISO. Any assignee must be bound by the terms and conditions associated with the Phase One Proposal or Phase Two Solution.

Section 2

Phase One Proposal Identified Needs to be Resolved

This section of the RFP presents an executive summary of the identified needs, whereas Section 5 below refers to the more detailed description of the identified needs that shall be resolved in developing Phase One Proposals.

2.1 Statement of Need

The results of the Boston 2028 Needs Assessment Update conducted for the Boston area transmission performance against transmission reliability standards for the projected 2028 peak load system conditions in this study indicated that there are PTF needs in the study area.⁵ The Boston area transmission system fails to meet the reliability criteria standards in the study area under the design case testing performed and measures should be developed to mitigate the problems identified.

In addition, the Boston Needs Assessment Addendum identifies the need for a dynamic reactive device for system restoration in the Boston area.⁶

2.2 Specific Areas of Concern

2.2.1 Steady State Testing Results

The results indicated that under peak load conditions there were one N-1 thermal overload and three N-1-1 thermal overloads. There were no voltage violations observed under peak load conditions.

2.2.1.1 Review of N-0 Testing

N-0 (also known as “all-lines-in”) conditions were reviewed for base case system conditions. The results indicate that under all tested dispatch and transfer level conditions at peak load there were no N-0 thermal overloads or voltage violations.

2.2.1.2 Review of N-1 Testing

N-1 testing (all-facilities-in, first contingency) was performed for all of system conditions. The results indicate that under all tested dispatch and transfer level conditions at peak load there was one 115 kV line STE thermal overload. There were no N-1 voltage violations observed.

2.2.1.3 Review of N-1-1 Testing

Initial element-out-of-service (N-1-1) testing included all transmission lines, autotransformers, shunt devices, and generators in the study area that are considered Bulk Electric System (BES) elements as initial elements-out-of-service for the testing. These element-out-of-service conditions were tested against the full set of contingencies.

⁵ Final Boston 2028 Needs Assessment Update, Oct. 2019, https://smd.iso-ne.com/operations-services/ceii/pac/2019/10/ceii_final_boston_2028_na_update.pdf

⁶ Final Boston 2028 Needs Assessment Addendum, Oct. 2019, https://www.iso-ne.com/static-assets/documents/2019/10/final_boston_2028_na_addendum.pdf

The results indicate that under all tested dispatch and transfer level conditions at peak load there were three 345 kV lines with N-1-1 thermal overloads. Additionally, there were no N-1-1 voltage violations observed at peak load.

2.2.1.4 Short Circuit Testing

The short-circuit study results indicated that no substations had any PTF breakers that would be over-dutied for 2028 system model conditions in the Boston study area for all scenarios tested.

2.2.2 System Restoration Needs

Based on the evaluation detailed in the Boston 2028 Needs Assessment Addendum, there is a need for a dynamic reactive device with at least 300 MVAR of dynamic reactive range for the system with the Mystic 8 and 9 generators retired.

Section 3 Phase One Proposal Submission, Content, and Format

3.1 RFP Responses

Any QTPSs interested in developing solutions to address all the identified needs in the Boston study area are required to submit a Phase One Proposal. The ISO has determined the NSTAR Electric Company and New England Power Company will be the Backstop Transmission Solution provider(s) for this RFP, therefore they are required to submit a Phase One Proposal. A complete Phase One Proposal is comprised of complete and thorough responses to Phase One Proposal questions in RFP360, completed Installed Cost Estimate Workbook (.xlsx), all required attachments referenced therein, a study deposit of \$100,000 (U.S.) per submitted Phase One Proposal, and any supporting additional Phase One Proposal related information deemed necessary by the QTPS Respondent. Proposal variations will be considered as separate proposals and each will require a separate RFP360 submittal and study deposit.

Each proposal should cover the information requested in sufficient detail to permit an accurate evaluation of the proposal, including 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). Material that is not germane to this RFP is not desired. Emphasis should be on conciseness, completeness and clarity of content.

A QTPS Respondent's Phase One Proposal, must contain responses to all RFP questions, adhere to the RFP instructions and guidance, and be submitted into RFP360 by the deadline specified in Sections 1.3 and 3.3 to be accepted. This RFP package is available on the PAC website⁷ and through access to RFP360 and includes the following:

Part 1: Request for Proposal (RFP) Overview (this document)

Part 2: RFP Proposal Instructions which includes questions that appear in RFP360

QTPS Responses shall be submitted into RFP360 and shall include:

- a. Attestation and Affidavit
- b. Index of Attachments
- c. narrative responses
- d. an Installed Cost Estimate Workbook
- e. Lifecycle Cost Workbook
- f. a Modeling Data Workbook⁸ and/or other modeling data files,
- g. Pro Forma Financial Statements Workbook, and
- h. other applicable files.

⁷ <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission-projects>

⁸ The ISO prefers data to be submitted utilizing PSSE and ASPEN files but will accept the Modeling Data Workbook in the event that the QTPS Respondent is unable to provide Phase One Proposal modeling information.

3.2 Qualifications to Submit a Phase One Proposal

Only an entity that is a QTPS may submit a proposal in response to this RFP. The ISO's QTPS List⁹ is publicly posted on its webpage. Any entity interested in becoming a QTPS should refer to the Qualified Transmission Project Sponsor Application and Annual Certification¹⁰ webpage for further information and instructions.

3.3 Proposal Submission Deadline

A Phase One Proposal or Phase Two Solution shall be entered into RFP360, as specified in this RFP, but no later than 11:00 PM Eastern Prevailing Time ("EPT") on March 4, 2020. If a Phase One Proposal or its associated study deposit is received after the Proposal Submission Deadline, the ISO will reject the Phase One Proposal or Phase Two Solution.

3.4 Submission

A Phase One Proposal is considered complete when the ISO receives, by the Proposal Submission Deadline, the:

- a. Complete QTPS Responses in RFP360, including all required attachments (see Section 3.1 above), and
- b. Study deposit of \$100,000 (U.S.)

3.5 Phase One Proposal Study Deposit

Pursuant to Section 4.3(c) of Attachment K to the OATT, the ISO requires a study deposit of \$100,000 (U.S.) per submitted Phase One Proposal. The ISO will only allow study deposit by wire and received no later than the Proposal Submission Deadline. Information and details regarding the ISO's wire transfer submittals will be provided to QTPS Respondents by the ISO Billing Department staff upon request made by emailing billingdept@iso-ne.com. The QTPS Respondent shall email the Billing Department to request this information at least five business days in advance of the QTPS Respondent submitting its Phase One Proposal.

If a study deposit is received after the Proposal Submittal Deadline, the ISO will reject the Proposal and the study deposit will be returned to the QTPS Respondent.

The study deposit of \$100,000 (U.S.) will be applied towards the costs incurred by the ISO and/or its consultants associated with the evaluation of the Phase One Proposal submitted¹¹. If during the course of the evaluation, the ISO expects the study cost to exceed the study deposit, the ISO will notify the QTPS Respondent of the additional amount above the study deposit that is required. The QTPS Respondent must wire the additional study deposit amount to the ISO account within 10 business days of receiving the notification or the proposal will no longer be considered. There is no limit to the number of additional study deposits the ISO can request from the QTPS Respondent. Pursuant to Section 4.3(i) of Attachment K to the OATT, any difference between the QTPS Respondent's study deposit (plus any additional study deposits) and the actual costs of the Phase One and Phase Two studies for a project shall be paid by or refunded to the QTPS Respondent, as

⁹ https://www.iso-ne.com/static-assets/documents/2016/03/current_qtps_inventory.docx

¹⁰ <https://www.iso-ne.com/participate/applications-status-changes/qtps-application-annual-certification>

¹¹ Costs incurred by the ISO in the Phase Two Solution process will also be drawn from the study deposit.

appropriate, with interest calculated in accordance with Section 35.19a(a)(2) of the FERC regulations in the Code of Federal Regulations at Title 18.

3.6 Phase One Proposal Format and Content

The ISO has provided a Modeling Data¹² and Installed Cost Estimate Workbook (“Workbooks”) for Phase One Proposal submissions that are publicly posted on the ISO website at www.iso-ne.com > System Planning > Competitive Transmission Projects. QTPS Respondents shall utilize the Workbooks and must complete them as described in the Workbooks and in Part 2: RFP Proposal Instructions.

QTPS Respondent(s) must respond to RFP questions by entering narrative responses or attaching files (files shall include the Workbooks) in RFP360 in the manner described in each question. If the QTPS Respondent believes that an RFP question in RFP360 is not applicable to its Phase One Proposal, the QTPS Respondent may respond with an “N/A” in the appropriate location in RFP360 and shall provide a brief reason why the QTPS Respondent believes the RFP question is not applicable.

When submitting files, the QTPS Respondent(s) shall use the following naming convention:

- a. the QTPS Respondent name (*e.g.* ABC Power) followed by an underscore,
- b. the question number in RFP360 which applies to the submitted file (*e.g.* Q12) followed by an underscore, and
- c. a brief description of the topic of the attachment (*e.g.* geographic map)

Example filename: ABC Power_Q12_geographic map. If multiple files are needed to respond to the same question and the topic of the attachment is the same, then the QTPS Respondent will add an underscore to the end of the file name and add an incremental number for each file, *e.g.* ABC Power_Q30_geographic map_1 and ABC Power_Q30_geographic map_2.

When submitting the Proposal Workbooks, the QTPS Respondent(s) shall use the following naming convention:

- a. the QTPS Respondent name (*e.g.* XYZ Energy) followed by an underscore,
- b. the question number in RFP360 which applies to the submitted file (*e.g.* Q22) followed by an underscore, and
- c. the name of the Proposal Workbook (*e.g.* Modeling Data Workbook or Cost Estimate Workbook)

Example filename: XYZ Energy_Q22_Cost Estimate Workbook

The QTPS Respondent shall refrain from using any of the following special characters when naming attachment files: [(~ # % & * { } \ / : < > ?)]. Use of any of these special characters is not compatible with the ISO’s filing system and will cause important information to be lost. The QTPS Respondent shall provide all responses and attached material in English or the ISO will disregard the information submitted.

In this RFP and in all responses, all monetary amounts shall be in U.S. Dollars.

¹² The ISO prefers data to be submitted utilizing PSSE and ASPEN files but will accept the Modeling Data Workbook in the event that the QTPS Respondent is unable to provide Phase One Proposal modeling information.

3.7 List of Phase One Proposals Received

The ISO will post a list of Phase One Proposals submitted in response to this RFP on its website at <http://www.iso-ne.com> > System Planning > Competitive Transmission Projects after the Proposal Submittal Deadline. The information will also be provided to the PAC by the ISO.

3.8 Preparation and Submission Expenses

Expenses for Phase One Proposals that are not the Backstop Transmission Solution are not eligible for rate recovery through the Regional Network Service (“RNS”) rate as provided for under the ISO OATT. QTPS Respondents selected to participate in the Phase Two Solution process can seek RNS recovery for Phase Two Solution expenses either through Schedule 14 of the ISO OATT or through a filing made to the Federal Energy Regulatory Commission under Section 205 of the Federal Power Act seeking different rate treatment.

The ISO is not responsible or liable in any manner for any risks, costs or expenses incurred by any QTPS Respondent in the preparation of a Phase One Proposal or Phase Two Solution in response to this RFP or any revision of such a proposal.

3.9 Cost Containment

Each Phase One Proposal must specify if any cost cap or cost containment mechanisms are being proposed. Phase One Proposals including cost cap or cost containment mechanisms must specify the mechanism in sufficient detail for the ISO to understand the implementation and impact of the cost cap or cost containment mechanism.

3.10 Attestation and Affidavit

Each Phase One Proposal must include an Attestation and Affidavit from an officer of the QTPS Respondent which is intended to bind the QTPS Respondent during the entire process from submission of the Phase One Proposal through selection of the preferred Phase Two Solution, or until such time as the Phase One Proposal or Phase Two Solution is excluded from further consideration. The Attestation and Affidavit form is part of the RFP package that is publicly posted on the ISO website at www.iso-ne.com > System Planning > Competitive Transmission Projects. A QTPS Respondent RFP submission is not complete without a signed Attestation and Affidavit form.

Section 4

Evaluation of Phase One Proposals

The ISO will utilize the criteria set forth in Section 4.3 of Attachment K of the Tariff to perform a preliminary review of all Phase One Proposals submitted by the Proposal Submission Deadline, which are complete as set out in Section 4.2.

4.1 Sole Phase One Proposal Response (Backstop Transmission Solution)

Consistent with Section 4.3(e) of Attachment K of the Tariff, if the Backstop Transmission Solution is the sole Phase One Proposal submitted in response to a given RFP or if all other Phase One Proposals other than the Backstop Transmission Proposal have been rejected due to deficiencies, the ISO shall cancel this RFP and proceed with a Solutions Study as defined under Section 4.2 of Attachment K of the Tariff, in which case the competitive solution process in Section 4.3 of Attachment K will no longer be applicable.

4.2 Preliminary Review of Phase One Proposal by the ISO

Pursuant to Section 4.3(e) of Attachment K of the Tariff, if more than one Phase One Proposal has been submitted in response to the RFP, the ISO shall perform a preliminary feasibility review of each Phase One Proposal to determine whether the Phase One Proposal:

- a. provides sufficient data and that the data is of sufficient quality to satisfy the following:
 1. a detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed location or route for the solution and technical details of the Phase One Proposal, such as interconnection into the existing transmission system;
 2. a detailed explanation of how the proposed solution addresses the identified need;
 3. the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
 4. 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; and
 5. the estimated life-cycle¹³ and installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate, a description of the financing being used, and any cost containment or cost cap measures.
 6. identification of any Local System Plans ("LSP") that require coordination with the proposed solution.
- b. appears to satisfy the needs described in the Needs Assessment, while appearing to meet the requirements of Section I.3.9 of the Tariff;
- c. 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; and
- d. is not eligible to be constructed only by an existing PTO in accordance with Schedule 3.09(a) of the TOA because the proposed solution is an upgrade to existing PTO facilities, or because

¹³ In the "Life-Cycle Cost Estimate Workbook" the life-cycle cost is found in cell C26 on sheet "RevReq_Full_Summary" and is referred to as "Net Present Value Revenue Requirement."

the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated only to the local customers of a PTO.

Any Phase One Proposal which fails to satisfy the criteria shown above will be removed from further consideration and any unused study deposit will be returned with interest.

4.3 Selection of Qualifying Phase One Proposals

The ISO will provide the PAC with, and post on the ISO's website, a listing of the Phase One Proposals that meet the criteria specified in Section 4.2 of this RFP. A meeting of the PAC will be held thereafter in order to solicit stakeholder input on the listing of Phase One Proposals. The ISO, with input from the PAC, may exclude Phase One Proposals from the list based on a determination that the Phase One Proposal is not competitive with other Phase One Proposals that have been submitted in terms of cost, electrical performance, future system expandability, or feasibility. Any Phase One Proposal which is excluded will be removed from further consideration and any unused study deposit will be returned with interest. Those Phase One Proposals which have not been excluded will be placed on a qualifying list of Phase One Proposals and will advance to the Phase Two Solution process.

4.4 Phase Two Solution 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.

- a. updates of the information provided in Phase One Proposals, or a certification that the information remains current and correct;
- b. list of required major Federal, State and local permits;
- c. description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Phase Two Solution and their respective durations, and possible constraints;
- d. Phase Two Solution schedule, with additional detail compared with Phase One Proposals, as specified by the ISO;
- e. detailed cost component itemization and life-cycle cost including any clarifications to cost containment or cost cap measures that were not included as part of the Phase One Proposal;
- f. design and equipment standards to be used;
- 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;
- j. detailed explanation of the Phase Two Solution feasibility and potential constraints and challenges;
- k. description of the means by which the sponsor proposes to satisfy state legal or regulatory requirements for siting, constructing, owning and operating transmission Phase Two Solution; and
- l. detailed explanation of potential future expandability.

The ISO's identification of the preferred Phase Two Solution will be based on the ISO's review of the applicable evaluation factors as described in Section 1.2 above. These evaluation factors apply equally to all Phase Two Solutions, including the Backstop Transmission Solution.

4.5 Identification of Preferred Phase Two Solution and Discontinuation of Further Development of Remaining Phase Two Solutions

The ISO will identify the preferred Phase Two Solution and notify the QTPS that proposed the preferred Phase Two Solution that its project has been selected for development. The preferred Phase Two 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 ISO will notify the PTO that has upgrades required by the preferred Phase Two Solution to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement. Once the ISO has identified the preferred Phase Two Solution, any remaining Phase Two Solutions, including the Backstop Transmission Solution, must stop all development.

4.6 Execution of Selected Qualified Transmission Project Sponsor Agreement

Within 30 days of its receiving notification from the ISO, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Phase Two Solution by execution of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT).

4.7 Section I.3.9 Associated Upgrades

As described in Section 1.7, the preferred Phase Two Solution will be studied and evaluated by the ISO in accordance with Sections I.3.9 and I.3.10 of the New England Transmission, Markets and Services Tariff to ensure that it does not have a significant adverse effect upon the reliability or operating characteristics of the transmission facilities of one or more Transmission Owners, or the system of one or more Market Participants. Upon the identification of a significant adverse effect the ISO will identify necessary project modifications and, as appropriate, these modifications will be added to the SQTSA. In such cases, where the modification is on a PTO's existing system, the ISO will notify the PTO to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.

4.8 Cost Allocation

Application for Regional Cost Allocation shall be completed in accordance with Planning Procedure No. 4. PROCEDURE FOR POOL-SUPPORTED PTF COST REVIEW¹⁴.

¹⁴ <https://www.iso-ne.com/participate/rules-procedures/planning-procedures>

Section 5

Technical Description of the Needs to be Addressed by the Phase One Proposal

Refer to Section 5 of the Boston 2028 Needs Assessment Update posted on October 17, 2019 and the Needs Assessment Update appendices posted on September 24, 2019 on the PAC website. The Boston 2028 Needs Assessment Update details the worst violation for a monitored element while the Needs Assessment appendices show all of the violations for a monitored element.

Refer to Section 3 of the Boston 2028 Needs Assessment Addendum posted on October 17, 2019. The Boston 2028 Needs Assessment Addendum identifies needs associated with system restoration requirements in the Boston study area post Mystic 8 and 9 retirements.

Phase One Proposals are required to solve all of the violations for all monitored elements.

Section 6

Standards, Requirements, and Guidelines

At the point of interconnection the applicable technical requirements and standards of the Transmission Owner(s) to whose facilities the Phase One Proposal or Phase Two Solution will interconnect shall apply to the design, engineering, procurement, construction and installation of the Phase One Proposal or Phase Two Solution. The remaining portion of the Phase One Proposal or Phase Two Solution shall meet applicable industry standards and Good Utility Practice. At a minimum, all new facilities must comply with the current National Electric Safety Code.

Section 7

Transmission Planning Criteria and Guidelines

- a. ISO New England Inc. Transmission, Markets and Services Tariff, Section I – General Terms and Conditions and Section II – Open Access Transmission Tariff.
- b. ISO-NE Planning Procedure No. 3 – Reliability Standards for the New England Area Pool Transmission Facilities.
- c. ISO-NE Planning Procedure No. 4 – Procedure for Pool-Supported PTF Cost Review.
- d. ISO-NE Planning Procedure No. 5-1 – Procedure for Review of Market Participant’s or Transmission Owner’s Proposed Plans (Section I.3.9 Applications: Requirements, Procedures and Forms).
- e. ISO-NE Planning Procedure No. 5-3 – Guidelines for Conducting and Evaluating Proposed Plan Application Analyses.
- f. ISO-NE Planning Procedure No. 5-5 – Special Protection Systems Application Guidelines.
- g. ISO-NE Planning Procedure No. 7 – Procedures for Determining and Implementing Transmission Facility Ratings in New England.
- h. ISO-NE Planning Procedure No. 9 – Major Substation Bus Arrangement Application Guidelines.
- i. NERC Standard TPL-001: Transmission System Planning Performance Requirements.
- j. NERC Standard NUC-001: Nuclear Plant Interface Coordination.
- k. NPCC Regional Reliability Reference Directory # 1: *Design and Operation of the Bulk Power System*.
- l. NPCC Regional Reliability Reference Directory # 4: *Bulk Power System Protection Criteria*.
- m. NPCC Regional Reliability Reference Directory # 7: *Special Protection Systems*.
- n. NPCC Document A-10: Classification of Bulk Power System Elements.
- o. ISO-NE Transmission Planning Technical Guide.