

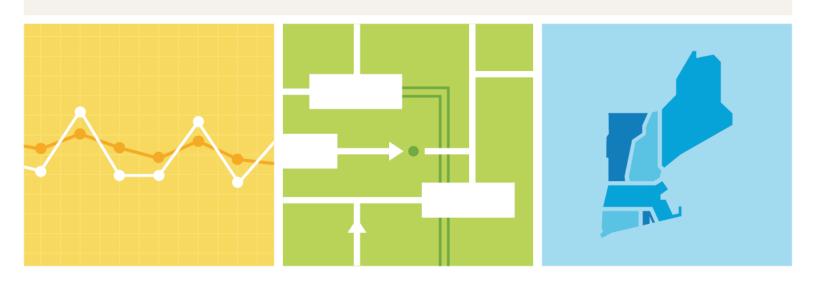


Transmission Planning Process Guide

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System Planning Department

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Section 1 Purpose

ISO New England (the ISO), Northeast Power Coordinating Council (NPCC) and North American Electric Reliability Corporation (NERC) criteria and reliability standards provide the minimum transmission system performance standards, which serve as the foundation for the ISO's regional transmission planning. All proposed system modifications, including transmission and generation additions or significant load reductions or additions, must be analyzed and designed to ensure system wide coordination and continued system reliability in compliance with these standards.

The purpose of this planning document is to provide additional detail on the existing regional system planning process as described in Attachment K of Section II of the ISO New England Transmission, Markets and Services Tariff (the Tariff).

This document is not intended to address every activity that may be associated with the regional system transmission planning process. There are a number of activities that are not the subject of this document but may be briefly touched upon in this document for context and to help provide a thorough explanation of the regional system planning process. These include activities such as the "Local System Planning Process" as described in Section 2.5 of Attachment K which is the responsibility of each Participating Transmission Owner (PTO), the Proposed Plan Application (PPA) process, and the Transmission Cost Allocation (TCA) procedures.

The provisions in this document are intended to be consistent with ISO New England's Tariff. If, however, the provisions in this planning document conflict with the Tariff in any way, the Tariff takes precedence as the ISO is bound to operate in accordance with the ISO Tariff.

Section 2

Process for Addressing Reliability Needs

2.1 Process for Enrollment

For purposes of participating as a transmission provider in the New England transmission planning region pursuant to this Attachment K of the New England Open Access Transmission Tariff (OATT), an entity may choose to enroll by executing (or having already executed) a: (i) transmission operating agreement with the ISO (ISO TOA)¹, or (ii) Market Participant Service Agreement (MPSA) coupled with the submittal to the ISO of a request to be recognized as a transmission provider in the New England region. Such enrollment will occur, in accordance with Section 1.1 of Attachment K of the ISO New England OATT, if one of the two following conditions are met. As entities are enrolled or disenrolled, ISO will reflect such changes in a subsequent update to Appendix 2 of Attachment K to the OATT and in the listing of 'current inventory of enrolled entities' located on the "Enrollment in the New England Planning Region" page on the ISO website².

Signatory to an ISO TOA

An entity that is a signatory to an ISO TOA is automatically enrolled upon the execution of the agreement. Entities that were signatories to an ISO TOA as of May 18, 2015 were automatically enrolled as of that date. Signatories to an ISO following May 18, 2015 were/will be enrolled as of the date that they became/become party to the agreement. As this is an automatic election pursuant to the OATT, ISO does not provide a notification of enrollment to such an entity.

An entity that is a signatory to an ISO TOA may not disenroll while they are party to a TOA.

In the event that the entity is no longer party to an ISO TOA(s), the entity (i) if it is a signatory to an MPSA, will not be automatically disenrolled and will then be treated as noted below; or (ii) if it is not a signatory to an MPSA, will be automatically disenrolled and the ISO will notify the entity of the disenrollment

Not a Signatory to an ISO TOA

An entity that is a party to a MPSA and not a signatory to an ISO TOA will be enrolled following their submittal to (via NEPlanningApp@iso-ne.com) and acceptance by ISO of a

¹ A TOA is an agreement between a transmission owner and the ISO that, among other things, provides the ISO with operating authority over the transmission owner's commercial transmission facility(ies). A list of current transmission operating agreements can be found on the ISO TOA page.

² https://www.iso-ne.com/participate/applications-status-changes/transmission-planning-region-enrollment

completed enrollment form³ located on the "Enrollment in the New England Planning Region" page on the ISO website⁴. The entity will be enrolled as of the date that ISO accepts the form and verifies that the entity is a party to an MPSA.

ISO will reject any submitted enrollment forms that are (i) incomplete or (ii) not represented by a party to an MPSA.

An email notification of the entity's successful enrollment or the ISO's rejection of the enrollment form will be sent from ISO to the email address from which the request was submitted and the email address for the Market Participant representative provided within the submitted form.

In the event of the MPSA termination of an enrolled entity that is not a signatory to an ISO-NE TOA, the entity will no longer be eligible to be enrolled as a transmission provider; hence, the ISO will automatically disenroll the entity as of the MPSA termination date. ISO will notify the entity of the disenrollment.

An enrolled entity that is not a signatory to an ISO TOA that elects to no longer be enrolled must send (via MEPlanningApp@iso-ne.com) an email to ISO requesting to disenroll.

Note that enrollment under Section 1.1 of Attachment K is separate and distinct from the terms, conditions and requirements that apply to Transmission Providers, as defined in Section I – General Terms and Conditions of the Tariff. Such enrollment (i) is not required for an entity to participate as part of the Planning Advisory Committee, which is open to any entity as described in Section 2.3 of Attachment K to the OATT, and (ii) does not transfer an entity's transmission facilities to the ISO New England RTO, or otherwise result in conferring ISO operational dispatch and planning rights and obligations over such facilities. The terms for conferring such authority over an entity's transmission facilities are contained in a TOA.

2.2 Process for Becoming a Qualified Transmission Project Sponsor

2.2.1 QTPS Process Overview

Any entity that intends to submit a proposal (Proposal) in response to an ISO identified need for a Reliability Transmission Upgrade (RTU), Market Efficiency Transmission Upgrade (METU), Public Policy Transmission Upgrade (PPTU), Longer-Term Transmission Upgrade (LTTU) or a Backstop Transmission Solution must first be recognized by the ISO as a Qualified Transmission Project Sponsor (QTPS), in accordance with Section 4B of Attachment K to Section II of the Tariff.

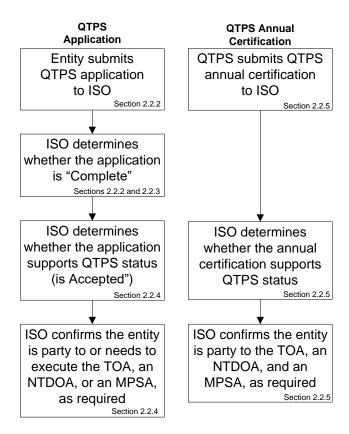
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³Located on the ISO website under Qualified Transmission Project Sponsor Application and Annual Certification.

⁴ https://www.iso-ne.com/participate/applications-status-changes/transmission-planning-region-enrollment

- A Participating Transmission Owner (PTO) is recognized as a QTPS once its QTPS application has been deemed accepted by the ISO.
- A non-PTO is recognized as a QTPS once its QTPS application has been deemed accepted by the ISO, and it is party to a Non-Incumbent Transmission Developer Operating Agreement (NTDOA) and an MPSA.

Qualifying as a QTPS can be done at any time but is required to be completed before a Proposal can be considered by the ISO. Additionally, an entity is required to maintain its QTPS status by completing an annual certification process. An overview of the process is shown in the flowchart below.



2.2.2 Requesting QTPS Status

An entity seeking to receive QTPS status (Applicant) shall complete and submit a QTPS Application Form⁵ (Application) to the ISO (via QTPS@iso-ne.com). The Application and

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 $^{^{5}\} https://www.iso-ne.com/static-assets/documents/2015/07/tppg_apdx_b_qtps_application_form.docx$

submittal instructions can be found on the ISO website under Qualified Transmission Project Sponsor Application and Annual Certification⁶.

The ISO will review the Application and determine whether it contains sufficient information such that ISO can then proceed with the determination of QTPS status (i.e., the Application is determined to be "Complete"). Within thirty (30) calendar days from its receipt, the ISO will notify the entity as to whether the Application is considered "Complete" or "Incomplete".

If the ISO determines that the Application is Complete, the ISO will initiate its determination of QTPS Status in accordance with Section 4B of Attachment K to Section II of the ISO Tariff, as described in Section 2.2.4 of this QTPS process.

If the ISO determines that the Application is Incomplete, the ISO will include in its notification the identified deficiencies that it expects the Applicant to be addressed within the remedial information that is to be subsequently submitted in accordance with Section 4B of Attachment K to Section II of the ISO Tariff, as described in Section 2.2.3 to this QTPS process.

2.2.3 Submittal and Review of Remedial Information

An Applicant that is notified by the ISO that its Application is incomplete has the opportunity to address the identified deficiencies by submitting remedial information (via QTPS@iso-ne.com) to the ISO within thirty (30) calendar days from the date of the ISO notification indicating the Application is Incomplete. The Applicant may consult with the ISO during this period to help ensure that the remedial information provided will remedy the identified deficiencies.

Remedial information received within the thirty (30) calendar day window will be reviewed by the ISO to determine whether the identified deficiencies have been addressed. If the Applicant fails to cure the deficiency within thirty (30) calendar days, the Application will be deemed to be "Rejected". The ISO will issue written notification to the Applicant indicating either:

- The Application is now deemed Complete and the ISO will proceed with the determination of QTPS status; or
- The Application is Rejected, with reasons noted.

2.2.4 Determination of QTPS Status

Within ninety (90) calendar days from the date the submitted application is deemed Complete, the ISO will use its best efforts to:

 Proceed with its evaluation of the Complete Application to determine whether the submitted information indicates that the entity meets or does not meet the QTPS qualification criteria in Section 4B of Attachment K;

⁶ https://www.iso-ne.com/participate/applications-status-changes/qtps-application-annual-certification

- Make a determination of whether the Complete Application demonstrates that the Applicant meets the QTPS qualification criteria (i.e., is "Accepted") or does not demonstrate that the Applicant meets the QTPS qualification criteria (i.e., is "Rejected");
- Confirm whether an Applicant with an Accepted Application is party to or needs to execute the Transmission Operating Agreement (TOA), an NTDOA or an MPSA, as applicable; and
- Inform the Applicant of the determination, via written communication to the primary contact listed in the Application.

2.2.4.1 Accepted Application

A PTO with an Accepted Application will be notified by the ISO that they are a QTPS.

A non-PTO with an Accepted Application:

- That is party to an NTDOA and an MPSA will be notified by the ISO that they are a QTPS.
- That is not party to an NTDOA and an MPSA will be notified by the ISO that they will be deemed a QTPS only after the Applicant and the ISO have executed an NTDOA and the Applicant is a party to an MPSA.

The ISO notification will, as necessary, provide the Applicant direction on the steps, as required to:

- Be party to an NTDOA⁷ and/or
- Initiate/complete the Membership process⁸ such that it results in the Applicant becoming party to an MPSA⁹.

Following confirmation that the PTO is party to the TOA or that the non-PTO is party to an NTDOA and an MPSA, the ISO will notify the entity via written communication to the primary contact listed in the Application that it has been deemed a QTPS.

⁷ Nothing prevents a non-PTO from becoming party to an NTDOA prior to the ISO's determination that the Application is Accepted. An Applicant that is applying for QTPS status following its failure to maintain QTPS status in accordance with Section 2.2.5 and who is already party to an NTDOA will be determined to have met the NTDOA requirement.

⁸ See: http://www.iso-ne.com/support/reg_info/membership/index.html)

⁹ Nothing prevents a non-PTO from initiating the Membership process and becoming party to an MPSA prior to the ISO's determination that the Complete Application is Accepted. A non-PTO that is applying for QTPS status following its failure to maintain QTPS status in accordance with Section 2.2.5 and who is already party to an MPSA will be determined to have met the MPSA requirement.

2.2.4.2 Rejected Application

An Applicant with a Complete Application that is determined to be Rejected will be notified via written communication to the primary contact listed in the Application by the ISO of this determination, with reasons noted, and that they are not deemed a QTPS.

An entity may, at any time after a Rejected determination is made, complete and submit a new QTPS Application Form.

2.2.5 Maintain QTPS Status

In order to maintain its QTPS status, the QTPS must submit a QTPS Annual Certification Form (Certification Form) that indicates whether the information in its Accepted Application has adversely changed in a material fashion in the intervening year, and maintain its status under the TOA, NTDOA, and MPSA, as appropriate.

The ISO will review the submitted Certification Form and issue a written notification to each QTPS indicating their QTPS status. An entity whose QTPS status is terminated by the ISO under this Section can only reinstate the status by requesting and receiving QTPS status in accordance with Section 4B of Attachment K to Section II of the ISO Tariff, as described in Section 2.2.2 of this document.

2.2.5.1 Submittal of QTPS Annual Certification Form and Certification Window

A QTPS must complete and submit a Certification Form¹⁰ to the ISO (via QTPS@iso-ne.com) from the beginning of the day on January 1st through the end of the day on January 31st (the Certification Window) of every year following the year of obtaining its QTPS status.

The QTPS will indicate:

- Whether the information included in the Accepted Application has adversely changed in a material fashion (an adverse material change ¹¹) in the intervening year and, if so, provide a description of the changes; and
- Which agreements (i.e., TOA, NTDOA, MPSA) to which they are a party.

The Certification Form and submittal instructions can be found on the ISO website under Qualified Transmission Project Sponsor Application and Annual Certification¹².

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 $^{10\} https://www.iso-ne.com/static-assets/documents/2015/07/tppg_apdx_c_qtps_annual_certification_form.docx$

¹¹ An adverse material change is a change to any information included in the QTPS's Accepted Application that adversely impacts in a material fashion the QTPS's capability to construct a RTU, METU, PPTU, or LTTU in a timely and competent manner, and operate and maintain such facilities.

 $^{^{12}\,\}underline{\text{https://www.iso-ne.com/participate/applications-status-changes/qtps-application-annual-certification}$

2.2.5.2 Review of Certification Form

The ISO will review Certification Forms received within the Certification Window and confirm or terminate the QTPS status based on the information received and issue a written notification to each QTPS indicating their QTPS status, subject to also meeting the TOA, NTDOA and MPSA requirements shown below.

- A PTO must continue to be party to the TOA in order to maintain its QTPS status;
 and
- A non-PTO must continue to be party to an NTDOA and an MPSA in order to maintain its QTPS status.

The ISO will monitor for changes to these agreements and will terminate the QTPS status of any QTPS that ceases to be party to the TOA, NTDOA or MPSA, as applicable.

2.2.5.3 Failure to Submit Certification Form

The ISO will issue written notification to any QTPS that was required but failed (either due to omission or a timing failure) to submit a Certification Form within the Certification Window that its QTPS status is terminated

2.2.6 QTPS Listing

A list of QTPSs can be found in Appendix 3 to Attachment K of the OATT and in the listing of "current inventory of OTPSs" located in the QTPS page on the ISO web site.

2.3 Overview of the Regional Transmission Planning Process

Through an open stakeholder process, the ISO develops long range plans for the region's networked transmission facilities to address future system needs over the ten-year planning horizon. Subject to Information Policy including Critical Energy Infrastructure Information (CEII) requirements approved by FERC, all planning study efforts are discussed with the Planning Advisory Committee (PAC), and opportunities are provided for comments ranging from the draft scope of work through the posting of final reports. Study base cases and contingencies, which are used to simulate the system performance, are made available on the ISO web site to stakeholders subject to CEII requirements.

The transmission planning study process begins by developing a study scope and identifying all key inputs for conducting a Needs Assessment to determine the adequacy of the power system, as a whole or in part, to maintain the reliability of the facilities while promoting the operation of efficient wholesale electric markets in New England. After the results of a Needs Assessment are made available for stakeholder input, the potential transmission system solutions are evaluated thoroughly to identify the solutions for the region that offer the best combination of electrical performance, cost, future system expandability, and feasibility to meet the needs identified in a Needs Assessment. These study efforts may be in the form of a Solutions Study or a competitive solicitation, primarily depending on if the ISO forecasts that a solution is needed to solve reliability criteria violations in three years or less from the completion of a Needs Assessment.

2.4 Process Steps Overview

A Needs Assessment must be developed to assess the reliability performance of the Pool Transmission Facility (PTF) system. This assessment may determine that the planned system will not meet reliability criteria during the study period. Where that occurs, possible transmission system upgrades that will address the identified needs may be proposed. Once a preferred solution is identified as the solution that offers the best combination of electrical performance, cost, future system expandability, and feasibility to meet a need identified in a Needs Assessment in the required time frame. Additional activities under the proposed-plan process are necessary to ensure that proposed solutions are acceptable. This procedure describes the process for performance of a Needs Assessment in Section 2.6, performance of a Solutions Study in Section 2.8, utilization of the competitive solution process in Section 2.9, and the steps necessary to complete the review and approval process for proposed projects or plans. Activities such as treatment of Market Solutions and incorporation of changes in Needs Assessment or Solutions Study assumptions are also discussed.

2.5 Stakeholder Involvement

Stakeholders are expected to actively participate in the Planning Advisory Committee (PAC) process by attending meetings, commenting on posted study scopes and reports and otherwise providing useful comments on the process. ISO will consider all comments received from stakeholders during the PAC. Membership for the PAC is described in Section 7.2 of this document. Consistent with the intention of Attachment K, and for the efficiency of the planning process, members of the Reliability Committee (RC) are expected to participate in the PAC process to provide comments and input on study scopes, Needs Assessments and the selection of a preferred solution at that time, rather than waiting for the PPA or TCA review.

Stakeholders may provide comments at the PAC meetings or they may also submit comments in writing at PACMatters@iso-ne.com. Comments submitted to PACMatters within the comment period will be posted on ISO-NE's website, along with ISO-NE's response to such correspondence.

2.6 Needs Assessment

2.6.1 Process Overview

The ISO coordinates and administers the process for performing Needs Assessments for the PTF System. In addition, as described in Section 4.1 of Attachment K, the ISO, in coordination with the PTOs and the PAC, shall conduct Needs Assessments of the adequacy of the PTF system, as a whole or in part, to maintain the reliability of such facilities while promoting the operation of efficient wholesale electric markets in New England. Conversely, PTOs initiate, coordinate and direct the performance of all Needs Assessments for the Non-PTF in the New

¹³ http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/index.html

England transmission system. The remainder of Section 2.6 will address the Needs Assessment process for the PTF in the New England transmission system as administered by ISO.

The process for completing a Needs Assessment includes a review of the study scope, a review of initial results, presentation of final results, and documentation of the study using the ISO standard report format.

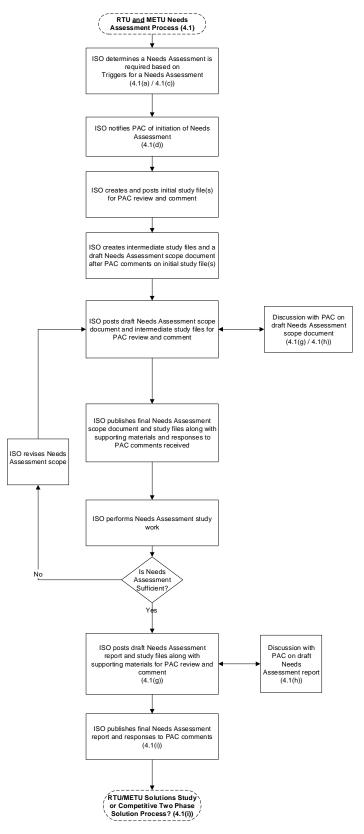
The following sections provide an overview of the process for conducting a Needs Assessment. Studies may address one or more of the types of assessments listed. In general, the process described is applicable to all of the study types listed. Where it is necessary, procedures that are specific to particular types of analyses will be noted in the descriptions.

A Needs Assessment may:

- Assess compliance with reliability standards, criteria, or guides (including those established by the ISO, NERC, NPCC) consistent with the long term needs of the system.
- Assess the adequacy of the transmission system capability, such as transfer capability, to support local, regional and interregional reliability.
- Assess the efficient operation of the wholesale electric market. (See Attachment N regarding the identification of market efficiency upgrades).
- Assess sufficiency of the system to integrate new resources and loads on an aggregate or regional basis as needed for the reliable and efficient operation of the system.
- Analyze various aspects of system performance. (Including but not limited to, transient network analysis, small signal analysis, electromagnetic transients program (EMTP) analysis, or delta P analysis).
- Examine short circuit performance of the system. (e.g. circuit breakers, bus systems, ground grids, and circuit switchers).
- Assess the ability to efficiently operate and maintain the transmission system.
- Address requests for an economic study consistent with section 4.1.b of Attachment K.
- Address system performance in consideration of de-list bids and cleared demand bids consistent with sections 4.1(c) and 4.1(f) of Attachment K.
- Address system performance as otherwise deemed appropriate by the ISO.

At any time during a Needs Assessment, assumptions can change requiring a modification to the scope. The modified scope will be brought back to the PAC for discussion and comments.

The Needs Assessment process is depicted by the following flowchart:



2.6.2 Initiation of a Needs Assessment

For a Needs Assessment on the PTF system, the ISO will be the initiator per the triggers listed in 4.1(a) and 4.1(c) of Attachment K. The ISO notifies the PAC in the form of a posted notice of the initiation of a Needs Assessment. The notice shall include a description of the relevant trigger(s) and may include a general description of the objectives, identify the type of study(s) to be performed and include general information about what the study(s) will encompass and a high level overview of the study area.

2.6.3 Study Scope Development and Review (PAC)

To allow for the development of a study scope the ISO will create and post, to its website, initial study files for each load level being assessed for the PAC to review and comment on (review period will typically be fifteen (15) days). After the ISO receives and reviews the PAC feedback on the initial study files the ISO will create and publish intermediate study files and a draft Needs Assessment scope document and bring the draft scope document to the PAC for discussion and review. The study scope will include a study schedule/timeline and should as a minimum include the following:

- Study objective,
- Study Area,
- Year(s) to be studied,
- Description of the type of analysis and testing that will be included in the study. While
 these typically include steady-state, stability and short circuit studies, EMTP analysis
 and other types of analysis are sometimes required,
- Study assumptions (including but not limited to) transfers, load level, contingencies, and market solutions,
- Any sensitivity considered such as potential retirements, demand response performance characteristics, load forecast changes, topology changes included or excluded, etc.,
- Reliability standards and criteria, and
- Description of methodology and performance criteria.

As deemed necessary by the ISO, the ISO may also provide the scope to the Market Advisor to the ISO Board of Directors and the ISO Board of Directors. Upon receiving comments from the PAC, the ISO will determine the final study scope and respond to the input received from the PAC. The final Needs Assessment scope document and all study files and supporting

documentation will be posted in the related Key Study Area sub-section to the System Planning area on the ISO website.¹⁴

2.6.4 Treatment of Market Solutions in Needs Assessment

Pursuant to Section 4.1(f) of Attachment K, the Needs Assessment shall reflect proposed market responses. Market responses may include, but are not limited to, resources (such as demand-side projects or distributed generation projects), and Elective Transmission Upgrades.

In performing Needs Assessments, the ISO shall rely on certain future resources and Elective Transmission Upgrades to prevent the identification of system needs. See Section 4.1(f) of Attachment K or Table 2.1 of the Transmission Planning Technical Guide¹⁵ for details.

To incorporate a resource or Elective Transmission Upgrade with a contract in a Needs Assessment, the ISO requires the following information:

- Evidence of the contract
- Modeling information for the resource

Evidence of the contract can be fulfilled via submittal of an order or other similar authorization from the appropriate state regulatory agency, along with a copy of the contract that together demonstrate the contractual requirements. These shall indicate, at a minimum, the project name, size, interconnection point, and expected in-service date.

To model the resource, the following information shall be provided:

• If the project (resource or ETU) is in the ISO interconnection queue, a queue position (QP) number shall be provided so that modeling information based on the ISO interconnection queue may be utilized. Once provided, the ISO will utilize the modeling data associated with the QP number in the base cases used for Needs Assessments and solution development. For all projects subject to the state interconnection process the provided QP number will be used in the base cases and supporting documentation. For projects subject to the ISO interconnection procedures with either an executed Interconnection Agreement (IA) or IA that is filed with FERC, the provided QP number will be used in the base cases and supporting documentation. For all other projects subject to the ISO interconnection procedures, the ISO will remove any mention of the provided QP number from the base cases and supporting documentation

¹⁴ http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2012/index.html

¹⁵ https://www.iso-ne.com/system-planning/transmission-planning/transmission-planning-guides/

- If the project is not in the ISO interconnection queue, then steady-state, stability, and short-circuit modeling information that is typically provided as a part of a System Impact Study (SIS) shall be provided. The required modeling information based on the size and type of resource is provided below:
 - Resources greater than 20 MW All steady-state, stability and short-circuit information specified in Attachment A (and Attachment A-1, for inverter based resources) of Appendix 1 of Schedule 22 of the OATT¹⁷.
 - Resources at or above 5 MW and at or below 20 MW All steady-state, stability, and short-circuit information specified in Attachment 2 (and Attachment A, for inverter based resources) of Schedule 23 of the OATT¹⁸
 - Elective Transmission Upgrades All steady-state, stability and short-circuit information specified in Attachment A of Appendix 1 of Schedule 25 of the OATT¹⁹
- If the contract includes network upgrades beyond the interconnection facilities, steadystate, short-circuit and transient stability modeling information must be provided for these upgrades
- A contact person must be identified who may be contacted for additional modeling information for the project

The steady-state and stability modeling information provided must be compatible with the most recent annual Transmission Planning (TP) Base Case Library. The short circuit modeling information must be compatible with the most recent Year N+5 short circuit case that is prepared as described in ISO Operating Procedure 16 Appendix K²⁰.

The contract evidence and modeling information may be submitted by: the Project Sponsor; the state regulatory agency authorizing the contract; a transmission company that is a counterparty to the contract; or by a third-party organization representing the interests of the New England states regarding energy related issues, such as the New England States Committee on Electricity (NESCOE).

The documents associated with the contracts and the modeling information shall be provided either as a part of the annual ISO-led request for information, described below, or via an email to pacmatters@iso-ne.com.

¹⁶ A PSCAD model is not required as a part of the initial submission of modeling information, but may be requested by the ISO if needed.

 $^{^{17} \, \}underline{\text{https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_2/sch22/sch_22_lgip.pdf}$

¹⁸ https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_2/sch23/sch_23_sgip.pdf

¹⁹ https://www.iso-ne.com/static-assets/documents/2015/02/sch_25.pdf

²⁰ https://www.iso-ne.com/static-assets/documents/2015/11/op16k_rto_final.pdf

- Annually, ISO sends a request to the New England Transmission Owners and NESCOE
 with a list of all the contracts that the ISO is including in Needs Assessments to seek
 confirmation on the status of existing contracts and any additions to the list. The
 resources with contracts will be included as a part of the annual TP Base Case Library.
- In addition to the annual review of resources with contracts, ad hoc submissions of contract additions, modifications or terminations may be done by emailing pacmatters@iso-ne.com.

Only submissions that are made as a part of the annual ISO request or via pace-meters@iso-ne.com that meet the requirements for the contract evidence and modeling information described above will be included in Needs Assessments.

2.6.5 Conduct Needs Assessment

The Needs Assessment study is conducted as described within the study scope and the ISO will coordinate with the PAC to support the ISO's performance of a Needs Assessment. If required, the ISO may ask PTO's or members of the PAC with special expertise to provide technical support or to perform studies required to assess one or more potential needs that will be considered in a Needs Assessment. To facilitate this support, the ISO will post on its website all study files and supporting documentation used to perform the Needs Assessment. The ISO may establish requirements that any PTO or member of the PAC must satisfy to access certain information used to perform Needs Assessments due to ISO Information Policy and CEII constraints. The ISO will update, as needed, the models, files, cases, contingencies, assumptions and other information that will be used to perform the Needs Assessment. These materials will then be posted to the ISO website. It may be necessary to update the Need Assessment study analysis based on changes in assumptions. If changes are made the ISO will post updated relevant information on its webpage and notify the PAC.

2.6.6 Collect and Review Results

The results of the Needs Assessment are compiled, analyzed and documented by the ISO. The information is compiled in a manner that allows for a detailed review of results on the basis of established criteria through concise presentation of the data. Each instance of system performance issues identified as part of the study should be documented and summarized.

The results of the analysis are reviewed, in detail, by the PAC to confirm the validity of the information and to ensure that all contributing factors have been taken into account and that the objectives of the Needs Assessment have been met. The ISO posts the draft Needs Assessment report and study files along with supporting materials to the ISO website and convenes PAC meetings to facilitate input to the Needs Assessment study work and draft report prior to the completion of the Needs Assessment report (subject to ISO Information Policy and CEII constraints).

2.6.7 Publish Needs Assessment Report

Upon completion of the PAC review, a final Needs Assessment report²¹ along with all study files and supporting documentation is published using the ISO Standard Needs Assessment report format describing the study that was performed and the results of the analysis. The report should conform to the standard report structure to allow for a consistent review by all stakeholders and to allow a consistent method of identifying reliability needs for the PTF system. This standardization also supports compliance audits performed by NPCC and NERC. The ISO will publish the final Needs Assessment report on its website²² in accordance with CEII publishing protocol. Generally the presentations to PAC are deemed sufficient to identify the opportunity for market responses.

The objective of the Needs Assessment report is to document the results of studies that evaluate system performance against criteria and standards and the report is not intended to document likely or proposed solutions to any of the problems identified. Remediation of identified performance issues is determined through performance of a Solutions Study or through the competitive solution process, as described in sections 4.2 and 4.3 of Attachment K, respectively.

2.7 Determination of Solutions Study or Competitive Solution Process

2.7.1 Process Overview

At the conclusion of a Needs Assessment, where needs have been identified, a decision must be made with regard to developing regulated transmission upgrades (solutions) to resolve the needs. The development of the solution(s) shall be accomplished by either the Solutions Study process or the competitive solution process.

2.7.1.1 Reliability Transmission Upgrades

The initial determining factor of the decision for Reliability Transmission Upgrades is based on the time sensitivity of each need in the Needs Assessment.

If the year of need of any identified need is three years or less from the completion of the Needs Assessment (time sensitive need), then the Solutions Study process is to be utilized to develop and select the solution. Where the Solutions Study process is utilized for system needs that occur three years or less, the ISO will communicate the following to PAC:

 an explanation of the reliability criteria violations and system conditions that generated the needs,

²¹ http://www.iso-ne.com/rules_proceds/isone_plan/othr_docs/sample_needs_assessment_rev1.doc

²² Planning Advisory Committee reports - https://www.iso-ne.com/committees/planning/planning-advisory

- time sensitivity of each need,
- an explanation of other transmission or non-transmission options considered to address the identified reliability needs, and
- the circumstances that generated the reliability need, and an explanation of why the reliability need was not identified earlier.

The ISO shall present the material above at a PAC meeting and will post the related presentation to the ISO website. The stakeholders will be given fifteen (15) days to submit comments on the posted material, and all comments received within the comment period will be posted to the ISO website. ISO responses to comments received will also be posted.

The ISO shall maintain and post on its website a list of prior year projects where the PTO was designated the entity responsible for construction and ownership of the reliability project once the Solutions Study process is completed²³. The list must include the time sensitivity of each need and the actual date the PTO(s) placed the project into service.

If a solution is required to solve a need *greater* than three years from the time the Needs Assessment is completed (non-time sensitive need)²⁴, then the competitive solution process is utilized to develop and select the solution.

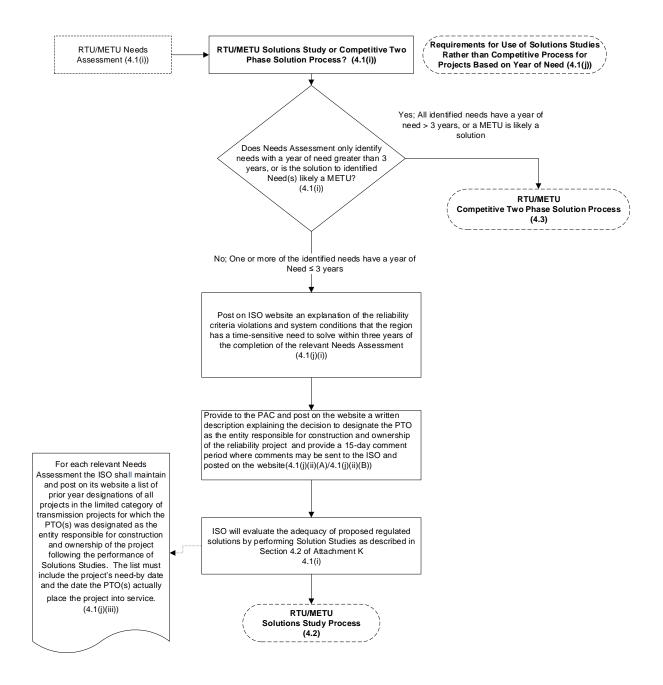
In the situation where the Needs Assessment identifies both time sensitive and non-time sensitive need(s) the Solutions Study process will be implemented. Solutions will be developed for the time sensitive need(s), which may, as an indirect consequence, result in non-time sensitive need(s) being solved. Upon selection of the preferred alternative to address the time sensitive need(s) a new or updated Needs Assessment will be performed to determine remaining needs and their accompanying year of need.

2.7.1.2 Market Efficiency Transmission Upgrades

If a Market Efficiency Transmission Upgrade is likely to be the solution for a need, then the competitive solution process shall be followed regardless of the year of need. The determination of Solutions Study or competitive solution process is depicted by the following flowchart:

²³ A Solutions Study is considered complete on the day the final Solutions Study report is posted to the PAC website.

²⁴ A Needs Assessment is considered complete on the day the final Needs Assessment report is posted to the PAC website.



2.8 Development of a Regulated Transmission Solutions Study

2.8.1 Solutions Study Process Overview Where Competitive Solution Process is not Applicable

When triggered as described in Section 2.7.1, the ISO will lead a solutions development process that will conduct studies to identify the most cost-effective and reliable transmission solution

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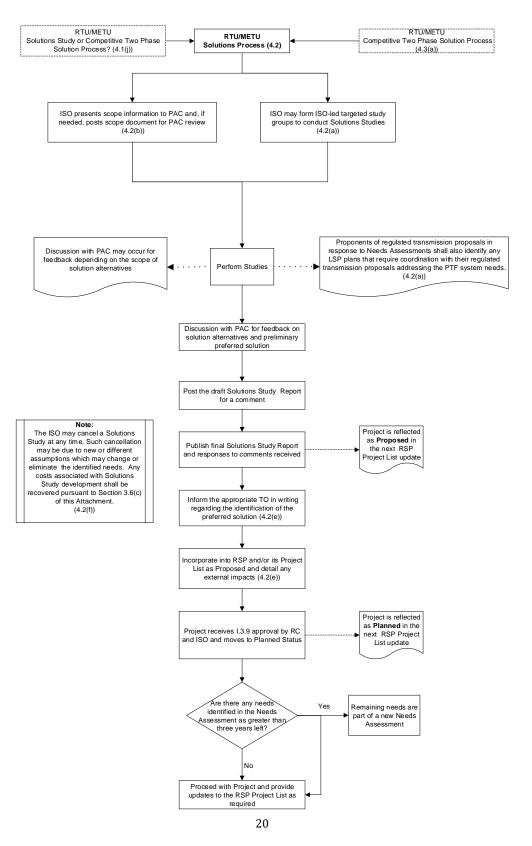
that offers the best combination of electrical performance, cost, future system expandability, and the feasibility to meet the time sensitive needs identified in the Needs Assessment in the required time frame. The process for performing a Solutions Study includes:

- Presentation of study scope information to PAC,
- Presentation of preliminary preferred solution to PAC,
- Identification of final preferred solution to PAC, and
- Drafting of a Solutions Study report using the ISO standard report format.

During this process, the ISO may form ISO-led study groups to conduct Solutions Studies. The ISO-led study group is responsible for conducting the solution development and assessment. The results of the ISO-led solutions development process will be discussed with PAC and be reflected in the RSP and /or its Project List.

Market solutions are not assessed in a Solutions Study, but instead are an integral assumption in the Needs Assessment. See Section 2.6.4 for an explanation of how and when Market Solutions are considered.

The Solutions Study process is depicted by the following flowchart:



2.8.2 Study Initiation Notification and Scope

After a Needs Assessment is completed and it is determined that a Solutions Study will be required, the ISO will provide notice of the initiation of the Solutions Study to PAC in the form of an e-mail notification or presentation.

The elements of a Solution Study scope should be based on the conditions and assumptions studied in the Needs Assessment. A Solutions Study scope document will not be provided to PAC in cases where the scope is the same as the study conditions and assumptions of the Needs Assessment scope which has already been vetted through the PAC process. In such cases, ISO will notify PAC through email that the Solutions Study scope is consistent with the study conditions and assumptions of the Needs Assessment, and that a scope document is not required. If a Solutions Study scope document is required, ISO will post the scope to the ISO website and provide PAC with a timeline for submitting comments.

If the Backstop Transmission Solution is the only acceptable Phase One Proposal in the competitive solution process or the only proposed solution selected to move on as a Phase Two Solution is the Backstop Transmission Solution, the ISO will proceed with a Solutions Study starting with this section.

2.8.3 Development of Regulated Transmission Solution Alternatives

The ISO may form ISO-led targeted study groups to conduct Solutions Studies. Such study groups will include representatives of the proponents of regulated transmission solutions and other interested or affected stakeholders. The ISO will determine the final study group.

The process for development of regulated solutions to address identified time sensitive needs should follow a set of basic development and evaluation procedures. This process is generally as follows:

- Evaluation of possible transmission system improvements that have the potential of solving the needs.
- Selection of viable alternatives through more detailed assessments.
- Testing of viable alternatives to ensure they are complete and they fully address the identified needs.
- Consideration of any of the following evaluation factors²⁵ described below:
 - a. Installed cost
 - This is evaluation factor is only considered in the Solutions Study process. It can be considered when other considerations accounted for in life-cycle cost would be similar among alternatives
 - b. Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
 - c. System performance

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²⁵ Where necessary, additional information has been provided to clarify the evaluation factor.

- Consideration of the electrical performance of the system. Performance may consider items such as voltage margin, percentage of equipment ratings, angular swings, potential significant adverse impacts on other facilities
- d. Cost cap or cost containment provisions;
 - i. Evaluation may consider a number of different scenarios to understand the exposure to a cost increase.
- e. In-service date of the project or portion(s) thereof;
- f. Project constructability;
 - i. This evaluation factor will only be used in the event that aspects related to the ability to construct the project do not fit into other categories.
- g. Generation and transmission facility outages required during construction;
 - i. The outages to be taken into consideration are transmission and generation outages. Evaluation will consider the impact on system operability during the required outages and may also consider other metrics such as the impact on production cost.
- h. Extreme contingency (EC) performance
 - i. Consideration of ECs listed in NERC TPL-001 and NPCC Directory 1. Typically, the evaluation will be related to the loss of a right-of-way (including line crossings), loss of substation, and three phase stuck breakers. This evaluation factor will not only consider existing ECs, but any new ECs that are created by the project.
- i. Operational impacts;
 - Consideration of required operator intervention necessary as system conditions change, possibly through a load cycle or due to different generation dispatches. Concerns related to limitations on system maintenance may also be considered.
- i. Incremental costs for potential resource retirements:
 - i. Consideration of incremental transmission needed to address potential resource retirements. The RFP may specify some retirements of specific interest; however, others may be considered depending on the proposal. As an example, when evaluating an HVDC line, what if a resource on the sending end retires?
- k. Interface impacts;
 - Consideration of the increase in transfer capability across an interface(s). Evaluation may also consider other metrics such as the impact on production cost. Proposals that cause a decrease in transfer capability are not acceptable since they would not receive PPA approval.
- l. Future expandability;
 - Consideration of required operator intervention necessary as system conditions change, possibly through a load cycle or due to different generation dispatches. Concerns related to limitations on system maintenance may also be considered.
- m. Consistency with Good Utility Practice;
- n. Potential siting/permitting issues or delays;
- o. Loss savings;

- i. The conditions that will be considered are with all lines in service, using the cases that were used in the Needs Assessment.
- p. Replacement of aging infrastructure;
 - i. Consideration of whether a proposal removes older infrastructure, even if there is not a known asset condition issue on that infrastructure.
- q. Environmental impact;
- r. Design standards; and
 - i. Consideration of the design standards being used. A project may be using more robust design standards than another. Some examples are ice-loading, wind speed, and elevation above flood levels.
- s. Impact on NPCC Bulk Power System (BPS) classification.
 - i. Consideration of whether the project will cause additional stations to be classified as BPS and also if the project will no longer be classified as BPS. This will help to understand the risk of additional cost related to the BPS classification change that would emerge during the PPA process and the potential for additional criteria violations based on NPCC Directory 1 being applied to the newly identified BPS facilities.

Each of these steps is performed in a consistent and structured manner. This may result in an iterative process during which an alternative may be rejected or modified to account for any failure to address the full set of problems identified in the Needs Assessment study. Each of the final viable alternatives should fully address the set of time sensitive needs identified in the Needs Assessment. In order to comprehensively compare each of the alternatives, the set of complete and viable alternatives is evaluated by the project proponent at a more detailed level for cost, consistent with Appendix A and Attachment D²⁶ to ISO Planning Procedure No. 4²⁷, which outlines accuracy ranges for cost estimates and also provides guidance on contingency and escalation values.

During the solutions alternatives development, the proponents of a regulated transmission proposal in response to a Needs Assessment shall also identify any Local System Projects (LSP) plans that will require coordination with their regulated transmission proposal addressing the PTF system Need. The LSP projects will not be eligible for PTF cost recovery.

2.8.4 Discussion Regarding Transmission Solution Alternatives Being Considered (PAC)

Transmission solution alternatives will be discussed with PAC. Depending on their scope, the proposed alternatives may be discussed with PAC at various stages of the Solutions Study process. PAC will have the opportunity to comment on the alternatives, the set of evaluation factors considered in comparing potential alternatives, and/or suggest different alternatives to be studied. Stakeholders may provide comments at the PAC meetings or they may also submit comments in writing at PACMatters@iso-ne.com. Comments submitted to PACMatters within

²⁶https://www.iso-ne.com/static-assets/documents/rules_proceds/isone_plan/pp04_0/pp4_0_attachment_d.pdf

²⁷ https://www.iso-ne.com/static-assets/documents/2020/02/pp 4 rev9.pdf

the comment period will be posted²⁸ on ISO-NE's website, along with ISO-NE's response to such correspondence.

Based on the analyses performed in the Solutions Study, the ISO will determine which regulated transmission solution offers the best combination of electrical performance, costs, future system expandability, and feasibility to meet the time-sensitive need identified in a Needs Assessment in the required time frame. This solution is considered the "preliminary preferred solution." PAC and other interested stakeholders are given the opportunity to comment on the preliminary preferred transmission solution before the draft Solutions Study Report is issued.

2.8.5 Publish Solutions Study Report

Upon completion of the Solutions Study analysis, the ISO will publish a draft study report, which identifies the preferred solution, using the ISO Standard Solutions Study report²⁹ format found on the ISO website. The report should conform to the standard report structure to allow for a consistent review by all stakeholders. This allows for a consistent method for identifying reliability solutions for the PTF system and also supports compliance audits performed by NPCC and NERC. The Solutions Study report will be posted on the ISO website in the related Key Study Area sub-section to the System Planning area of the ISO website³⁰ for a stakeholder comment period. Stakeholders may submit comments in writing at PACMatters@iso-ne.com. Comments submitted to PACMatters within the comment period will be posted³¹ on ISO-NE's website, along with ISO-NE's response to such correspondence.

The ISO will publish the final Solutions Study report on its website in accordance with CEII publishing protocol when all comments have been addressed.

2.8.6 Determination of the Regionally-Preferred Transmission Solution

After the preferred solution has been identified, the ISO will inform the appropriate Transmission Owners in writing regarding the identification of the preferred solution. Once identified, the preferred solution will be reflected in the RSP and/or its Project List as it is updated from time to time, pursuant to Attachment K and in accordance with Section 3.2 of this document.

Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP.

The proponent of the preferred solution will need to comply with PPA process set out in Section I.3.9 of the ISO Tariff and further described in PP5-0, PP5-1 and PP5-3 to ensure that there is no significant adverse impact on the stability, reliability or operating characteristics of the system

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²⁸ http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/index.html

²⁹ http://www.iso-ne.com/rules_proceds/isone_plan/othr_docs/sample_standard_solution_study_report_72910.doc

³⁰ http://www.iso-ne.com/system-planning/key-study-areas

³¹ http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/index.html

as a result of the preferred solution. The proponent will submit its PPA to the ISO, who then places it on the appropriate Reliability Committee agenda for their review and an advisory vote. As part of the materials provided for Level II and III PPAs, the ISO will include any opinions expressed by Affected Entities³² regarding significant adverse impacts that they believe to be insufficiently addressed. Following the RC advisory vote, the ISO will issue a letter to the Applicant with the final determination on the significant adverse impact of the project upon the system.

2.8.7 Changes in Study Assumptions

If a change in study assumptions is evaluated by ISO and is found to not impact the time sensitivity of the need(s) or the need(s) itself, the study will continue. If the change in study assumptions impacts the time sensitivity of a need or the need, the study may be stopped and the need will be re-evaluated. If the new study assumptions must be adopted, it is preferred to restart the assessment with updated assumptions. The ISO will make the final decision on whether a study will continue or will be re-started.

2.8.8 Remaining Needs

If after the completion of a Solutions Study, needs identified in the Needs Assessment with a year of need greater than three years from the completion of the Needs Assessment are still unsolved, then a new Needs Assessment will begin to determine the expected year of need for the remaining needs. That process is described in section 2.6 of this document.

2.9 Competitive Solution Process

2.9.1 Process Overview

Where triggered as described in Section 2.7.1, above, the ISO will implement a competitive solution process. Those entities that have been designated as QTPSs may submit, either individually or jointly, proposals for projects address the identified needs, or a subset thereof, consistent with the publicly issued Request for Proposal (RFP) that will be issued by the ISO. The general steps for the competitive solution process include:

- ISO publicly issuing an RFP to address the identified transmission system needs.
- ISO review of all submitted Phase One Proposals along with the Backstop Transmission Solution, which is also considered a Phase One Proposal, received in response to the RFP.

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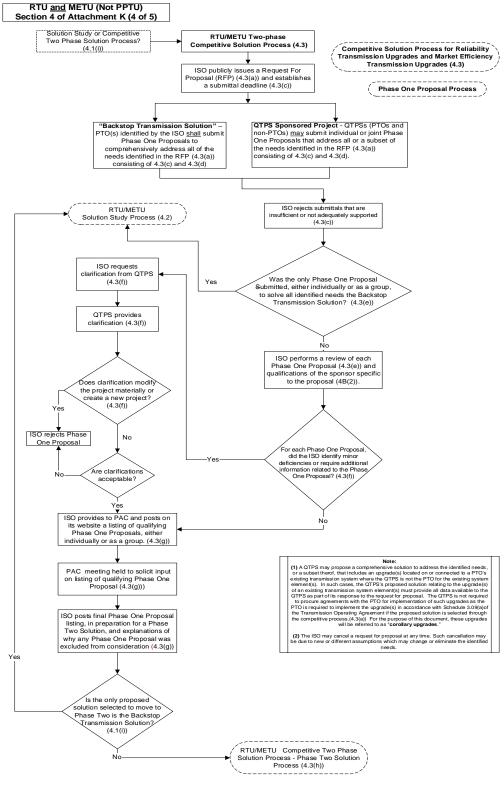
³² See Planning Procedure 5, Procedure for Reporting Notice of Intent to Construct or Change Facilities in Accordance with Section I.3.9 of the ISO New England Tariff (Proposed Plan Application Procedure), for the definition of Affected Entities.

- Advancement of qualifying Phase One proposals as Phase Two Solutions where more detailed information will be provided by the QTPS(s). These qualifying Phase One Proposals can be either:
 - Comprehensive, where either a single QTPS or multiple QTPSs jointly submit a proposal addressing the totality of needs identified in the RFP; or
 - Grouped, where a group of partial solutions proposals is aggregated by the ISO to resolve the totality of identified needs.
- ISO review of all submitted Phase Two Solutions and selection of a preliminary preferred Phase Two Solution.
- Opportunity for PAC to comment on the preliminary preferred Phase Two Solution.
- ISO determination of the preferred Phase Two Solution and notification to the respective QTPS(s) that its project was selected for development and notification for all other QTPSs, along with the Backstop Transmission Solution, to stop work on their proposals.
- ISO and the Selected QTPS(s) execute the Selected Qualified Transmission Project Sponsor Agreement (SQTPSA).
- As applicable, the ISO notifies the PTO that has upgrades on its existing transmission system required by the preferred Phase Two Solution to proceed with upgrades in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.
- ISO monitoring project milestones until the project is in-service and complete.

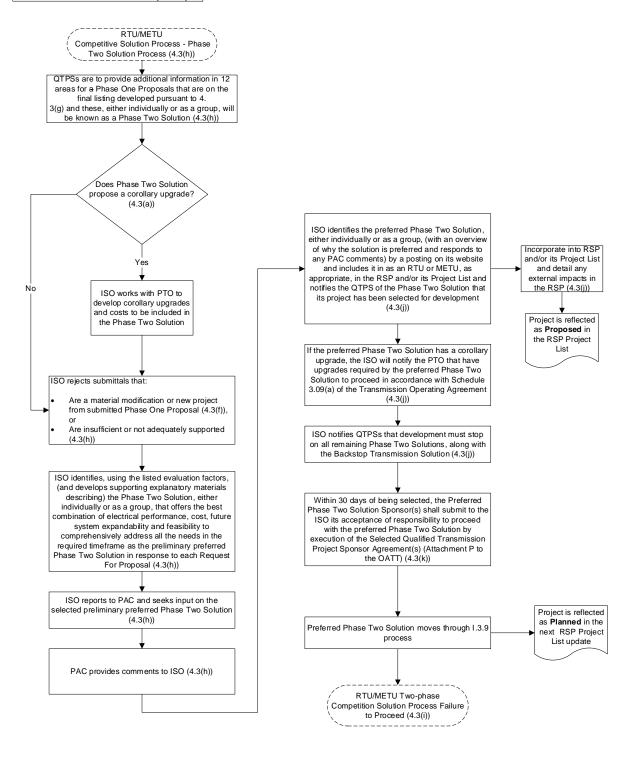
Market solutions are not accepted as proposals in the competitive solution process, but instead are an integral assumption in the Needs Assessment. See Section 2.4.8 for an explanation of how and when Market Solutions are considered.

An RFP may be cancelled by the ISO at any time. Reasons that an RFP might be cancelled include but are not limited to: the reliability needs have been addressed through market responses, system topology changes have changed the needs of the system, and/or adequate responses were not received in response to an RFP.

The competitive solution process is depicted by the following two flowcharts:



RTU and METU (Not PPTU) Section 4 of Attachment K (5 of 5)



2.9.2 Public Notification

The ISO will publicly issue an RFP associated with a Needs Assessment where a competitive solution process will be utilized pursuant to section 2.7 of this document. The RFP will indicate that a QTPS(s) may submit a Phase One Proposal offering a solution that addresses the identified needs (or a subset thereof), identify the PTO(s) required to submit a Backstop Transmission Solution as a Phase One Proposal, and provide further details regarding requirements for competitive project submissions. The RFP will be published to the ISO webpage under PAC Materials, the applicable Key Study Area, and Competitive Transmission Projects and an email notification will be sent to all members of the PAC and all QTPSs. The RFP will include a submittal deadline for all Phase One Proposals. Additionally, once the RFP is published in RFP360, the web based application that the ISO uses for administration of the RFP, all QTPSs will automatically receive an email notification. The public notification will include a submittal deadline for all Phase One Proposals.

2.9.3 Unsponsored Projects

A member of the PAC that is not a QTPS but would like a project to be considered in a competitive solution process must identify a QTPS willing to submit a corresponding Phase One Proposal and Phase Two Solution before the Phase One Proposal submission deadline. The process for identifying a QTPS willing to submit a Phase One Proposal and Phase Two Solution includes the following steps:

• The PAC member identifies a QTPS willing to submit a corresponding Phase One Proposal and Phase Two Solution (and to develop and construct the project, if selected).

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- The PAC member shall make a request to the ISO for assistance in identifying a sponsor.
- The ISO shall post on its website and distribute to the PAC a notice that solicits expressions of interest by QTPS's for sponsorship of the conceptual project.
- All expressions of interest shall include a detailed explanation of why they are best qualified to construct, own and operate the unsponsored project.
 - If only one QTPS expresses interest, the ISO shall designate it as the designated OTPS.
 - If more than one QTPS expresses interest, the PAC member shall select the designated QTPS.
 - In either case, the designated QTPS shall thereafter comply with the requirements of this guide, Attachment K and the ISO Tariff with respect to the project.

• If no QTPS expresses interest, the unsponsored project may not be submitted as a Phase One Proposal.

2.9.4 Phase One Proposal

A QTPS may, individually or jointly, submit a Phase One Proposal, in response to an RFP, that will address any or all of the identified needs. A QTPS's Phase One Proposal may include an upgrade(s) located on or connected to a PTO's existing transmission system where the QTPS is not the PTO for the existing system element(s) (corollary upgrades). In such cases, the QTPS's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the QTPS as part of its response to the request for proposal. The QTPS is not required to procure agreements with the PTO for implementation of such corollary upgrades as the PTO is required to implement the corollary 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 responsible transmission owner or owners identified by the ISO in the RFP, shall submit a Backstop Transmission Solution as a Phase One Proposal to comprehensively address all of the needs that would be solved by a project located within or connecting to its/their existing electrical system and which there is obligation to build under Schedule 3.09(a) of the TOA. The requirements of a Phase One Proposal are described below in section 2.9.5.

QTPSs shall identify any LSP projects that will require coordination with their proposals.

As part of a Phase One Proposal a project shall not alter a PTO's use and control of existing right of way. The ISO Tariff does not require a PTO relinquish any of its rights of way in order to permit a QTPS to develop, construct or own a project.

2.9.5 Requirements for a Phase One Proposal

With each proposal the submitting QTPS, including the Backstop Transmission Provider(s), must include a \$100,000 study deposit per submitted Phase One Proposal. The study deposit will be applied towards the costs incurred by the ISO and its consultants associated with the study of the Phase One Proposal and/or Phase Two Solution.

A Phase One Proposal shall be submitted by the deadline specified in the public posting by the ISO of the RFP, which will be no less than 60 days from the posting of the RFP.

The following items must all be met in the submission of a Phase One Proposal or the ISO may reject the proposal for being insufficient or not adequately supported:

- 1. A detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing system;
- 2. A detailed explanation of the identified needs that are addressed, how the proposed solution addresses those identified needs, a description of those needs which have not

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been addressed, and a description of the impact of the Phase One Proposal on those needs which have not been addressed;

- 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 installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate, and any cost containment or cost cap measures.

2.9.6 ISO Review

The ISO will perform a review on all submissions received in response to an RFP.

- If any identified need is only solved by the Backstop Transmission Solution, the process will then proceed under the Solutions Study process described in Section 2.8 of this guide.
- Where there are multiple responses to the RFP, the ISO will perform a review for each proposal to see if the proposed solution:
 - o Provides sufficient data and quality to satisfy Section 4.3(c) of Attachment K;
 - Appears to satisfy at least one of the needs described in the Request For Proposal;
 - Is technically practical 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
 - Is not eligible to be constructed only by an existing PTO in accordance with the TOA because the proposed solution is an upgrade to existing PTO facilities or because the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated to the local PTO customers.

If a proposal does not adequately meet the above criteria it will be rejected.

If the ISO identifies any minor deficiencies in the information provided as part of the Phase One Proposal, the ISO will:

• Notify the Phase One Proposal QTPS(s) and provide an opportunity for the sponsor to correct the deficiencies in a time frame specified by the ISO.

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- Reject a Phase One Proposal if:
 - Clarifications are not deemed to be adequate or are not received in the specified timeframe.
 - The proposal is materially changed or is new.

Phase One Proposals that are deemed to have acceptable clarifications will be considered for inclusion in the list of qualifying Phase One Proposals.

2.9.7 List of Qualifying Phase One Proposals

When all proposals are reviewed, the ISO will post to its website³³ and provide to PAC a listing of all individual Phase One Proposals and groups of Phase One Proposals that meet the criteria specified in Section 2.9.6 of this guide. A PAC meeting will be held to solicit stakeholder input on the listing and proposals.

The ISO, with input from the PAC, may exclude proposals from the listing and from submitting a Phase Two Solution based on a determination that a proposal is not competitive with other projects that have been submitted in terms of:

- Cost,
- Electrical performance,
- Future system expandability, or
- Feasibility

The ISO will create and post a final listing of qualifying Phase One Proposals, individually or as a group, that can move to propose a Phase Two Solution and will provide information on why it has excluded a proposal from consideration in the Phase Two Solutions process. If the only proposal on the final listing of qualifying Phase One Proposals is the Backstop Transmission Solution, the process will then proceed under the Solutions Study process described in Section 2.8 of this guide. The final listing will also include the submission deadline for a Phase Two Solution and that will be no less than 60 days from the posting on the final listing.

2.9.8 Phase Two Solutions: Requirements, Identification of Preferred Solution and Inclusion in the RSP

A QTPS that has a project listed on the final listing of qualifying Phase One Proposals, as described in Section 2.9.7 above, is eligible to submit a Phase Two Solution that shall consist of the following:

³³ Information on Phase One Proposals may contain CEII.

- (i) updates of the information provided in Phase One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;
- (iii) 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;
- (iv) project schedule, with additional detail compared with Phase One Proposals, as specified by the ISO;
- (v) 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;
- (vi) description of the financing being used;
- (vii) design and equipment standards to be used;
- (viii) description of the authority the QTPS has to acquire necessary rights of way;
- (ix) experience of the QTPS in acquiring rights of way;
- (x) 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;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the Qualified Transmission ProjectSponsor(s) proposes to satisfy legal or regulatory requirements for siting,constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

A Phase Two Solution must be submitted by the deadline specified in the posting of the final listing of qualifying Phase One Proposals as indicated in section 2.9.7 above.

The ISO will review and study all of the Phase Two Solutions that are received by the submission deadline. During this review the ISO will identify the Phase Two Solution, individually or as a group, that offers the best combination of electrical performance, cost, future system expandability and feasibility to comprehensively address all of the needs in the required timeframe as the preliminary preferred Phase Two Solution in response to the RFP. The ISO will document and post the reasons why this Phase Two Solution was chosen as the

preliminary preferred Phase Two Solution and will seek PAC input during a comment period on the selection. For evaluation factors refer to section 2.8.3.

Once the comment period closes the ISO will:

- Identify and post to the <u>Competitive Transmission Projects</u> area on its website the preferred Phase Two Solution, individually or a group, and a description of why it is the preferred Phase Two Solution.
- Notify the QTPS(s) of the selected Phase Two Solution in writing that its project has been selected for development.
- As applicable, notify the PTO that has corollary upgrades required by the preferred Phase Two Solution to proceed with upgrades in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.
- Notify all non-selected QTPSs in writing to cease development of their solution including the Backstop Transmission Solution.
- Reflect the preferred Phase Two Solution in the RSP and /or its Project List as an RTU or METU as appropriate.

Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP.

2.9.9 Selected Qualified Transmission Project Sponsor Agreement

Once a QTPS has received notification that its project was selected for development, the QTPS shall execute the SQTPSA, Attachment P to the OATT, within 30 days. If a joint proposal was selected for development, upon notification each QTPS that is part of the joint proposal shall execute the SQTPSA, Attachment P to the OATT, within 30 days.

2.9.10 Failure to Proceed

If the ISO finds that, after consultation with a PTO QTPS(s), one or more of the QTPS(s) is failing to pursue approvals or construction in a reasonable fashion, the Qualified Transmission Project Sponsor(s) that is failing to pursue approvals or construction in a reasonably diligent fashion will have 60 days from the ISO's notification to reassign a portion or all of the preferred Phase Two Solution to another Qualified Transmission Project Sponsor in accordance with Section 8 of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). In the event that such reassignment does not occur within 60 days, the ISO shall:

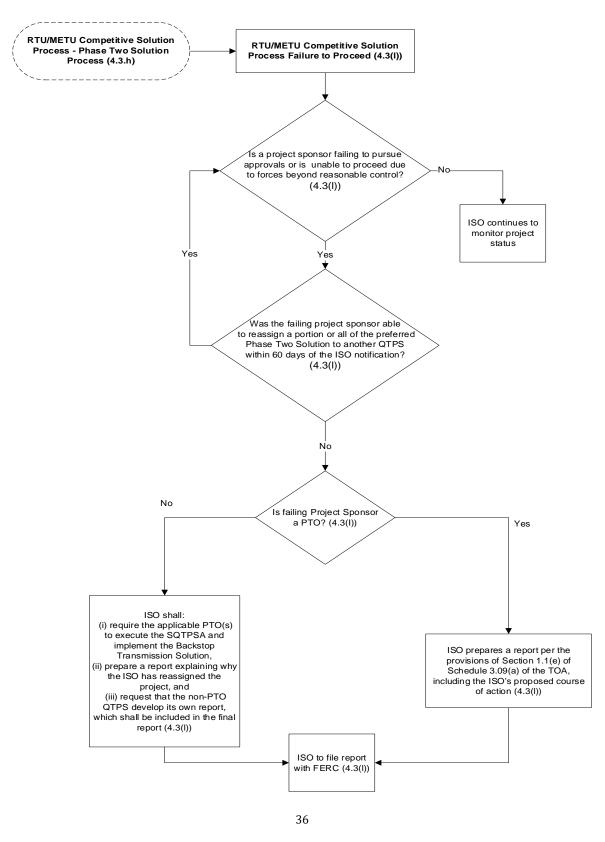
- Require the applicable PTO(s) to execute the SQTPSA and implement the Backstop Transmission Solution.
- Prepare a report explaining why it has reassigned the project to the PTO(s).

- Request the non-PTO QTPS to prepare a report explaining why they were unable to complete the project.
- File the report, including the report from the non-PTO QTPS, with the FERC.

If the QTPS that is failing or unable to proceed is a PTO the ISO shall:

- Prepare a report consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the TOA including a proposed course of action after consultation with the PAC.
- The ISO will then file the report with the FERC.

The process in the event of failure to proceed is outlined in the following flowchart:



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Section 3 Planning for Public Policy

3.1 Public Policy Transmission Upgrades Process

3.1.1 Process Overview

Every three years or less, the ISO will issue a notice indicating that Public Policy Requirements that drive transmission needs can be submitted to New England States Committee on Electricity NESCOE (state and federal) and the ISO (local) for consideration. If the determination is made that a Public Policy Transmission Upgrade will be pursued, QTPS(s) will be allowed to submit proposals for projects to develop, build, and operate one or more projects consistent with the general design requirements identified by the ISO in the Public Policy Transmission Study. The general steps for the Public Policy Transmission Study process shall include:

- ISO issuing a Public Notice indicating input on state and federal Public Policy Requirements (PPR) can be submitted to NESCOE and local (e.g. municipal and county) PPRs can be submitted to the ISO.
- Possible NESCOE Communication to the ISO regarding Public Policy, as described in section 3.1.3 below.
- ISO review of NESCOE's Communication along with Stakeholder responses to the communication
- Specification of the federal, state and local PPRs, if any, that will be addressed in a Public Policy Transmission Study (PPTS). Federal and state PPRs will be specified by NESCOE and, if required, by ISO. Local PPRs will be specified by ISO.
- ISO performance of an initial phase of the PPTS and, if determined by ISO, a follow-on phase of the PPTS with opportunity for PAC to comment.
- If a Public Policy Transmission Upgrade will be pursued, the ISO will publicly issue an RFP inviting QTPSs to submit, either individually or jointly, Stage One Proposals and, after evaluating such proposals along with PAC input, the ISO will create and post a final listing of qualifying Stage One Proposals. A QTPS that, either individually or jointly, has a project listed on the final listing is eligible to submit a Stage Two Solution.
- ISO determination of the preferred Stage Two Solution and notification to the respective QTPS that its project was selected for development and notification for all other QTPS's to stop work on their proposals.
- ISO and the Selected QTPS(s) execute the SQTPSA.

- As applicable, the ISO notifies the PTO that has corollary upgrades on its existing transmission system required by the preferred Stage Two Solution to proceed with upgrades in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.
- ISO monitoring project milestones until the project is in-service and complete.

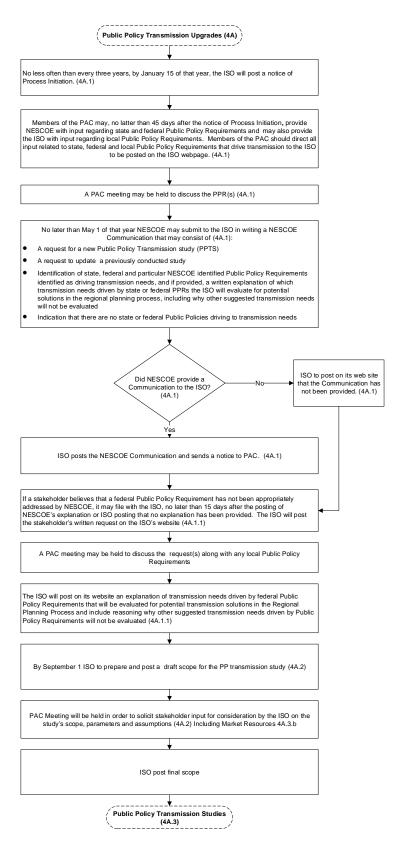
Pursuant to Section 4A.3(b) of Attachment K, the PPTS shall reflect proposed market responses. Market solutions shall be reflected in the Public Policy Transmission Study. Market responses may include, but are not limited to, resources (e.g., demand-side projects and distributed generation) and Elective Transmission Upgrades.

In performing PPTS, the ISO shall rely on certain resources to prevent the identification of transmission needs driven by Public Policy Requirements. See Section 4A.3(b) of Attachment K or Table 2.1 of the Transmission Planning Technical Guide³⁴ for details.

An RFP may be cancelled by the ISO at any time. Reasons an RFP may be cancelled include, but are not limited to, the identified needs have been addressed through market responses: system topology changes have changed the identified needs; and/or other assumption changes have altered or eliminated the identified need.

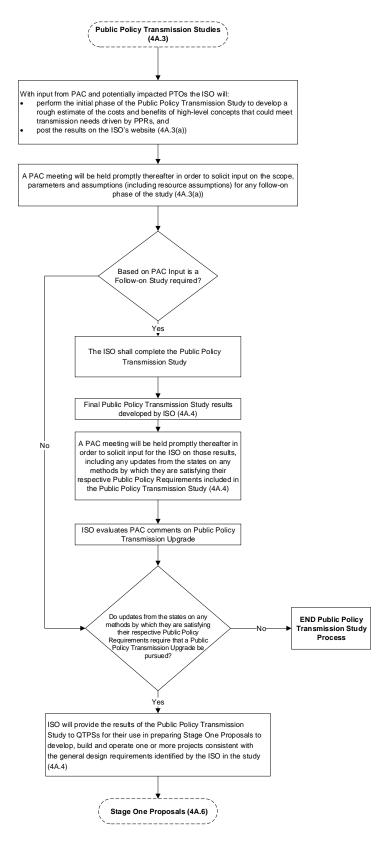
The Public Policy Transmission Study process is depicted by the following two flowcharts:

³⁴ https://www.iso-ne.com/system-planning/transmission-planning/transmission-planning-guides/



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3.1.2 Public Notification for Public Policy Requirements

Every three years or less, by January 15th of that year (the Notice Year), the ISO will post a notice indicating that members of the Planning Advisory Committee may:

- 1. Provide to NESCOE input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements.
- 2. Provide to the ISO input regarding local (e.g., municipal and county) Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements.

Members of the Planning Advisory Committee will have 45 days after the posting of the notice to submit information for NESCOE, ISO or both. This shall be done using the Public Policy Input Template found on the ISO Public Policy Transmission Upgrades portion of the ISO's website and submitted to the ISO via PublicPolicy@iso-ne.com. The ISO will post such input on the Public Policy Transmission Upgrades portion of the ISO's website.

The ISO may schedule a PAC meeting to allow for discussion on state, federal and local PPRs that may be submitted to NESCOE or the ISO.

3.1.3 Submission by NESCOE

No later than May 1st of the Notice Year, NESCOE may submit to the ISO a written NESCOE Communication that may contain:

- 1. A request for a new Public Policy Transmission study (PPTS).
- 2. A request to update a previously conducted study.
- 3. Identification of state, federal and particular NESCOE identified Public Policy Requirements identified as driving transmission needs, and if provided, a written explanation of which transmission needs driven by state or federal PPRs the ISO will evaluate for potential solutions in the regional planning process, including why other suggested transmission needs will not be evaluated.
- 4. Indication that there are no state or federal Public Policies driving transmission needs.

The ISO will post to the <u>Public Policy Transmission Upgrades</u> area on its website and provide to PAC the NESCOE Communication and explanation.

If the NESCOE Communication does not provide a listing of identified transmission needs (which may consist of a NESCOE statement of its determination that no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process)

and that explanation (which may consist of a NESCOE explanation of why no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process), the ISO will post to its website and send a notice to the PAC that a listing and explanation have not been received during the notice period. In that circumstance, the ISO will determine subsequently (after opportunity for PAC input), and post on its website, an explanation of which transmission needs driven by state or federal PPRs the ISO will evaluate in the regional planning process, including why other suggested transmission needs will not be evaluated.

3.1.4 Responses to Public Policy Requests

After the posting of the NESCOE Communication or ISO's posting detailed above in section 3.1.3, stakeholders believing that NESCOE has not appropriately addressed a federal Public Policy Requirement that may drive transmission will have 15 days to provide the ISO with a written request that seeks reconsideration by the ISO of NESCOE's position. A detailed reasoning must be provided with the written request that will allow the ISO to understand the stakeholders' position. All written requests received will be posted to the Public Policy Transmission Upgrades section of the ISO website.

Where the ISO agrees with the positions of a stakeholder or the ISO's own findings on a federal policy driving transmission needs, the ISO may perform a PPTS for a federal policy need that was not identified by the NESCOE Communication. The ISO will post on its website an explanation of those transmission needs driven by federal PPRs not identified by NESCOE that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by federal PPRs not identified by NESCOE will not be evaluated. In addition, the ISO will post on its website an explanation of those transmission needs driven by local PPRs that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by local PPRs will not be evaluated.

No later than September 1 of the Notice Year, the ISO will prepare and post a draft scope for the PPTS. The draft scope will include associated parameters and assumptions (including resource assumptions). The PAC will be notified of the posting and the ISO will hold a PAC meeting in order to solicit stakeholder input for consideration by the ISO on the study scope, parameters, assumptions and market resources. Once the scope is finalized, the ISO will post it to its website and notify the PAC.

3.1.5 Conduct Public Policy Transmission Study

With input from the PAC including potentially impacted PTOs, the ISO will perform the initial phase of the PPTS. During the initial phase of the PPTS, ISO shall develop a rough estimate of the costs and benefits of the high-level concepts that could meet transmission needs that are defined in the project scope. At the completion of this phase, the results will be posted on the ISO website and a meeting of the PAC will be held to solicit input on the initial phase of the PPTS and the scope parameters and assumptions (including resource assumptions) for any follow–on (additional study work) phase of the study. Based on PAC input, the ISO will determine if any

follow-on study work is needed. The possible outcomes of the initial phase of the PPTS are the following:

- The PPTS process ends because implementation of the concepts related to the outcome of the study would not be beneficial to the region.
- ISO completes the follow-on phase of the study to perform more detailed analysis and engineering work on the high-level concepts.

Concepts related to the outcome of the PPTS move to the Stage One Proposals (Section 3.1.8) process because no follow-on study is required.

The final PPTS will be posted to the ISO website and the PAC will be notified of its posting. A meeting of the PAC will be held in order to solicit input on the results including any updates from the states on any methods by which they are satisfying their respective PPR included in the PPTS. The ISO will evaluate the input from the PAC and will also provide the results of the PPTS to QTPS's for their use in preparing a Stage One Proposal (see Section 3.1.8) to develop, build and operate one of more projects consistent with the general design requirements identified by the ISO in the PPTS.

3.1.6 Request for Proposal

The ISO will publicly issue an RFP for each high-level general project concept (concepts) identified by the ISO in the PPTS. The RFP will indicate that QTPS's may submit, individually or jointly, a Stage One Proposal in response to a public notice RFP that will address the identified concepts. The RFP will be published to the ISO webpage under PAC Materials, Public Policy Transmission Upgrades, and Competitive Transmission Projects and an email notification will be sent to all members of the PAC and all QTPSs. Additionally, once the RFP is published in RFP360, the web based application that the ISO uses for administration of the RFP, all QTPSs will automatically receive an email notification. The public notification will include a submittal deadline for all Stage One Proposals.

3.1.7 Unsponsored Projects

A member of the PAC that is not a QTPS but would like a project to be considered in a competitive solution process must identify a QTPS willing to submit a corresponding Stage One Proposal and Stage Two Solution before the Stage One Proposal submission deadline. The process for identifying a QTPS willing to submit a Stage One Proposal and Stage Two Solution includes the following steps:

• The PAC member identifies a QTPS willing to submit a corresponding Stage One Proposal and Stage Two Solution.

Or

• The PAC member shall make a request to the ISO for assistance in identifying a sponsor.

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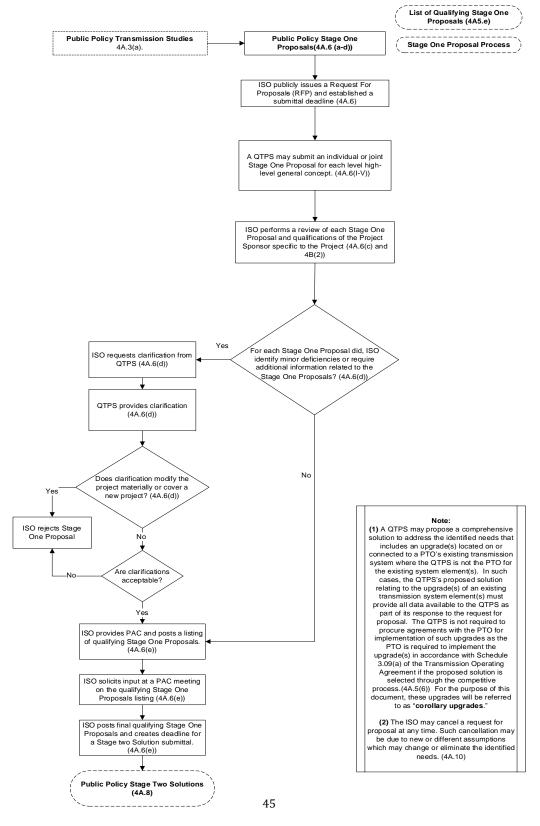
- The ISO shall post on its website and distribute to the PAC a notice that solicits expressions of interest by QTPS's for sponsorship of the conceptual project.
- All expressions of interest shall include a detailed explanation of why they are best qualified to construct, own and operate the unsponsored project.
 - If only one QTPS expresses interest, the ISO shall designate it as the designated OTPS.
 - If more than one QTPS expresses interest, the PAC member shall select the designated QTPS.
 - o In either case, the designated QTPS shall thereafter comply with the requirements of this guide, Attachment K and the ISO Tariff with respect to the project.
- If no QTPS expresses interest, the unsponsored project may not be submitted as a Stage One Proposal.

3.1.8 Public Policy Stage One Proposals

QTPSs, individually or jointly, may submit a Stage One Proposal in response to an RFP that will address the identified concepts by the deadline specified, which shall not be less than 60 days from the posting of the public notice RFP. A QTPS's Stage One Proposal may include a corollary upgrade(s). In such cases, the QTPS's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the QTPS as part of its response to the request for proposal. The QTPS is not required to procure agreements with the PTO for implementation of the corollary upgrades as the PTO is required to implement the corollary 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 requirements of a Stage One Proposal are described below in section 3.1.9.

OTPSs shall identify any LSP projects that will require coordination with their proposals.

The Stage One Proposal process is depicted by the following flowchart:



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3.1.9 Requirements for a Stage One Proposal

With each proposal a submitting QTPS must include a \$100,000 study deposit per submitted Stage One Proposal. The study deposit will be applied towards the costs incurred by the ISO associated with the study of the Stage One Proposal and/or Stage Two Solution.

A Stage One Proposal shall be submitted by the deadline specified in the public posting by the ISO of the RFP, which will be no less than 60 days from the posting of the RFP.

The following items must all be met in the submission of a Stage One Proposal or the ISO may reject the proposal for being insufficient or not adequately supported:

- A detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing system;
- ii. A detailed explanation of how the proposed solution addresses the identified need;
- iii. The proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
- iv. 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
- v. The estimated installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate and any cost containment or cost cap measures.

3.1.10 ISO Review

The ISO will perform a review for each Stage One Proposal to determine whether the proposed solution.

- i. Provides sufficient data and quality to satisfy Section 4.A6(a) of Attachment K;
- ii. Satisfies the concept driven by Public Policy Requirements, as reflected in the Request For Proposals;
- iii. Is technically practical 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
- iv. Is not eligible to be constructed only by an existing PTO in accordance with the TOA because the proposed solution is an upgrade to existing PTO facilities or

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

If a proposal does not adequately meet the above criteria it will be rejected.

If the ISO identifies any minor deficiencies in the information provided as part of the Stage One Proposal, the ISO will:

- Notify the Stage One Proposal QTPS and provide an opportunity for the sponsor to correct the deficiencies in a time frame specified by the ISO.
- Reject a Stage One Proposal if:
 - Clarifications are not deemed to be adequate or are not received in the specified timeframe.
 - o The proposal is materially changed or is new.

Stage One Proposals that are deemed to have acceptable clarifications will be included in the list of qualifying Stage One Proposals.

3.1.11 List of Qualifying Stage One Proposals

When all proposals are reviewed, the ISO will post to its website³⁵ and provide to PAC a listing of all Stage One Proposals that meet the criteria specified in Section 3.1.10 of this guide and also indicate whether any of the projects may also satisfy identified reliability needs of the system. A PAC meeting will be held to solicit stakeholder input on the listing and proposals.

The ISO, with input from the PAC, may exclude projects from the listing and from submitting a Stage Two Solution based on a determination that a project is not competitive with other projects that have been submitted in terms of:

- Cost,
- Electrical performance,
- Future system expandability, or
- Feasibility.

³⁵ Information on Stage One proposals that contains CEII information will be posted appropriately to the ISO's password protected portion of its website.

The ISO will create and post a final listing of qualifying Stage One Proposals that can move to propose a Stage Two Solution. The final listing will also include the submission deadline for a Stage Two Solution and that will be no less than 60 days from the posting on the final listing.

3.1.12 Stage Two Solutions: Requirements, Identification of Preferred Solution and Inclusion in the RSP

A QTPS that has a project listed on the final listing of qualifying Stage One Proposals, as described in Section 3.1.11 above, is eligible to submit a Stage Two Solution that shall consist of the following:

- (i) updates of the information provided in Stage One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;
- (iii) description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Stage Two Solution and their respective durations, and possible constraints;
- (iv) project schedule, with additional detail compared with Stage One Proposals, as specified by the ISO;
- (v) detailed cost component itemization and life-cycle costs including any clarifications to cost containment or cost cap measures that were not included as part of the Stage One Proposal;
- (vi) description of the financing being used
- (vii) design and equipment standards to be used;
- (viii) description of the authority the QTPS(s) has to acquire necessary rights of way;
- (ix) experience of the QTPS(s) in acquiring rights of way;
- (x) 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 Stage Two Solution;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the QTPS(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

A Stage Two Solution must be submitted by the deadline specified in the posting of the final listing of qualifying Stage One Proposals as indicated in section 3.1.11 above.

The ISO may reject Stage Two Solution submittals which are insufficient or not adequately supported.

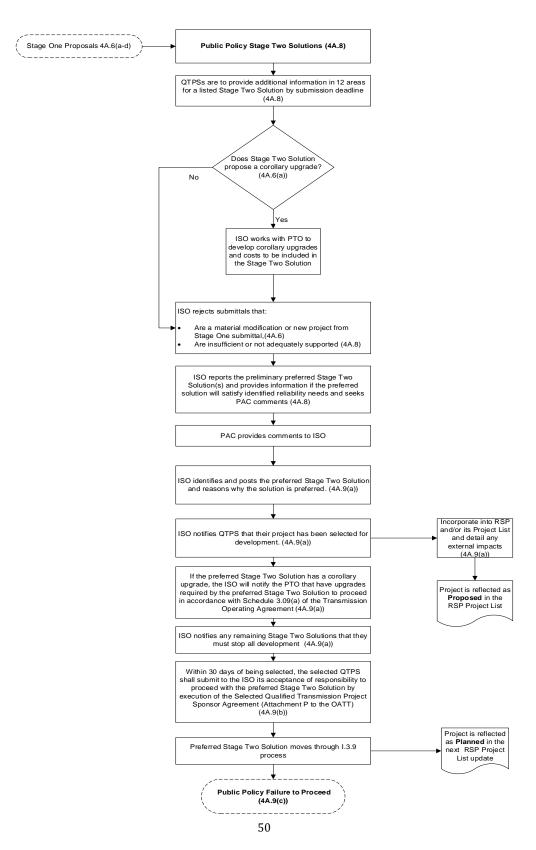
The ISO will review and study all of the Stage Two Solutions that are received by the submission deadline. During this review the ISO will report on the preliminary preferred Stage Two Solution along with its views as to whether the preferred solution(s) also satisfies identified

reliability needs on the system. The ISO will document and post the reasons why this Stage Two Solution was chosen as the preliminary preferred Stage Two Solution and will seek PAC input during a comment period on the selection.

Once the comment period closes the ISO will:

- Identify and post to its website the preferred Stage Two Solution and a description of why it is the preferred Stage Two Solution.
- Notify the QTPS of the selected Stage Two Solution in writing that its project has been selected for development.
- As applicable, notify the PTO that has upgrades required by the preferred Stage Two Solution to proceed with upgrades located on or connected to its existing transmission system in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.
- Notify all non-selected QTPS's in writing to cease development of their solution.
- Reflect the preferred Stage Two Solution in the RSP and /or its Project List as Public Policy Transmission Upgrade.

The Stage Two Solution process is depicted by the following flowchart:



3.1.13 Selected Qualified Transmission Project Sponsor Agreement

Once a QTPS has received notification that its project was selected for development, the QTPS shall execute the SQTPSA, Attachment P to the OATT, within 30 days. If a joint proposal was selected for development, within 30 days of the notification each QTPS that is part of the joint proposal shall execute the SQTPSA, Attachment P to the OATT.

3.1.14 Failure to Proceed

If the ISO finds that, after consultation with the QTPS, the QTPS is failing to pursue approvals or construction in a reasonable fashion, or that one or more of the QTPS(s) is unable to proceed with the project due to forces beyond their control the ISO shall, after consultation with the PAC:

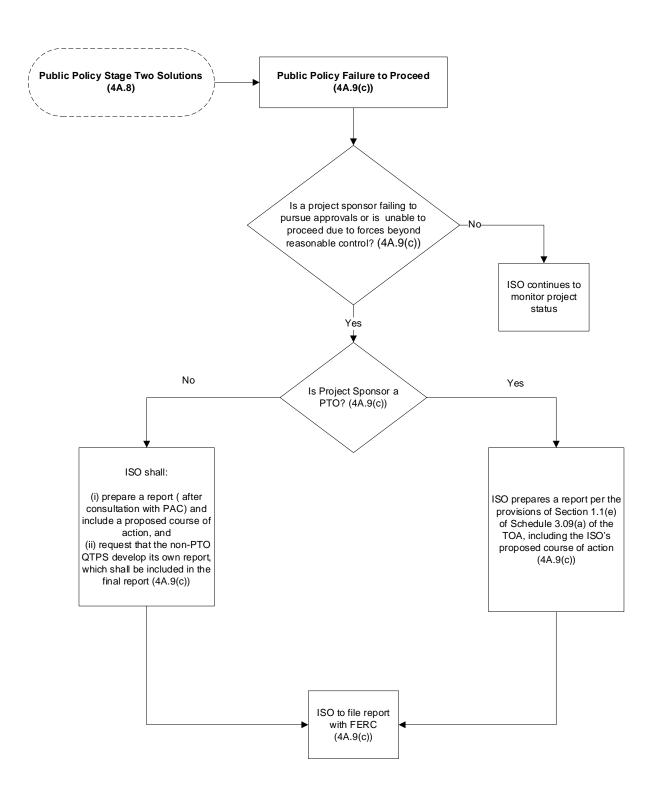
- Prepare a report including a proposed course of action.
- Request the non-PTO QTPS to prepare a report explaining why they were unable to complete the project.
- File the report, including the report from the non-PTO QTPS, with the FERC including the ISO's proposed course of action.

If the QTPS that is failing or unable to proceed is a PTO the ISO shall:

- Prepare a report consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the TOA including a proposed course of action after consultation with the PAC.
- File the report, including proposed course of action, with the FERC.

Proposed courses of action for when a Stage Two Solution is unable to proceed may include consideration and selection of another Stage Two Proposal relating to the pertinent Public Policy Requirement, or the re-solicitation of Stage One Proposals to meet the pertinent Public Policy Requirement.

The process in the event of failure to proceed is outlined in the following flowchart:



Section 4 Longer-Term Transmission Studies

4.1 Longer-Term Transmission Studies

As described in Section 16 of Attachment K of the OATT, NESCOE may submit a written request for the ISO to conduct a Longer-Term Transmission Study (LTTS). The LTTS will identify high-level concepts of transmission infrastructure and, if requested, high-level cost estimates that could meet State-identified Requirements specified in the request based on state-identified scenarios and timeframes, which may extend beyond the five-to-ten year planning horizon. A request for an LTTS may be submitted to the ISO no earlier than 6 months from conclusion of the prior cycle, which includes a LTTS, follow-on studies, and any associated competitive solicitations. The LTTS request shall identify the State-identified Requirements that serve as the basis of the request by being a legal requirement, mandate or policy of a New England State or local government; the proposed objectives of the study; and the scenarios and timeframe(s) proposed for use in the study. Additionally, the ISO, at its sole discretion, may collaborate with and provide technical support to NESCOE or the New England states in connection with the states' procurements, and efforts to secure federal funding for transmission investments.

4.2 Preparation for Conduct of the Longer-Term Transmission Studies; Stakeholder Input

Upon receipt of a request for a LTTS from NESCOE, the ISO will post the request on the ISO's website and NESCOE will present the study request at an upcoming PAC meeting. NESCOE will then provide the ISO with written confirmation of the specific scenarios to be analyzed in the study, together with the specific information to facilitate the conduct of the study, including, but not limited to: assumptions, types and location of new resource development, location of new loads and load serving stations, and injection points or geographic zones. The ISO will then develop a scope of work that may be performed, and post on the ISO's website³⁶ the LTTS's proposed scope of work, associated parameters, and assumptions. The scope will be discussed at a PAC meeting in order to solicit stakeholder input on the study's scope, parameters, and assumptions. Members of the PAC shall direct all such input related to the LTTS's scope, parameters, and assumptions to the ISO for consideration by the ISO and NESCOE, as applicable. Depending on the scope and objectives of a LTTS request, the ISO may request information to support consideration of new loads in the study. The ISO will provide the final scope of work for the LTTS to NESCOE for confirmation, and once written confirmation is received, the ISO will post the final scope of work on the ISO's website.

³⁶ https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies

4.3 Conduct of the Longer-Term Transmission Study; Follow-On Studies; Stakeholder Input

The ISO, in consultation with NESCOE, will perform the LTTS, supplemented by third-party consultants as necessary. The ISO may ask Participating Transmission Owners or PAC members with special expertise to provide technical support or assist in the performance of the study. The study will consist of transmission system analysis; such as, steady-state thermal and voltage, stability, and short circuit, to be performed under the conditions specified in the confirmed scope of work. If the ISO identifies a need to deviate from the final scope of work, the ISO will consult with NESCOE prior to incorporating the change. Once NESCOE provides written confirmation of the updated scope of work, the ISO will notify the Planning Advisory Committee of any changes to the scope of work. The study will assess the ability of the PTF to meet applicable planning criteria under the provided conditions.

The ISO will post on the ISO's website the results of the LTTS, which will be discussed at a PAC meeting. Comments related to the LTTS results should be submitted to PACMatters@iso-ne.com (PACMatters) for consideration by the ISO and NESCOE, as applicable.

The ISO, in consultation with NESCOE, will prepare a LTTS report and post it on the ISO's webpage.³⁷ The report will identify the overview of transmission system limitations and the high-level concepts of transmission infrastructure and, if requested, associated cost estimates, required to solve the longer-term issues identified in the study based on the state-identified scenarios and timeframe. Comments submitted to PACMatters within the comment period will be posted on ISO-NE's website, along with ISO-NE's and/or NESCOE's response, as applicable, to such correspondence.

After the completion of a LTTS and issuance of the LTTS report, NESCOE may submit a written request for the ISO to perform follow-on studies based on the results of the LTTS. The request shall provide the ISO specific scenarios to be analyzed in the follow-on study, together with specific information to facilitate the conduct of the study, including, but not limited to scope, parameters and assumptions. The ISO will post the request for a follow-on study on the ISO's website and a meeting of the Planning Advisory Committee will be held promptly thereafter for NESCOE to present the follow-on study request. NESCOE will then provide the ISO written confirmation of the specific scenarios to be analyzed in the follow-on study, together with the specific information to facilitate the conduct of the study, including, but not limited to scope, parameters and assumptions.

The ISO will then develop a draft scope of work and post it on the ISO's website. A meeting of the PAC will be held promptly thereafter in order to solicit stakeholder input on the study's

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³⁷ https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies

scope. Members of the PAC shall direct comments to PACMatters within the comment period. These comments will be posted on ISO-NE's website, along with ISO-NE's and/or NESCOE's response, as applicable. The ISO will provide the final scope of work for the follow-on study to NESCOE for confirmation, and once written confirmation is received, will post the final scope of work on the ISO's website and proceed with performing the follow-on study.

After completion of the follow-on study, the results will be posted on the ISO's website and a meeting of the PAC will be held promptly thereafter in order to solicit input on the results. Such input shall be directed to the ISO (via PACMatters) for consideration by NESCOE and the ISO, as applicable. The ISO will prepare a follow-on study report, as needed, and post it on the ISO's website.

4.4 Competitive Solution Process for Longer-Term Transmission Upgrades, Identification of Longer-Term Needs; Request for Proposal Determination

At the request of NESCOE, the ISO will consult with and provide technical support to NESCOE on possible longer-term needs that may be addressed through one or more request for proposals (RFPs) in connection with a LTTS or a follow-on study. The ISO may identify for NESCOE's consideration known non-time-sensitive reliability or market efficiency needs that could be combined with longer-term needs in a RFP(s). Determination of which potential needs will be included in a RFP(s) and whether to move forward with such a request(s) is that of NESCOE. If the ISO receives from NESCOE a written list identifying the specific needs that NESCOE may be interested in including in one or more potential request for proposal(s), the ISO will post the list on the ISO's website³⁸. A meeting of the PAC will be held promptly thereafter for NESCOE to present the needs identified in its written list. Members of the PAC shall direct all comments related to the NESCOE-identified needs to the ISO for consideration by NESCOE. Such input shall be directed to the ISO (via PACMatters)

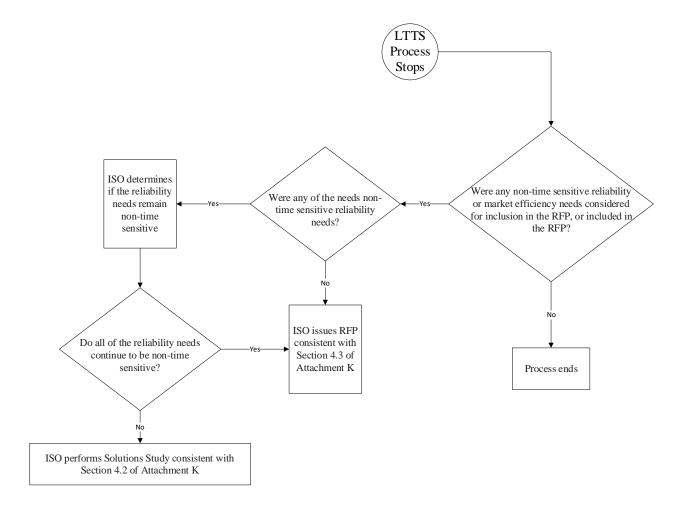
After comments are received from the PAC but prior to submitting another request to initiate a LTTS, NESCOE may submit a written request for the ISO to issue an RFP inviting QTPSs to submit proposals offering a comprehensive solution that addresses the specified needs. If any non-time-sensitive reliability or market efficiency needs are not included in the needs selected by NESCOE to be addressed in an RFP(s), then those non-time-sensitive reliability or market efficiency needs shall be addressed pursuant to Section 2.9 of this document. In the case that non-time sensitive reliability or market efficiency needs are included in the needs selected by NESCOE to be addressed in an RFP(s), they will be addressed under this section of the guide.

³⁸ https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies

If any non-time sensitive reliability or market efficiency needs were included in the needs selected by NESCOE to be addressed in an RFP, and the longer-term process is terminated or a Longer-Term Transmission Upgrade is removed from the RSP Project List then:

- In the case of a market efficiency need, the ISO shall initiate the process under Section 2.9 of this document, and
- In the case of a reliability need, the ISO shall:
 - Assess the reliability need and its time-sensitivity, as appropriate;
 - Determine whether a solution is needed to solve the reliability need in three years or less from the completion of the assessment; and
 - o Initiate the applicable process as described in Sections 2.8 or 2.9, corresponding to Sections 4.2 and 4.3 of Attachment K.

This process is depicted in the following flowchart:



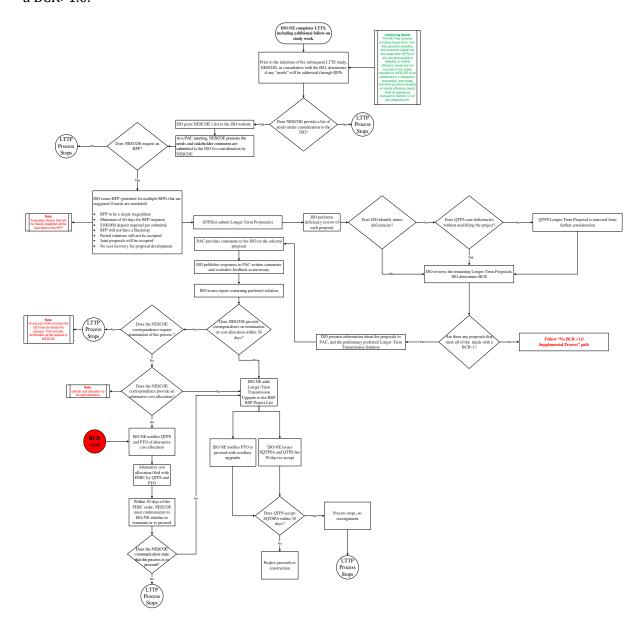
4.5 Overview of Longer-Term Proposals

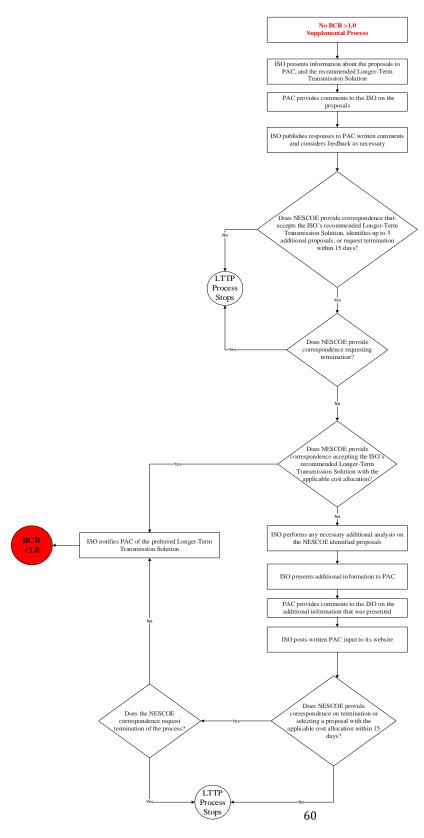
Once NESCOE has submitted a written request for the ISO to issue an RFP(s), the ISO will issue an RFP(s) inviting QTPS(s) to submit proposals. Those entities that have been designated as QTPSs may submit, either individually or jointly, proposals for projects to comprehensively address the identified needs, consistent with the RFP. The general steps for the competitive solution process include:

- 1. The ISO will issue an RFP inviting QTPSs to submit, either individually or jointly, Longer-Term Proposals.
- 2. The ISO will review the Longer-Term Proposals and those that meet the needs and requirements set out in section 4.9 will have their financial benefits calculated to determine the Benefit to Cost ration (BCR)

- 3. The ISO will select a preliminary preferred Longer-Term Transmission Solution if there is a Longer-Term Proposal that meets the identified needs and requirements that has a BCR > 1.0.
 - a. NESCOE may propose an alternative cost allocation methodology
- 4. In no Longer-Term Proposal that meets the needs and identified requirements has a BCR > 1.0, the ISO will not select a preliminary preferred Longer-Term Transmission Solution but will instead recommend a Longer-Term Proposal to PAC and provide an opportunity for PAC to comment.
 - a. Within 15 days of the ISO posting responses to stakeholder comments, NESCOE may:
 - i. Provide no communication and the process terminates,
 - ii. Accept the ISO recommendation, or
 - 1. If NESCOE accepts the ISO recommendation, it becomes the preferred Longer-Term Solution
 - iii. Request further study on up to three Longer-Term Proposals
- 5. If NESCOE requests further study, the ISO will perform any necessary additional analysis on the NESCOE identified proposals, and presents results to PAC and provide an opportunity for PAC to comment.
 - a. Within 15 days after the ISO posts PAC comments, NESCOE may:
 - i. Provide no communication and the process terminates,
 - ii. Provide a preferred Longer-Term Proposal along with alternative cost allocation
- 6. ISO notifies QTPS that its project was selected for development and, as applicable, the ISO notifies the PTO that has corollary upgrades on its existing transmission system required by the preferred Longer-Term Solution to proceed with upgrades in accordance with Schedule 3.09(a) of the Transmission Operating Agreement.
 - a. If NESCOE provides an alternative cost allocation methodology, it is filed with FERC
- 7. ISO and the Selected QTPS(s) execute the SQTPSA.
- 8. ISO monitors project milestones until the project is in-service and complete.

The Longer-Term Transmission Study process is depicted by the following two flowcharts. The first is when a BCR > 1.0 is met, and the second is the supplemental process with a BCR is < 1.0. The red circles indicate where the BCR < 1.0 process is introduced back into the main process of a BCR>1.0.





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4.6 Public Notification

The ISO will publicly post on its website an RFP inviting QTPS(s) to submit a Longer-Term Proposal offering a comprehensive solution that addresses all the needs identified in the request. The RFP will indicate that a QTPS may submit an individual or joint Longer-Term Proposal(s). In the case where a joint proposal is submitted, all parties must be QTPSs. The RFP will be published to the ISO webpage under Competitive Transmission Projects³⁹ and an email notification will be sent to all members of the PAC and all QTPSs. The RFP will include a submittal deadline for all Longer-Term Proposals. Additionally, once the RFP is published in RFP360, the web-based application that the ISO uses for administration of the RFP, all QTPSs will automatically receive an email notification. The public notification will include a submittal deadline for all Longer-Term Proposals.

4.7 Longer-Term Proposals

A QTPS may, individually or jointly, submit a Longer-Term Proposal, in response to an RFP that will address all of the identified needs. A QTPS's Longer-Term Proposal may include an upgrade(s) located on or connected to a PTO's existing transmission system where the QTPS is not the PTO for the existing system element(s) (corollary upgrades). In such cases, the QTPS's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the QTPS as part of its response to the request for proposal. The QTPS is not required to procure agreements with the PTO for implementation of such corollary upgrades as the PTO is required to implement the corollary upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process.

QTPSs shall identify any LSP projects that will require coordination with their proposals.

As part of a Longer-Term Proposal a project shall not alter a PTO's use and control of existing right of way. The ISO Tariff does not require a PTO relinquish any of its rights of way in order to permit a QTPS to develop, construct or own a project.

4.8 Requirements for a Longer-Term Proposals

With each Longer-Term Proposal, the submitting QTPS must include a \$100,000 study deposit per submitted proposal. The study deposit will be applied towards the costs incurred by the ISO and its consultants associated with the study of the Longer-Term Proposal.

A Longer-Term Proposal shall be submitted by the deadline specified in the RFP, which will be no less than 60 days from posting the RFP.

The following information must be provided as part of the Longer-Term Proposal or the ISO may reject the proposal for being insufficient or not adequately supported:

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³⁹ https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission

- i. detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing transmission system;
- ii. detailed explanation of how the proposed solution addresses the identified need(s);
- iii. list of required major Federal, State and local permits
- iv. proposed schedule, including key high-level milestones, for development, siting,
 procurement of real estate rights, permitting, construction and completion of the
 proposed solution;
- v. 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;
- vi. description of the authority the QTPS(s) has to acquire necessary rights of way;
- vii. experience of the QTPS(s) in acquiring rights of way;
- viii. description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the proposed solution and their respective duration, and possible constraints;
 - ix. detailed cost component itemization and life-cycle cost, including cost containment or cost cap measures;
 - x. description of the financing being used;
 - xi. design and equipment standards to be used:
- xii. detailed explanation of project feasibility and potential constraints and challenges;
- xiii. description of the means by which the QTPS(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- xiv. detailed explanation of potential future expandability.

The ISO may cancel the RFP at any time. Cancellation may be due, but is not limited to, new or different assumptions which may change or eliminate the identified needs. The ISO shall cancel an RFP if requested to do so in a written NESCOE communication.

4.9 ISO Review of Longer-Term Proposals

Upon receipt of Longer-Term Proposal(s), the ISO shall perform a review of each proposal to 62

determine whether the proposal:

- i. Provides sufficient data and that the data is of sufficient quality to satisfy Section 4.8 above;
- ii. Satisfies the needs identified in the RFP;
- iii. 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
- iv. Is 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 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.

For each Longer-Term Proposal that satisfies the criteria specified above, the ISO shall develop an independent capital cost estimate, using a consistent capital cost estimating methodology. Longer-Term Proposals that do not adequately meet the above criteria will be rejected.

If the ISO identifies any minor deficiencies in the information provided as part of the Longer-Term Proposal, the ISO will:

- Notify the QTPS(s) and provide an opportunity for the sponsor to cure the deficiencies within the timeframe specified by the ISO.
- Reject a Longer-Term Proposal if:
 - Clarifications are not deemed to be adequate or are not received in the specified timeframe.
 - The proposal is materially changed or is new.

Longer-Term Proposals that are deemed to have acceptable clarifications will continue to be evaluated.

4.10 Identification and Reporting of Preliminary Preferred Longer-Term Transmission Solution

The ISO will identify the Longer-Term Transmission Solution that offers the best combination of electrical performance, cost, future system expandability and feasibility that comprehensively addresses all of the needs in the timeframes specified in the RFP(s) and has a benefit to cost ratio greater than 1.0 as the preliminary preferred Longer-Term Transmission Solution in response to each request for proposal.

The ISO will consider several factors during the evaluation process for identification of the preliminary preferred Longer-Term Transmission Solution. These factors may include, but are not limited to, the following which are listed in no particular order:

- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance
 - Consideration of the electrical performance of the system. Performance may consider items such as voltage margin, percentage of equipment ratings, angular swings, potential significant adverse impacts on other facilities
- Cost cap or cost containment provisions
 - Evaluation may consider a number of different scenarios to understand the exposure to a cost increase.
- In-service date of the project or portion(s) thereof;
- Project constructability
 - This evaluation factor will only be used in the event that aspects related to the ability to construct the project do not fit into other categories.
- Generation and transmission facility outages required during construction;
 - The outages to be taken into consideration are transmission and generation outages. Evaluation will consider the impact on system operability during the required outages and may also consider other metrics such as the impact on production cost.
- Extreme contingency (EC) performance
 - Consideration of ECs listed in NERC TPL-001 and NPCC Directory 1. Typically, the evaluation will be related to the loss of a right-of-way (including line crossings), loss of substation, and three phase stuck breakers. This evaluation factor will not only consider existing ECs, but any new ECs that are created by the project.
- Operational impacts;
 - Consideration of required operator intervention necessary as system conditions change, possibly through a load cycle or due to different generation dispatches. Concerns related to limitations on system maintenance may also be considered.
- Incremental costs for potential resource retirements;
 - Consideration of incremental transmission needed to address potential resource retirements. The RFP may specify some retirements of specific interest; however, others may be considered depending on the proposal. As an example, when evaluating an HVDC line, what if a resource on the sending end retires?
- Interface impacts;
 - Consideration of the increase in transfer capability across an interface(s).
 Proposals that cause a decrease in transfer capability are not acceptable since they would not receive PPA approval.
- Future expandability;
- Consistency with Good Utility Practice;

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- Potential siting/permitting issues or delays;
- Environmental impact;
- Design standards
 - Consideration of the design standards being used. A project may be using more robust design standards than another. Some examples are ice-loading, wind speed, and elevation above flood levels.
- Impact on NPCC Bulk Power System (BPS) classification; and
 - Consideration of whether the project will cause additional stations to be classified as BPS and also if the project will no longer be classified as BPS. This will help to understand the risk of additional cost related to the BPS classification change that would emerge during the PPA process and the potential for additional criteria violations based on NPCC Directory 1 being applied to the newly identified BPS facilities.
- Qualified Transmission Project Sponsor(s) capabilities

The ISO will determine the financial benefits associated with Longer-Term Proposals that meet the needs identified in the RFP(s) and are competitive in terms of electrical performance, cost, future system expandability and feasibility. These financial benefits will consider factors that include, but are not limited to, the following which are listed in no particular order:

- Production cost and congestion savings;
- Avoided capital cost of local resources needed to serve demand;
- Avoided transmission investment;
- Reduction in losses; and
- Reduction in expected unserved energy

To be eligible for consideration as the preliminary preferred Longer-Term Transmission Solution, the Longer-Term Proposals must provide a benefit-to-cost ratio (BCR) of greater than 1.0. A Longer-Term Proposal(s) with a BCR of 1.0 or less shall not be eligible for consideration as the preliminary preferred Longer-Term Transmission Solution. The BCR shall equal financial benefits divided by project costs. For the purpose of this calculation, financial benefits will be set equal to the present value of all financially quantifiable benefits provided by the project projected for the first 20 years of the project's life and project costs will be set equal to the present value of the annual revenue requirements projected for the first 20 years of the project's life.

The ISO will report the preliminary preferred Longer-Term Transmission Solution to the PAC. Members of the PAC may provide comments, during the specified comment period, to the ISO on the preliminary preferred Longer-Term Transmission Solution.

4.11 ISO Selection of Preferred Longer-Term Transmission Solution

Following receipt of stakeholder input, the ISO will identify the preferred Longer-Term Transmission Solution, together with an overview of why the solution is preferred, in a report

and post that report on the ISO's website⁴⁰. The ISO will select the project that meets the conditions specified in Section 4.10 above. Within 30 days of the ISO's posting of the report identifying the preferred Longer-Term Transmission Solution, NESCOE may submit to the ISO a written communication:

- (a) requesting that the ISO terminate the process, or
- (b) requesting that the ISO continue the process, but specifying an alternative allocation for the recovery of the incremental costs to address longer-term needs beyond those necessary to address any reliability or economic needs included in the longer-term request for proposal(s).

If the ISO does not receive a written communication requesting that the ISO terminate the process, the ISO will proceed in accordance with Section 4.13 of this guide, which shall apply solely to Longer-Term Proposals that meet the greater than 1.0 BCR threshold. The ISO shall terminate the process if requested to do so in the written NESCOE communication.

4.12 ISO Reporting Where No Longer-Term Proposal Meets the Greater than **1.0** Benefit-to-Cost Ratio Threshold; NESCOE Response

In the event that no Longer-Term Proposal meets the greater than 1.0 BCR threshold, the ISO will present its findings to the PAC. The ISO will not identify a preliminary preferred Longer-Term Transmission Solution, but will make a recommendation on a Longer-Term Proposal. Members of the Planning Advisory Committee may provide comments on its findings, and the ISO will provide and post on its website responses to written comments.

If, after considering stakeholder input, the ISO determines that no Longer-Term Proposal meets the BCR threshold, the ISO will cancel the request for proposal after the 15th day from the posting of the ISO's responses on the website unless the ISO received a communication from NESCOE that:

(a) Accepts the ISO recommended Longer-Term Proposal and identifies the New England states, individually or jointly, that have agreed to voluntarily fund the costs of that Longer-Term Proposal in excess of those eligible for treatment as Regional Benefit Upgrades, or (b) Identifies up to three Longer-Term Proposals for which NESCOE seeks further analysis.

If the communication from NESCOE accepts the ISO-recommended Longer-Term Proposal, this proposal becomes the preferred Longer-Term Solution and the ISO will proceed in accordance with Section 4.15 of this document.,

If NESCOE identifies Longer-Term Proposals for further analysis, the ISO will perform further analysis of these proposals, present its findings to the Planning Advisory Committee for input, and post that input on its website. A Longer-Term Proposal is eligible for NESCOE's identification as a preferred Longer-Term Proposal if the ISO, at its sole discretion, has determined that it addresses all the needs in the timeframes specified in the RPF and is viable.

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⁴⁰ https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies

The ISO will cancel the request for proposal after 15 days from posting the Planning Advisory Committee's input, unless the ISO receives a written communication from NESCOE identifying:

- A preferred Longer-Term Proposal,
- The New England states, individually or jointly, that have agreed to voluntarily fund the
 costs of that Longer-Term Proposal in excess of those eligible for treatment as Regional
 Benefit Upgrades, and
- The manner in which those excess costs shall be allocated among the states identified in the communication, in which case, the ISO will proceed in accordance with Section 4.15 of this document.

4.13 Inclusion of Longer-Term Transmission Upgrade in the Regional System Plan and RSP Project List Where the BCR > 1.0 is Met

4.13.1 Where Default Cost Allocation is Chosen

If the ISO does not receive a written NESCOE communication requesting that the ISO terminate the process or providing an alternative cost allocation within the 30-day period specified in Section 4.11, the ISO will notify the QTPS that proposed the preferred LTTS that its project has been selected for development, and include the project as a Longer-Term Transmission Upgrade in the Regional System Plan or RSP Project List and should proceed in accordance with Section 4.14.1 of this document. The preferred LTTS may include an upgrade(s) located on or connected to a PTO's existing transmission system where the QTPS 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 Longer-Term Transmission Solution to proceed in accordance with Schedule 3.09(a) of the TOA.

4.13.2 Where an Alternative Cost Allocation is Chosen

If the ISO receives a written NESCOE communication providing an alternative cost allocation pursuant to Section 4.11 of this document, the ISO will notify the QTPS that proposed the preferred LTTS that its project has been selected for development and the PTO that has upgrades required by the preferred LTTS and provide them the written NESCOE communication reflecting the requested alternative cost allocation. In the case where the ISO notifies the PTO that has upgrades required by the preferred LTTS to proceed in accordance with Schedule 3.09(a) of the TOA, any prudently incurred PTO costs associated with a filing to implement the cost allocation requested by NESCOE will be recovered by the applicable PTO in accordance with Attachment F of the OATT.

Within 30 days of the Commission's order addressing the alternative cost allocation, NESCOE will provide the ISO a communication specifying whether the process should proceed in accordance with Section 4.14.2 of this document or terminate. If the written NESCOE communication provides for the process to proceed, then the ISO will notify the Qualified Transmission Project Sponsor and PTO and include the project as a Longer-Term Transmission Upgrade in the Regional System Plan or RSP Project List. If the written NESCOE communication requests termination of the process, the ISO shall terminate the process.

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4.14 Execution of Selected Qualified Transmission Project Sponsor Agreement BCR > 1.0

4.14.1 Default Cost Allocation

If the ISO does not receive a written NESCOE communication requesting that the ISO terminate the process or providing an alternative cost allocation pursuant to Section 4.11 of this document, within 30 days of receiving notification pursuant to Section 4.13.1 of this document, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT SQTSPA). Within 30 days of receiving notification pursuant to Section 4.13.1 of this document, each Qualified Transmission Project Sponsor that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of a SQTPSA.

4.14.2 Alternative Cost Allocation

If the ISO receives a written NESCOE communication providing an alternative cost allocation pursuant to Section 4.13.2 of this document, within 30 days of the ISO's notification to the Qualified Transmission Project Sponsor that NESCOE has elected to proceed, the QTPS shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of the SQTPSA. Within 30 days of the ISO's notification to the QTPS that NESCOE has elected to proceed, each QTPS that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of a SQTSPA

QTPS(s) whose projects are listed on the RSP Project List and have executed the SQTPSA shall be entitled to recover, pursuant to the rates and appropriate financial arrangements set forth in the Tariff and, as applicable, the TOA and NTDOA, all prudently incurred cost associated with developing the Longer-Term Transmission Upgrade subsequent to executing the SQTPSA.

PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a Longer-Term Transmission Solution proposed by any other QTPS. Notwithstanding the foregoing, a PTO is not precluded from recovering, pursuant to the applicable rates and appropriate financial arrangements set forth in the Tariff and the TOA, all prudently incurred costs associated with meeting its obligations to plan and maintain its Transmission Facilities as defined in Section 2.01 of the TOA.

4.15 Inclusion of Longer-Term Transmission Upgrade in the Regional System Plan and RSP Project List; Where the BCR > 1.0 Threshold has not been met

Upon receipt of a written NESCOE communication identifying a preferred Longer-Term Proposal pursuant to Section 4.12 of this document, the ISO will notify the QTPS that proposed

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the Longer-Term Proposal that its project has been selected for development as the preferred Longer-Term Transmission Solution and the PTO that has upgrades required by the preferred Longer-Term Transmission Solution, and provide them the written NESCOE communication identifying the New England states that have voluntarily agreed to fund costs in excess of those eligible for treatment as Regional Benefit Upgrades pursuant to Schedule 12 of the OATT and the agreed-to allocation for the excess costs. In the case where the ISO notifies the PTO that has upgrades required by the preferred Longer-Term Transmission Solution to proceed in accordance with Schedule 3.09(a) of the TOA, any prudently incurred PTO costs associated with a filing to implement the cost allocation requested by NESCOE will be recovered by the applicable PTO in accordance with Attachment F of the OATT.

Within 30 days of the Commission's order addressing the cost allocation, NESCOE will provide the ISO a communication specifying whether the process should proceed in accordance with Section 4.13.2 or terminate. If the written NESCOE communication provides for the process to proceed, then the ISO will notify the QTPS and PTO and include the project as a Longer-Term Transmission Upgrade in the Regional System Plan or RSP Project List. If the written NESCOE communication requests termination of the process, the ISO shall terminate the process.

4.16 Execution of Selected Qualified Transmission Project Sponsor Agreement; BCR≤1.0

Within 30 days of the ISO's notification to the QTPS that NESCOE has elected to proceed, the QTPS shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of the SQTPSA. Similarly, within 30 days of the ISO's notification to the QTPS that NESCOE has elected to proceed, each QTPS that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Longer-Term Transmission Solution by execution of a SQTPSA.

QTPS(s) whose projects are listed on the RSP Project List and have executed the SQTPSA shall be entitled to recover, pursuant to the rates and appropriate financial arrangements set forth in the Tariff and, as applicable, the TOA and NTDOA, all prudently incurred cost associated with developing the Longer-Term Transmission Upgrade subsequent to executing the SQTPSA.

PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a Longer-Term Transmission Solution proposed by any other Qualified Transmission Project Sponsor.

4.17 Failure to Proceed; Applicable to all Long-Term Transmission Upgrade Projects

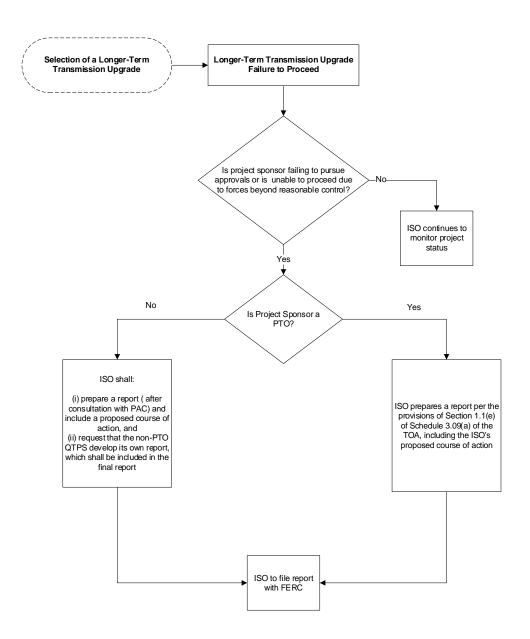
This section is applicable for all selected Longer-Term Transmission Solutions, independent of the BCR. If the ISO finds that a Qualified Transmission Project Sponsor is failing to pursue approvals or construction in a reasonably diligent fashion, or that one or more of the Qualified Transmission Project Sponsors is unable to proceed with the project due to forces beyond its reasonable control, the ISO shall, after consultation with the Planning Advisory Committee:

- Prepare a report including a proposed course of action.
- Request the non-PTO QTPS to prepare a report explaining why they were unable to complete the project.
- File the report, including the report from the non-PTO QTPS, with the FERC including the ISO's proposed course of action.

If the QTPS that is failing or unable to proceed is a PTO the ISO shall:

- Prepare a report consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the TOA including a proposed course of action after consultation with the PAC
- File the report, including proposed course of action, with the FERC.

The following flowchart depicts this process:



Section 5 Description of Interregional Coordination

5.1 Interregional Coordination for ISO, NYISO and PJM

As described in Section 7 to the Northeastern ISO/TRO Planning Coordination Protocol⁴¹ the Joint ISO/RTO Planning Committee (JIPC) will review regional needs and solutions identified as part of the regional planning process of the ISO, NYISO and PJM to identify, with Interregional Planning Stakeholder Advisory Committee (IPSAC) input, if an Interregional Transmission Project (ITP) may potentially meet the regional needs more efficiently or cost-effectively than regional transmission projects. All PAC members shall be considered IPSAC members for this purpose. If it is determined that an ITP may be a solution to identified regional needs the JIPC will coordinate studies deemed necessary in order to allow effective consideration by the regions of a proposed ITP in comparison to a regional transmission solution. Any stakeholder may propose an ITP (or project concept) that may be more efficient or cost-effective than a regional transmission solution for evaluation under Section 2.8.1, 2.9.1 and 3.1.1 of this guide (Sections 4.2, 4.3 and 4A of Attachment K). This proposal may be submitted as a Phase One Proposal or a Stage One Proposal in response to a publicly issued RFP (Sections 2.9 and 3.1), or in writing to PACMatters@iso-ne.com as an alternative during a Solutions Study (section 2.8).

Section 6 Regional System Plan

6.1 Description of the Regional System Plan

The ISO publishes the Regional System Plan (RSP) on a biannual basis. This document is vetted with the PAC and is based on periodic comprehensive assessments of the PTF system-wide needs to maintain the reliability of the New England Transmission System while accounting for market efficiencies, economic, environmental and other considerations. The ISO updates the RSP with the results of ongoing Needs Assessments, Solutions Studies and competitive solution process. In addition, the RSP accounts for projected improvements to the PTF that are needed to maintain system reliability and the operation of efficient markets. Further, the RSP must specify the physical characteristics of the physical solutions that can meet the needs defined in the Needs Assessments and include information on market responses that can address them. The RSP also provides sufficient information to allow Market Participants to assess the quantity, general location, operating characteristics and required availability criteria of the type of incremental supply or demand-side resource, or merchant transmission project that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission projects. The provision of this type of information is evolving and has included approaches such as providing critical load levels at which problems arise and providing

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⁴¹ https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/othr/ipsac/rto_plan_prot/planning_protocol.pdf

preliminary identification of conceptual locations for market resources which can solve problems and serve as potential market inputs.

6.2 RSP Project List

The RSP Project List includes information about Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade, Public Policy Transmission Upgrade, and Longer-Term Transmission Upgrades project costs and changes to these project costs over time. Further detail on estimate ranges can be found in Attachment D to ISO Planning Procedure No. 4. The following are the classification of projects that are listed in the RSP Project List⁴²:

- A "Proposed" project is placed on the RSP Project List once the project has been identified as a preferred transmission solution through the Solutions Study process or as the selected Stage Two Solution in the competitive solution process. A "Proposed" project has a cost estimate that is at least in the range of -25% to +50%. A Public Policy Project will be considered "Proposed" once it is placed on the RSP Project List.
- A "Planned" project will only be placed on the RSP Project List once the project has
 met the requirements for a "Proposed" project and the Tariff Section I.3.9 approval
 has been received, if required. The cost estimate for a "Planned" project will
 increase in accuracy to at least +/-25% as detailed engineering progresses. A
 "Planned" project is still subject to a Schedule 12C review for Transmission Cost
 Allocation.
- An "Under Construction" project is a Transmission Upgrade that has received the approvals required under the Tariff and engineering and construction is underway.
- An "In Service" project is one that has been placed into operation. Note: A project may be cancelled if it is deemed no longer needed.

An Elective Transmission Upgrade (ETU) will be included on the RSP Project List without a Needs Assessment.

Asset Condition based projects are not included on the RSP Project List; see section 6.3 for more information.

6.3 Asset Condition Project List

The Asset Condition Project List exists to track cost information for asset condition projects that are being performed by the PTOs. These projects are initiated by asset condition assessments that are performed by the PTOs and not the ISO. Further detail on estimate ranges can be found

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⁴² http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/projects/index.html

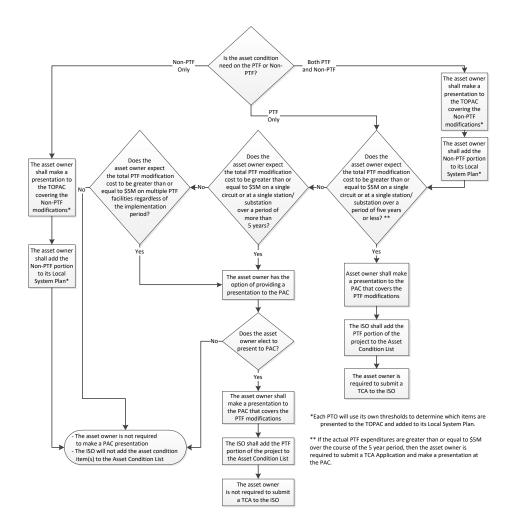
in Attachment D to ISO Planning Procedure No. 4. The following are the classification of projects that are listed in the Asset Condition Project List⁴³:

- A "Concept" Project is under consideration to address an asset condition issue that has been presented to PAC or TOPAC. Costs are not provided
- A "Proposed" Project is where the Asset owner has determined that the solution is appropriate to address the asset condition issue and the solution has been presented to the PAC. Costs must be provided.
- A "Planned" Project has met the requirements of a "Proposed" project and where Tariff Section I.3.9 approval has been received, if required.
- An "Under Construction" has received the approvals required under the Tariff and engineering and construction is underway.
- An "In Service" project is one that has been placed into operation.

An asset condition project expected to have a PTF cost of greater than or equal to \$5M on an individual line or at a single station/substation over a period of five years or less shall be presented to the PAC and placed on the Asset Condition Project List. For asset condition projects that have a mix of PTF and non-PTF costs, the determining threshold is based on the PTF cost of the project. In addition, an asset owner may choose to present an asset condition project to the PAC that are only greater than \$5M when combined across multiple facilities or that span a period of more than 5 years. In such cases, the asset condition project will also be added to the Asset Condition Project List.

The flowchart below provides guidance on the handling of an asset condition need. In cases when the asset owner makes a PAC presentation to describe the project that solves an asset condition need, the project will be added to the Asset Condition Project List at the next Asset Condition Project List update. After the project is presented to the PAC, the asset owner will be responsible to submit a TCA for the project following the procedures outlined in Planning Procedure No. 4 Attachment G.

⁴³ http://www.iso-ne.com/system-planning/system-plans-studies/rsp



6.4 Inclusion and Update of Projects in the RSP Project List and Asset Condition Project List

The RSP Project List and Asset Condition Project List (Project Lists) are updated periodically, typically three times per calendar year. Updates are usually given to the PAC in March, June and October. The Project Lists and updates are posted on the ISO website.⁴⁴ ISO asks the PTOs and QTPSs for updated information on the Project Lists approximately two months before the posting date. The PTOs/QTPSs are expected to provide the updated information back to the ISO approximately one month prior to the posting date. New projects are added during the periodic updates.

⁴⁴ http://www.iso-ne.com/system-planning/system-plans-studies/rsp

In cases where the PTO or QTPS identifies that PTF cost of a project^{45,46} on the Project Lists has increased more than 50 percent, and the increase is \$5M or greater, from the most recent presentation made to PAC⁴⁷, the applicable PTO/QTPS will present the updated cost information to the PAC. This presentation will include an explanation as to why the cost has increased from the previously presented estimate. This presentation must be made prior to the month in which an update to the Project Lists is scheduled for the change to be reflected in either of the Project Lists. As an example, if the updates to the Project Lists are schedule for October, the PTO/QTPS presentation regarding changes in cost estimates must be discussed at PAC by September for inclusion in the October Project Lists. In addition, the ISO may request that the PTO/QTPS provide a presentation to the PAC when there are significant changes in project scope or when there is an issue that is expected to be particularly noteworthy to the PAC.

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⁴⁵ The PTF costs for Resource interconnection upgrades and Elective Transmission Upgrades are not included on the RSP Project List and there is no requirement to provide a presentation to PAC for any changes to the costs associated with these projects.

⁴⁶ For the purpose of Section 6.4, "project" corresponds to an individual Project ID on the RSP Project List or an individual Asset Condition ID on the Asset Condition Project List.

⁴⁷ Changes in cost provided during ISO New England's periodic presentations for updates to the RSP Project List and Asset Condition Project List do not qualify as "the most recent presentation made to PAC."

Section 7

Planning Advisory Committee Process

7.1 Role of the PAC

The regional system planning process in New England is open and transparent and reflects advisory input from regional stakeholders, particularly members of the PAC, according to the requirements specified in the Tariff and the planning principles described in FERC Order 890. The PAC is open to all parties interested in regional system planning activities in New England subject to the Critical Energy Infrastructure Information (CEII) policy.

The Planning Advisory Committee may provide input and feedback to the ISO concerning the regional system planning process, development of the RSP, and updates to the RSP Project list. Specifically, the Planning Advisory Committee serves to review and comment on:

- Development of the RSP.
- Assumptions for Studies.
- Results of Needs Assessments, Solutions Studies and solutions developed through the competitive solution process.
- Potential market responses to the needs identified by the ISO in a Needs Assessment or the RSP.
- Public Policy Transmission Studies, including the criteria and assumptions for such studies along with Public Policy Solicitations.
- Longer-Term Transmission Studies, including review of study's scope, parameters, assumptions and results for such studies, and solutions developed through the competitive solution process.

The PAC, with assistance of and in coordination with the ISO, serves also to identify and prioritize requests for Economic Studies to be performed by the ISO, and provides input and feedback to the ISO concerning the conduct of Economic Studies, including criteria and assumptions for such studies.

Based on input and feedback from PAC to the ISO, the ISO refers to the appropriate NEPOOL technical committees, including but not limited to, the Markets, Reliability and Transmission Committees, on issues and concerns identified by the PAC for further investigation and consideration.

7.2 Membership

There are no membership requirements to become part of the Planning Advisory Committee. Meetings are open to members of any entity, including State regulators or agencies and NESCOE, subject to the CEII policy. To be added to the Planning Advisory Committee email distribution list, an email address shall be provided to the Secretary of the Committee via pacmatters@iso-ne.com.

7.3 Meeting Notification, Frequency and Materials

Prior to the beginning of the calendar year, the ISO lists on its calendar⁴⁸ the proposed meeting dates of the Planning Advisory Committee for each month of the year. Before each meeting the ISO will provide notification of the meeting agenda, location, format and time to the PAC members via e-mail. Meetings are scheduled at a frequency needed to serve the intent of the Attachment K. The ISO posts materials for Planning Advisory Committee meetings on the Planning Advisory Committee section⁴⁹ on the ISO's website prior to meetings. The materials for the Planning Advisory Committee meetings are made available to the PAC members subject to protections required by confidentiality requirements of the ISO New England Information Policy set forth in Attachment D of the ISO Tariff and CEII policy as further described in Section 2.4(d) of Attachment K.

7.4 CEII Information and Materials

Planning materials determined to be CEII will be posted on the ISO's website. However, access to this material requires stakeholders to possess an ISO-issued digital security certificate. To obtain access to planning-related materials determined to be CEII, the entity seeking to obtain such access must contact the ISO's Market Support Services department at 413-540-4220 or by e-mail, AskISO@iso-ne.com. Authorized Market Participants or their representatives, such as consultants, are bound by the ISO New England Information Policy and will be able to access CEII materials through the ISO's website. State and federal governmental agency employees and their consultants will be able to access such materials through the ISO's website upon submittal of a signed non-disclosure agreement, which is available on the ISO's website. Personnel of the Electric Reliability Organization, NPCC, other regional transmission organizations or independent system operators, and transmission owners from neighboring regions will be able to access CEII materials pursuant to governing agreements, rules and protocols. All external requests by other persons for planning-related materials determined to be CEII shall be recorded and tracked by ISO's Market Support Services staff. Such requestors will be able to obtain access to CEII documents filed with the Commission pursuant to the Commission's regulations governing access to CEII. To the extent a request seeks access to planning-related material that is not filed with the Commission, such requestor shall comply with the requirements provided in the CEII procedures of the ISO, available on the ISO's website, prior to receiving access to CEII information. Upon compliance with the ISO's CEII procedures, the ISO

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⁴⁸ https://www.iso-ne.com/calendar

⁴⁹ http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/mtrls/index.html

shall grant the request or access to the planning-related CEII document through direct distribution or access to the ISO website. The ISO issues a draft version of the RSP that is listed as CEII because there may be CEII material in the document. The final version of the RSP that is released has been reviewed thoroughly and does not contain any CEII material and therefore does not need to be considered CEII.

7.5 TOPAC/Local System Planning

As described in Section 6 and Appendix 1 to Attachment K, the PAC periodically provides input and feedback to PTO's concerning the development of their Local System Plans (LSP) including Local Public Policy Transmission Upgrades. It has been common practice to extend the PAC meeting to allow the PTO's the time to present their LSP's to any interested member of the PAC. Each PTO will present its respective LSP to the interested members of the PAC for advisory stakeholder input not less than one time per year. Each PTO's LSP will include transmission system plans for Non-Pool Transmission Facilities (Non-PTF) that are not incorporated into the RSP planning process.