

New England Transmission Owner (NETO) Responses to Stakeholder Comments on Asset Condition Process Improvements – PAC Guidelines

Comments from NESCOE¹

Comment 1

Currently, asset condition presentations to the PAC serve as the initial, and often only, publicly available discussion of specific asset condition projects. As such, they should clearly and fully describe 1) the proposed project – the need for the project, costs, alternatives considered – and 2) the rationale for the recommended approach in a way that is understandable for the public. They should also be presented to the PAC at a consistent point in the project development timeline to allow for meaningful dialogue with stakeholders, including time for follow-up presentations as appropriate. While verbal presentation at the PAC offers an opportunity for a more fulsome discussion of these projects, the presentations themselves should contain all the salient information about a project on a stand-alone basis.

NETO Response to Comment 1

The NETOs will make every effort to include all relevant information for projects, as laid out in the presentation guidelines, for all future asset condition project presentations. Additionally, in response to several stakeholder comments regarding presentation timing, cost estimate accuracy and defined stakeholder comment periods, we have developed the following table that addresses those subjects and incorporated it into Section 2 of the revised guidelines:

¹ [Asset Condition Process Improvements – PAC Guidelines, NESCOE, September 15, 2023](#)

		Timing of Presentation	
		At least 6 Months Prior to Start of Major Construction	At Least 3 Months Prior to Start of Major Construction
Anticipated Project Cost	≥\$50M	Initial presentation with: <ul style="list-style-type: none"> • Order of magnitude (+200%/-50%) cost estimates for all solution alternatives Request for written stakeholder comments within 15 days	Update presentation with: <ul style="list-style-type: none"> • Summary of initial presentation • Discussion of project changes since last presentation • Responses to any stakeholder feedback received, including feedback that led to project changes Selection of preferred alternative with Conceptual (+50%/-25%) cost estimate
	\$5M - \$50M	No presentation required	Detailed presentation with: <ul style="list-style-type: none"> • Order Of Magnitude (+200%/-50%) cost estimates for solution alternatives not selected • Selection of preferred alternative with Conceptual (+50%/-25%) cost estimate • Request for written stakeholder comments within 15 days

Comment 2

Terminology: We suggest replacing the term “project drivers” with “needs” throughout the Proposed Guidelines to be consistent with familiar terminology used for other types of assessments (e.g., reliability) and to maintain a clear distinction between needs and solutions.

NETO Response to Comment 2

The NETOs agree with NESCOE’s suggested terminology change and have updated the guidelines accordingly.

Comment 3

Related Efforts: Presentations should make clear whether the project is part of a known or reasonably anticipated larger effort or program. It is also important to identify whether a project is the result of an assessment that may be repeated elsewhere and yield similar results, even if outside of a formal program. This disclosure would provide stakeholders with a sense of whether the recommended project is likely to be standalone or part of a multi-year wave of future similar projects. If a project may be the first of a wave of similar projects, then the NETO should provide a rationale as to why it should advance now prior to understanding the extent and mitigation cost of similar system-wide needs.

NETO Response to Comment 3

When feasible and appropriate, the NETOs will consolidate projects into larger presentations, especially in the case of system-wide replacement/upgrade programs. A recent example of this was Eversource's Laminated Wood Structure (LWS) replacement effort spread over 3 phases.²We have revised the guidelines accordingly.

Comment 4

Project Updates: In cases where a NETO updates the project scope or cost from a prior stakeholder communication, the Proposed Guidelines should include a requirement for the presentation to include a full history of scope, costs incurred to date, and total cost estimate (with accuracy level) changes with each presentation update.

NETO Response to Comment 4

More details have been added to Section 2 of the presentation guidelines to address this. Any information provided on previously presented projects will also be consistent with the re-presentation requirements noted in Section 6.4 of the ISO-NE Transmission Planning Process Guide.

Comment 5

Proposed Guidelines Review and Update: The Proposed Guidelines should be revisited to reflect other substantive changes that flow from the on-going asset condition process improvement discussions, which extend beyond these Proposed Guidelines. NESCOE recommends that the Proposed Guidelines include a placeholder to account for the future creation of an Asset Condition Needs and Solutions Guidance Document, similar to the placeholder reserving Section 3.XII of the Proposed Guidelines for future use if a rightsizing process is developed. Looking further ahead, a regular schedule should be established for the periodic review and update, as necessary, of the Proposed Guidelines.

NETO Response to Comment 5

² LWS replacement effort: [Phase 1](#), [Phase 2](#), [Phase 3](#)

The NETOs agree that the presentation guidelines should be subject to regular review and updates. Language has been added to the introduction noting that the document will be reviewed and updated (if necessary) on an annual basis.

Comment 6

Introduction section: The introduction should identify the purpose of the PAC presentation more broadly than providing “transparency into the drivers and costs of regional transmission projects and affording stakeholders the opportunity to comment on these topics in a public forum.” NESCOE recommends that the NETOs make it clear that the PAC presentation is intended to explain the finding of need for asset condition projects, all alternatives considered, and the rationale for the recommended course of action. The presentation also serves as the primary means of soliciting stakeholder feedback, requests for further information, and/or project adjustments.

NETO Response to Comment 6

The introduction of the guidelines has been revised to better identify the purpose of asset condition project presentations.

Comment 7

General Guidelines section: NESCOE recommends that the Proposed Guidelines include additional timeline guidance for PAC presentations. For stakeholder review to be meaningful, a consistent and predictable review window is important. For example, the Proposed Guidelines should require that the proponent make a presentation available for stakeholder review at least ten (10) days in advance of an applicable PAC meeting in order to be included on the PAC agenda.

NETO Response to Comment 7

To address this and other stakeholder comments regarding presentation timing, the guidelines have been updated with the table noted in the response to NESCOE Comment 1. While presentation materials are provided to ISO New England several weeks in advance of the PAC meeting at which they are presented, ISO-NE typically posts agendas and materials no later than three (3) business days prior to the actual meeting. The NETOs will discuss the feasibility of earlier postings for asset condition-related materials with ISO-NE.

Comment 8

General Guidelines section: The Proposed Guidelines should also specify that a presentation be available at a consistent point in the project development timeline to allow for meaningful incorporation of stakeholder feedback in advance of significant expenditures. This timing should also accommodate the potential need for further stakeholder discussions of the proposed project at subsequent PAC meeting(s). NESCOE suggests 120 days before construction is expected to begin on an asset condition project. If the NETOs or stakeholders prefer another milestone, such as a well-defined and transparent major financial commitment, we would be pleased to hear alternatives to our request.

NETO Response to Comment 8

In response several stakeholder comments regarding presentation timing, we have developed the timing table referenced in NESCOE Comment 1 and incorporated it into the revised guidelines.

Comment 9

General Guidelines section: PAC asset condition project presentations should be broadly accessible to the public. The NETOs should endeavor to avoid including critical electric infrastructure information (CEII). If a NETO determines that a presentation needs to include CEII, a non-CEII version should also be made available.

NETO Response to Comment 9

The NETOs agree that asset condition PAC presentations should be publicly available whenever possible. If a CEII presentation is required, both CEII and redacted public versions of the presentation will be provided to ISO-NE for posting. This is reflected in Section 2 of the revised presentation guidelines.

Comment 10

Project Background section: The presentation should include information related to asset criticality such as the project's NPCC BPS classification, location in the bulk electric system, number of customers and/or megawatts of load served (if applicable).

NETO Response to Comment 10

While the NETOs agree this information would be useful to states and stakeholders, information highlighting system vulnerabilities and criticality of certain assets could also compromise the security of the bulk transmission network. Providing too much information related to asset criticality could cause presentations to be classified as CEII. The guidelines have been revised to suggest that this information be provided where possible, but not to the extent that a presentation would become CEII.

Comment 11

Project Drivers section: This section should be renamed "Project Needs" consistent with our general recommendation above.

NETO Response to Comment 11

The title of Section 3 has been corrected in the revised guidelines.

Comment 12

Project Drivers section: For needs pertaining to technological obsolescence, the presentation should describe the details of the specific issue and provide information on how other utilities with the same or similar equipment are dealing with this same obsolescence issue.

NETO Response to Comment 12

NETOs agree that as much information pertaining to technological obsolescence included in the needs section would be beneficial. Section 3 of the presentation guidelines has been updated to reflect this. A recent example of this would be Eversource's Relay Replacement project³ at the Southington substation.

Comment 13

Project Drivers section: For projects that replace assets that are not yet at the end of their useful life, the presentation should identify what derailed the life expectancy of the assets and whether other NETOs are experiencing similar issues.

NETO Response to Comment 13

NETOs agree that as much information pertaining to unexpected shortening of asset life expectancy included in the needs section would be beneficial. Section 3 of the presentation guidelines has been updated to address this.

Comment 14

Project Drivers section: Representative photos often help stakeholders understand the need for particular projects. However, appropriate context is often equally helpful. For example, when showing pictures of deteriorated structures, NETOs should explain whether the photo is representative of the overall population or a worst-case outlier for the current assessment.

NETO Response to Comment 14

Section 3 of the guidelines has been revised to incorporate this additional detail in photo captions.

Comment 15

Solutions Alternatives section: NESCOE believes that the majority of solution recommendations should be accompanied by alternatives including a cost estimate of each alternative at an appropriate accuracy level given the dollars at stake. Depending on comparative costs between alternatives, it may suffice to limit the resources committed to alternative development to a +200/-50% design level (e.g., desktop assessment) to sufficiently inform decision making. In other cases where alternative costs are similar, it may be necessary to bring both alternatives to the same cost accuracy band.

³ [Relay Replacement project](#)

NETO Response to Comment 15

The NETOs agree to include cost estimates at an appropriate range for alternatives when doing so is necessary to properly compare solution alternatives. As noted in the response to NESCOE Comment 1, Section 2 of the guidelines now includes a table with suggested cost estimate accuracy for all presented solution alternatives.

Comment 16

Feedback and Next Steps section: NESCOE appreciates that the Proposed Guidelines require that responses to stakeholder questions be posted in writing to the ISO-NE PAC webpage. NESCOE recommends that the Proposed Guidelines include a timeline by which NETOs must respond to stakeholder questions and a timeline for posting those responses on the PAC webpage. A 15-day reply period may be appropriate, consistent with the window for stakeholder feedback on PAC presentations.

NETO Response to Comment 16

As noted in the response to NESCOE Comment 1, Section 2 of the guidelines now includes a table with suggested stakeholder comment periods. The NETOs will make reasonable efforts to respond to all comments expeditiously. However, the timeframe needed to respond may vary depending on the number and breadth of comments received. For example, requests to evaluate different project alternatives could require engineering analysis that would extend beyond the suggested 15-day reply period.

Comments from Massachusetts Attorney General⁴

Comment 1⁵

A comprehensive and detailed Guidance Document will also provide a uniform framework within which stakeholders can review and evaluate Asset Condition Projects. This, in turn, will enable stakeholders to provide critical feedback before projects start and facilitate a more robust stakeholder process.

To date, the NETOs have made no commitment to implement this important reform. Moreover, while the NETOs indicate that they will continue to evaluate the proposal, they do not provide a timeframe for reporting back to the Planning Advisory Committee (“PAC”). Therefore, the Massachusetts AGO respectfully requests that the NETOs commit to prioritize the development and implementation of the Asset Condition Needs and Solution Guidance Document and provide a date when they will share a substantive proposal for stakeholder consideration with the PAC.

NETO Response to Comment 1

⁴ [Comments on Letter and Proposed Guidelines for Asset Condition Project Presentations, Massachusetts AGO, September 15, 2023.](#)

⁵ See also September 14, 2023 Letter from New England Consumer Advocates.

The NETOs are committed to creating the Asset Condition Needs and Solution Guidance Document. Per the last update to the PAC, the NETOs expect to provide a progress update on the draft Guidance Document by December 2023.

Comment 2

The NETOs indicate that they have already committed to providing ISO-NE with age-related information for PTF transformers and transmission lines and that they will start publishing most of this information by the end of the year. The NETOs' response appears to recognize that any database must be made publicly available (subject to any CEII limitations) to sufficiently increase transparency into Asset Condition Projects. The NETOs should ensure that any Asset Condition Database resulting from this process is made publicly available through ISO-NE.

NETO Response to Comment 2

An update⁶ regarding the Asset Condition Database was provided at the September PAC and we anticipate having the completed draft database available for stakeholder review in December 2023.

Comment 3

As with the Asset Condition Needs and Solutions Guidance Document, the Massachusetts AGO respectfully requests that the NETOs commit to prioritize the development and implementation of this reform [Asset Condition Database] and provide a date when they will provide the status of their assessment of each of the elements of NESCOE's proposal, and share a substantive proposal for stakeholder consideration with the PAC In addition to expanding the database to include more PTF assets/asset information, it may also be necessary to update this information more frequently than once a year to ensure that it is an up-to-date and useful source of information. For example, the Regional System Plan ("RSP") Project and Asset Condition Project Lists are updated three times a year. Timing the update of the Major PTF Equipment Asset Condition Database with RSP and/or Asset Condition Project List updates may be a more appropriate cadence.

NETO Response to Comment 3

Please see our response to Comment 2 above for details on the Asset Condition Database. As the information within the database will likely not change significantly if updated more than once annually, the current plan is to update it on an annual basis.

Comment 4

The Massachusetts AGO respectfully requests that the NETOs incorporate the following into the Draft Presentation Guidelines:

1. Predictable minimum timelines for posting project presentations to the PAC website for stakeholder review. The Massachusetts AGO suggests that NETOs make presentation materials available at least ten days prior to PAC presentation.

⁶ [Proposed PTF Asset Condition Database Presentation, September 20, 2023](#)

2. Minimum timeline(s) for presentations prior to the start of construction to allow for meaningful review and integration of stakeholder feedback. For example, the Draft Presentation Guidelines could specify that the initial presentation for each project to the PAC should be presented a minimum of six to eight months prior to the start of construction. The minimum timeline should provide adequate time for NETO consideration of stakeholder feedback and NETO response to stakeholder feedback, including subsequent presentations to the PAC prior to the start of construction.
3. A more detailed process for NETO response to stakeholder feedback, including, but not limited to: (1) a timeline for NETOs' written responses to stakeholder comments; and (2) potential factors/criteria the NETOs would consider in determining whether stakeholder feedback warranted additional project presentations to the PAC.
4. The requirement of a second PAC presentation where cost estimates for a project are not at a Conceptual Level (-25%/50%), as detailed in the NETOs' August 16th Proposed Guideline Presentation to the PAC.
5. Remove the section entitled "Preferred Solution – Right-Sizing." As the Draft Presentation Guidelines note, a right-sizing process has not been developed. Thus, the inclusion of a right-sizing section in the Draft Presentation Guidelines is premature. Moreover, as noted above, meaningful discussions around rightsizing cannot take place until substantial reforms to the current Asset Condition Project process are in place. The Massachusetts AGO recognizes that the Draft Presentation Guidelines will likely need to be revisited after more substantive reforms are adopted (e.g., upon adoption and implementation of an Asset Condition Needs and Solution Guidance Document).
6. Provide more detailed memoranda, like Eversource's memorandum regarding the 1704/1722 Underground Cable Replacement Project, as part of initial presentation materials. Detailed memoranda explaining needs, challenges, and solutions for a project would increase stakeholder understanding of projects and enable more informed stakeholder participation and feedback.

NETO Response to Comment 4

In response to this and several other stakeholder comments regarding presentation timing, cost estimate accuracy and stakeholder comment periods, we have developed the table referenced in the NETO response to NESCOE Comment 1 and incorporated it into the revised guidelines.

Regarding the inclusion of a placeholder section for Right-Sizing, while the NETOs recognize that discussions on developing a process to support this have not taken place yet, it was a stated desired goal in NESCOE's original February 2023 letter on the asset condition project process. As such, the guidelines should include a placeholder section that will be expanded when the appropriate time arises.

The NETOs will provide more detailed memoranda on a case-by-case basis if necessary to supplement a PAC presentation and will evaluate whether more specific guidance can be added in future revisions to the Guidelines.

Comments from Kris Pastoriza^{7,8}

Only comments and questions directly regarding the development of asset condition process enhancements are answered here. Eversource has followed up directly with Ms. Pastoriza regarding additional questions that relate specifically to Eversource's line rebuild projects in New Hampshire.

Comment 1

Height and altitude of each existing and proposed structure.

NETO Response to Comment 1

The intent of the presentation guidelines document is to define a presentation outline that provides a sufficient level of detail for a robust discussion on the overall needs and drivers for a specific project at the PAC. In the NETOs' view, the information request in this comment pertains to data that would typically be developed during a state-level siting or permitting proceeding, if relevant to applicable requirements, rather than an assessment of needs and appropriate solutions from an electrical and regional cost perspective.

Comment 2

Pole and conductor inspection reports and any other inspection reports, showing proof of claimed damage, degree of damage, which poles are damaged, and the standards used to determine the need for replacement.

NETO Response to Comment 2

As stated in Section 3 of the presentation guidelines, summary information of pole and inspection reports will be provided, if available, as well as information on relevant accepted industry standards that justify the need for a given project.

Comment 3

Lifecycle costs and Carbon footprint of wood vs. steel structures.

NETO Response to Comment 3

The intent of the presentation guidelines document is to define a presentation outline that provides a sufficient level of detail for a robust discussion on the overall needs and drivers for a specific project at the PAC. The information request in this comment pertains to subject matter that is broader than the presentation of specific projects to stakeholders and is more appropriate for consideration by states in their siting policies and permitting requirements, as may be applicable. Equipment and material

⁷ Letter to PAC and Eversource re X-178 line, Kris Pastoriza , August 23, 2023

⁸ Stakeholder comment to the PAC re Asset Condition Projects Presentation, Kris Pastoriza, August 16, 2023

selection for a specific project is generally outside the jurisdiction of the ISO New England processes, but may be regulated at the state level, if relevant to applicable requirements.

Comment 4

Visual Impact maps (leaf-off) for proposed project.

NETO Response to Comment 4

The intent of the presentation guidelines document is to define a presentation outline that provides a sufficient level of detail for a robust discussion on the overall needs and drivers for a specific project at the PAC. In the NETOs' view, the information request in this comment pertains to data that would typically be developed during a state-level siting or permitting proceeding, if relevant to applicable requirements, rather than in connection with an assessment of needs and appropriate solutions from an electrical and regional cost perspective.

Comment 5

The maximum conductor (ASCR, ACSS and ACCC or equivalent (I. e. C7)) size the existing poles, and the proposed poles at their proposed heights, can carry.

NETO Response to Comment 5

Determining ability of an existing or proposed structure to support a particular conductor requires complex calculations that depend on a myriad of factors, including conductor size, structure heights, span lengths, expected weather, applicable safety standards, and other factors. The NETOs undertake asset condition projects to address known and identified deficiencies with existing transmission facilities, not to expand the capacity of the transmission system. Because of this, the hypothetical maximum size of a conductor that could be supported by a new or proposed tower is not usually calculated, and the information would not serve to provide a good comparison between projects for stakeholders to consider. However, the NETOs may provide this information where appropriate and beneficial for solutions discussions.

Comments from Synapse Energy Economics⁹

Comment 1

More information about cost mitigation measures: Presentations should include more information on what cost mitigation measures transmission owners employ when implementing asset condition projects. This would include identifying what transmission owners do to select low-cost projects from the outset of a project and what steps they take to prevent cost overruns once a project is underway.

⁹[Comments by Synapse on Draft Guidelines For Creation of Asset Condition Project Presentations, Synapse Energy Economics, September 15, 2023](#)

NETO Response to Comment 1

The NETOs will take this comment under consideration as a topic for a future presentation.

Comment 2

Clearer documentation of asset condition issues and expected asset useful life: The Current Guidelines include a section on project drivers, but that section should include additional evidence of asset condition problems. Transmission owners should explain what exactly is wrong with the asset, when the deteriorated condition was first identified, and how the condition was identified and verified. For example, where an asset is experiencing physical deterioration, the transmission owner should identify what functions are being affected, to what level they are affected, clear and up-close photographic evidence, and documentation that demonstrates why an asset requires work on the timeline proposed by the transmission owner. In addition, the Project Background section of asset condition project presentations described in the Draft Guidelines should include the expected useful life of the asset in question upon installation. The Draft Guidelines currently discuss the inclusion of the asset age and installation year in this section.

NETO Response to Comment 2

Section 3 of the revised guidelines has been updated to include range of asset life expectancy, as well as additional detail in photo captions. The proposed Asset Condition Database, which the NETOs have committed to providing in the coming months, will serve as a source of inspection timelines for transmission and substation assets.

Comment 3

The addition of clear timelines and guidelines for Planning Advisory Committee review and feedback and NETO response: We request that transmission owners include in the Draft Guidelines a timeline for bringing asset condition projects before the Planning Advisory Committee that leaves a minimum of six months between the presentation and the expected start of project construction. The Draft Guidelines should also include a clear timeline for transmission owners to respond to stakeholder feedback, ideally such that stakeholders receive responses from transmission owners within fifteen days of the deadline for stakeholder feedback submissions. If a transmission owner's presentation only includes an order of magnitude project cost estimate, the transmission owner should provide a second presentation with more specific cost information to follow up. The Draft Guidelines should also include a follow-up, second presentation on asset condition projects when requested by stakeholders so that the PAC can discuss the project after receiving answers to written questions and feedback. These requirements will ensure that stakeholders receive responses in a timely manner and that they have the opportunity to follow up on important issues. These requirements will also ensure that transmission owners have the runway to incorporate that feedback as they implement their projects.

NETO Response to Comment 3

In response to this and several other stakeholder comments regarding presentation timing, we have developed the timing table referenced in NESCOE's Comment 1 and incorporated it into the revised guidelines.

Comment 4

The addition of a memo providing context about the project for projects exceeding \$50M: Asset condition projects that exceed \$50 million in costs should be required to submit a detailed memorandum in tandem with their presentations to the Planning Advisory Committee. These memoranda should include detailed information on alternative plans considered by the transmission owner, with cost estimates and other relevant details, similar to Eversource's Memorandum Response to NESCOE's July 7, 2023, Letter Regarding the 1704/1722 Underground Cable Replacement Project.

NETO Response to Comment 4

In response to this and several other stakeholder comments regarding presentation timing, we have developed the timing table referenced in NESCOE's Comment 1 and incorporated it into the revised guidelines.

The NETOs will provide more detailed memoranda on a case-by-case basis if necessary to supplement a PAC presentation and will evaluate whether more specific guidance can be added in future revisions to the Guidelines.

Comment 5

We would additionally like to urge the NETOs to commit to adopting two additional reforms: the creation of a Major PTF - Asset Condition database and an Asset Condition Needs and Solutions Guidance Document as called for by NESCOE in its July 14, 2023, letter.

NETO Response to Comment 5

Work has begun on both the Asset Condition database and Guidance Document; per the last update to the PAC, the NETOs expect to provide the first version of the database and a progress update on the draft Guidance Document in December 2023.

Comment 6

Synapse thinks that additional transparency around cost-estimate accuracy would be helpful for stakeholders. We believe it would be valuable to have an annual review of the forecasted and actual costs of asset condition projects completed each year, and ask that the NETOs consider including such a presentation to the PAC.

NETO Response to Comment 6

The NETOs will take this suggestion under consideration for future asset condition project reporting efforts.