



New England States Committee on Electricity

To: New England Transmission Owners (NETOs)
From: NESCOE
Date: July 14, 2023
Subject: Asset Condition Process Improvements – Next Steps
Cc: ISO-NE; Planning Advisory Committee (PAC)

NESCOE values ongoing collaboration with the New England Transmission Owners (NETOs) and ISO-NE to enhance New England’s transmission asset condition project visibility and projections, justification process, project cost accuracy, and, ultimately, solution to right-sizing. As we have previously discussed, the objective is to establish predictable and cost-efficient approaches to inform the NETOs’ ratepayer-funded capital spending on Pool Transmission Facility (PTF) assets, which is significant, unpredictable, and growing. Consumers face these cost increases at the same time that New England transforms the electric grid to accommodate the anticipated rapid increases in both electrification and renewable resource integration.

Since NESCOE requested changes to New England’s asset condition project process and expressed interest in developing a transmission infrastructure right-sizing approach in February 2023, we have appreciated clarifying conversations with the NETOs and ISO-NE. We have also appreciated the preliminary stakeholder feedback at the Planning Advisory Committee (PAC). Both have informed our thinking.

NESCOE requests that the NETOs prioritize executing substance and process improvements to justify and advance asset condition projects in the nearest term. Those process changes will enable a considered dialogue about right-sizing approaches.

The pace and scale of recent asset condition projects demonstrate the time urgency of such reforms. Since NESCOE asked the NETOs for process changes in early 2023, the NETOs have presented to the PAC forty-two (42) asset condition projects totaling over \$1.6 billion.¹ There are now almost \$5 billion in asset condition projects proposed, planned, or under construction.² This represents a nearly 50% increase since February 2023.

¹ ISO-NE. Asset Condition List – June 2023, at <https://www.iso-ne.com/system-planning/system-plans-studies/rsp>. These totals also include the asset condition projects presented at the June 15, 2023, PAC meeting, which are not reflected in the Asset Condition List. See Eversource Laminated Wood Structure Replacement Program Phase III (June 15, 2023), at https://www.iso-ne.com/static-assets/documents/2023/06/a05_2023_06_15_pac_laminated_wood_structure_replacements_phase_3.pdf; Eversource 1704/1722 Underground Cable Rebuild Project (June 15, 2023), at https://www.iso-ne.com/static-assets/documents/2023/06/a04_2023_06_15_1704_1722_underground_cable_rebuild_project.pdf; Eversource Deerfield 345/115 kV Relay Upgrades (June 15, 2023), at https://www.iso-ne.com/static-assets/documents/2023/06/a06_2023_06_15_pac_deerfield_relay_upgrades.pdf.

² *Id.*

Midway through 2023, there is not yet a clear, predictable timeline for ISO-NE, state, and stakeholder review of the NETOs' asset condition projects. For example, of the forty-two (42) projects that the NETOs have presented, four are already under construction and another ten are expected to be in-service by the end of the year.³ As a result, ISO-NE, states, and stakeholders have no time to review the NETOs' proposed project costs in even a cursory way, let alone time to consider cost-effective right-sizing opportunities.

New England states, stakeholders, and electricity customers deserve continuing visibility into the scope, scale, and pace of asset condition project planning and spending. Moreover, such information is a prerequisite to a prudent right-sizing approach.

We outline several proposals below to improve the transparency, predictability, and cost discipline of asset condition projects. As described at greater length in the "Next Steps" section, we recommend that the NETOs:

- 1) develop asset condition project spending plans that include one-, two-, and five-year forecasts
- 2) work with ISO-NE to develop and maintain an asset condition database that will include all information necessary to guide and inform holistic asset condition prioritization and decision-making
- 3) provide a description of how select asset condition projects could support rightsizing
- 4) develop an asset condition and guidance document that will promote a more criteria-based decision-making approach to asset condition projects
- 5) make certain improvements to the process for stakeholder review of proposed asset condition projects

To be clear, the proposed changes are not intended to supplant NETOs' professional judgment or disrupt investment in assets that emerge as at-risk over time. They will instead provide visibility and foresight and build a foundation for a common understanding between ISO-NE, NETOs, states, and stakeholders about the scale, scope, and pace of needed investments.

We urge swift progress on these reforms, which will lay the foundation for a sensible, holistic transmission planning process.

Asset Condition Process Concerns

New England needs consistency and transparency in how it evaluates, prioritizes, and advances asset condition projects. Ratepayers need confidence that the portfolio of PTF asset condition projects that the NETOs advance meet the highest-priority needs across the system, including rightsizing. That is not the case today. Current processes do not result in a uniform approach to asset condition project development across the region, as each transmission owner appears to have different standards and to apply different judgment to their asset condition projects. For example, it appears that the NETOs do not apply consistent standards and judgment in

³ *Id.*

determining the scope of the preferred solution for an entire transmission line (e.g., targeted structure replacement vs. full line rebuild), resulting in different approaches to address essentially the same types of projects with important cost implications. In some cases, there may be little debate on the appropriateness of a full rebuild. In other cases, a more surgical approach may be more appropriate and prudent. The region needs information to allow a holistic view, including consideration of the relative condition of other PTF assets and the cumulative impact on ratepayers.

Specifically, the current asset condition process leaves unclear:

- 1) where the most significant asset condition needs exist across the region
- 2) how much has been completed and how much remains
- 3) the implications for rightsizing
- 4) where the region should prioritize consumer spending on asset condition investment
- 5) the asset condition spending trajectory over the next 10-15 years.

Suggested Asset Condition Project Process Improvements

To address these issues, NESCOE requests that the NETOs develop in the nearest-term a region-wide *Major PTF Equipment – Asset Condition Database* that includes the age and condition of the entire fleet. Such a database should provide a broad and comprehensive view of all major PTF assets' condition. This database, coupled with the asset condition project capital spending plans that NESCOE previously requested, will inform regional asset condition capital investment prioritization and decision-making.

In parallel, NESCOE requests that the NETOs develop a regional *Asset Condition Needs and Solution Guidance Document* for pool-supported cost recovery and that the NETOs work with NESCOE and others to improve the stakeholder process.

NESCOE offers an initial description of, and intent behind, each request below to clarify objectives and advance discussions. NESCOE hopes to collaborate with ISO-NE, the NETOs, and stakeholders to expand and refine these proposals so that the end result is comprehensive, practical, and supports informed asset condition project decision-making.

1. Asset Condition Project Capital Spending Plan

The accelerated pace of asset condition project spending underscores the need for more visibility into longer-term spending projections. NESCOE requests that time be allocated at near-term meetings as follows:

- At the Reliability & Transmission Committee's July 18-19, 2023 meeting to discuss these projections, perhaps as part of the RNS Rate Forecast discussion.
- At the July 25, 2023 PAC meeting to allow for the public presentation of the same material. Indeed, given the level of consumer-funded investment in asset condition projects, it will remain important for consumers to be able to access simply-stated, comprehensive presentations at PAC on a regular basis.

We understand that complete one-, two- and five-year asset condition spending projections may not be available in July. In advance of those projections being made available, we request, at a minimum, a presentation in July that provides: 1) information necessary to understand asset condition spending projections through the end of the year for each Transmission Owner; and 2) an expected timeframe in which the longer-term forecasts will be completed and provided.

2. Major PTF Equipment – Asset Condition Database

a. Database

The database should provide a comprehensive view of all information necessary to guide and inform holistic asset condition prioritization and decision-making. The database should include the following, at minimum:

1. **Major PTF Transmission Assets:** such as transformers, circuit breakers, transmission line structures, conductors, and control houses. Each asset should have identifying characteristics including company, location, age, voltage level and other relevant characteristics (e.g., steel – wood – laminated structures, gas – air – oil insulated, etc.).
2. **Asset Health Score:** scoring should be done in accordance with the Asset Condition Needs and Solutions Guidance Document described below to ensure consistency in health scoring of major PTF assets across all NETOs.
3. **Planned Comprehensive Assessment Schedule:** planned field inspections and condition assessments for each major PTF transmission asset.
4. **Cost Projections (15-year):** including a likely timeframe and cost for all interventions expected to be needed within the next 15 years, initially an order of magnitude cost estimate level will be sufficient, but the accuracy should be progressively refined as projects approach the 5-year horizon.

We do not intend the database to be decisional, to result in a formulaic approach to asset condition replacement investment, or to disrupt investment in assets that emerge as at-risk over time. Rather, it will give ISO-NE, states, and stakeholders appropriate visibility and foresight, which will enhance consideration of the NETOs' judgments and recommended investment choices.

We welcome ISO-NE and stakeholders' input on other potentially useful information to be included in the framework.

b. Process Document for Database Maintenance

To ensure that this database is continually refined and maintained, New England needs a formal process. Ideally, ISO-NE would manage this database to provide visibility to states and stakeholders, with CEII or other confidential information protection as needed, and without the need to interpret the NETOs' data. The database should be populated and maintained in coordination with the *Asset Condition Needs and Solutions Guidance Document* described

below, particularly to ensure consistency in health scoring of the major PTF assets across the NETOs.

c. Roadmap to Database Completion

NESCOE recognizes that some of the information needed to complete this database may take time to gather. We look forward to working with the NETOs to understand which data is readily available and which will take more time.

To advance the discussion and ensure progress from the status quo in the near term, we offer a draft roadmap. We welcome the NETOs', ISO-NE's, and stakeholder feedback or alternatives:

Major PTF Equipment – Asset Condition Database	Proposed Completion
Major PTF Assets	December 31, 2023
Process Document for database maintenance	December 31, 2023
Planned Comprehensive Assessment Schedule	May 1, 2024
Cost Projections (15 year)	May 1, 2024
Asset Health Score	May 1, 2024

3. *Asset Condition Needs and Solution Guidance Document*

An *Asset Condition Needs and Solution Guidance Document* is a critical near-term step to establishing uniform regional cost recovery decision making. The document must be comprehensive and guided by the principle that it will enable more disciplined, criteria-based consideration of, and decision-making about, needs, solutions, and priorities. Such a guidance document would inform decision-making but is not intended to supplant NETOs' professional judgment or disrupt investment in assets that emerge as at-risk over time. However, should a NETO deviate from such guidance for a given project based on that NETO's professional judgment that a different approach should be taken, NESCOE expects that the NETO would provide a detailed justification for such departure. Such a document should also contemplate coordination with a future right-sizing criteria document. NESCOE suggests that this document be developed in parallel with the Major PTF Equipment – Asset Condition Database, with a targeted completion date by the end of 2023.

4. *Asset Condition Stakeholder Process Improvements*

As discussed, the stakeholder process needs improvement. The focus to date has been on how the NETOs share information with the PAC. This focus is appropriate given that the provision of project information to the PAC serves as the initial, and often only, public notification and discussion of such projects, and that PAC is New England's public forum. However, there should also be corresponding changes to other steps in the process, including information provided to NEPOOL's Reliability Committee, which reviews and approves Transmission Cost Applications outside of the public view.

a. Standardize the Format and Information Contained in Asset Condition Project Presentations

NESCOE appreciates the NETOs' initiative to develop guidelines to standardize PAC presentations. We look forward to discussing the draft.

We request that the NETOs develop similar guidelines for presentations to the Reliability Committee. For example, such presentations should reference prior presentations to the PAC and the initial cost estimates and schedules for each project.

b. Establish Clear Timelines to Allow for Stakeholder Review and Feedback

A process with guidelines or requirements for timeframes associated with each step in the asset condition project process will increase visibility and predictability around stakeholder feedback and the NETOs' consideration of it. NESCOE welcomes the NETOs' proposal for a clear stakeholder feedback schedule and process on PAC presentations in their guidance document. There are other changes that could be helpful. For example, a requirement that the NETOs make PAC presentations a minimum number of months prior to the start of construction would provide more time for stakeholder review and subsequent incorporation of stakeholder feedback into project plans as appropriate.

Next Steps

In summary, NESCOE suggests the following asset condition project process improvements:

1. Asset Condition Project Capital Spending Plan

- a. Spending projections through the end of the year for each Transmission Owner
- b. Estimated timeframe in which the longer-term (one-, two-, five-year) forecasts previously requested by NESCOE will be completed and provided

2. Asset Condition Database

- a. Develop a database to provide a broad and comprehensive view of all major PTF assets' condition
- b. Establish roadmap to database completion

3. Asset Condition Needs and Solution Guidance Document

- a. To be developed in parallel with the database to enable a more criteria based approach to identifying and solving for asset condition needs

4. Stakeholder Process Improvements

- a. Standardize format and information contained in asset condition presentations, including support for select rightsizing.
- b. Establish clear timelines for stakeholder review and feedback

NESCOE requests that the NETOs prioritize work on these requests and bring draft documents to the PAC and other committees as appropriate for discussion this summer. We ask that these conversations begin with a presentation on asset condition project capital spending plans at the Reliability & Transmission Committees' July 18-19, 2023 meeting, and be repeated for the public at the July 25, 2023 PAC meeting.

By taking time now to slow down and establish a transparent and predictable asset condition process, New England can move toward work on a right-sizing approach—an important part of holistic planning that will allow for efficient transmission investment at the pace and scale needed for the region’s clean energy future.

NESCOE looks forward to working together with the NETOs, ISO-NE, and stakeholders on overcoming these challenges.