



NETO Update on Asset Condition Project Process Enhancements

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Alan Trotta

On behalf of Avangrid, Eversource, National Grid, Rhode Island Energy, Vermont Electric Power Company, and Versant Power

Agenda

- Recap of 2023 Discussions and Enhancements
- PTF Asset Condition Database Update
- Asset Condition Guidance Document Update
- Tentative 2024 Schedule and Next Steps

Recap of 2023 Discussions and Enhancements

Recap of 2023 Discussions and Enhancements

- The New England Transmission Owners (NETOs) have made several process enhancements in response to NESCOE's [February 8](#) and [July 14](#) letters
- All presentations and other materials have been posted to the [Transmission Owner Asset Management](#) section of the ISO-NE website

Recap of 2023 Discussions and Deliverables

Date	
Feb 2023	<ul style="list-style-type: none">• Initial request from NESCOE to NETOs
July 2023	<ul style="list-style-type: none">• Follow up letter from NESCOE to NETOs• RNS rate overview and forecast, with additional asset condition forecast information
Aug 2023	<ul style="list-style-type: none">• NETO letter outlining process and schedule• Draft guidelines for asset condition PAC presentations• Cost estimating process presentation
Sept 2023	<ul style="list-style-type: none">• PTF Asset Condition Database Proposal
Oct 2023	<ul style="list-style-type: none">• Asset management process presentation
Nov 2023	<ul style="list-style-type: none">• Revised guidelines for asset condition project PAC presentations and responses to stakeholder comments• Draft Asset Condition Project Forecast, including estimated dates and costs per project

PTF Asset Condition Database Update

Background

- Goal is to provide system-wide age-related information for PTF assets
 - May provide earlier indications of potential asset condition issues that could trigger refurbishment or replacement of a facility
- Draft PTF Asset Condition Database format was [presented](#) to PAC on September 20
- Since then, changes and refinements to database format have been made in response to stakeholder / ISO-NE comments and additional NETO discussions

Summary of Changes

- For transmission lines, “Original In-Service Year” has been updated to “In-Service Year of Oldest Component (Structure or Conductor Span)”
 - Rationale: some lines have been partially or fully rebuilt since their original in-service date
- For transformers, both “In-Service Year” and “Year of Manufacture” will be provided
 - Both are necessary to understand the remaining useful life of asset
- When transmission line uses a bundled conductor as the “Primary Conductor Type” the database will indicate the number of conductors in the bundle
 - Example: **2 - 795 ACSR** means that the Primary Conductor is a pair of 795 ACSR conductors

Summary and Next Steps

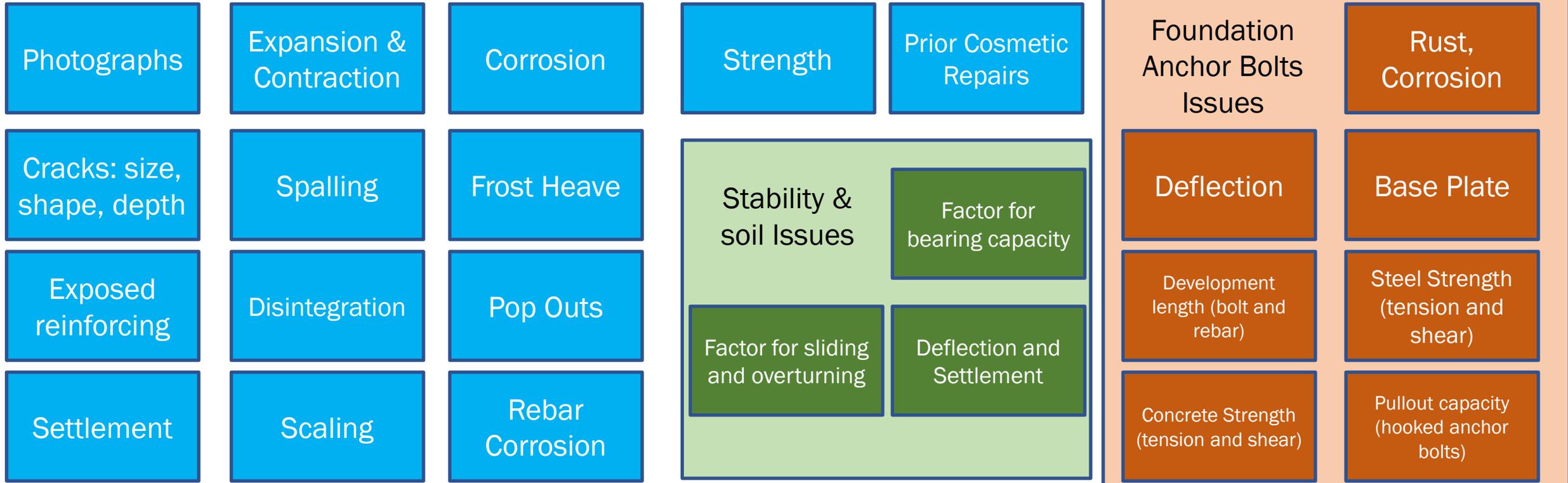
- Version 1 of the database will be posted to the [Transmission Owner Asset Management](#) section of the ISO-NE website in January, along with responses to stakeholder comments on the database
 - Manually compiling data from various sources has proven to be time and resource-intensive
 - Some data columns will be incomplete – to be updated as more information is compiled
- Going forward, NETOs will review and update the information within the database annually (likely in Q4)
- In 2024, the NETOs will evaluate the feasibility of adding additional information to the database, including:
 - Asset health scores and metrics
 - Data on additional PTF elements (Control houses, circuit breakers, etc.)
- Cost projections will not be included
 - Already provided as part of Asset Condition Project Forecast presented in November and 5-year RNS rate forecast presented in the summer

Asset Condition Guidance Document Update

Asset Condition Guidance Document

- NESCOE's [July 14 letter](#), requested the creation of an “Asset Condition Needs and Solution Guidance Document”
- The NETO's Asset Management Process [presentation](#) to the PAC on October 18, 2023 covered this topic at a high level
- The NETOs are developing an Asset Condition Guidance Document that will follow the structure of the October 18 presentation with more detail on the steps involved
- Discussions to date have identified many process similarities between the NETOs
 - For example, all NETOs make use of relevant industry standards, including EPRI criteria, IEEE standards, NERC standards (such as FAC-008) and NPCC directories
- For many types of transmission equipment, NETO asset management evaluations consider a myriad of complex and interrelated factors
 - See next slide for examples of factors considered during evaluations of transmission structure foundations
- Asset Condition Guidance Document will provide additional information on NETO asset condition decision making processes and criteria, but will not address every possible type of asset condition evaluation in detail

Example of factors considered when evaluating transmission structure foundations



Anticipated Content of Asset Condition Guidance Document

- Guidance Document will include:
 - A detailed description of steps undertaken at each stage of an asset condition project
 - Information and factors considered by the NETOs at each stage
 - References to the industry standards considered by the NETOs at each stage
 - Information on internal review processes applied at each stage
- The NETOs are tentatively planning to provide a draft Asset Condition Guidance Document for review at the March 20, 2024 PAC meeting

Tentative 2024 Schedule and Next Steps

Tentative Schedule for 2024

Date	Discussion/Deliverable Description
Jan	<ul style="list-style-type: none">• Publish Draft PTF Asset Condition Database
Mar	<ul style="list-style-type: none">• Publish Draft Asset Condition Guidance Document
Q2	<ul style="list-style-type: none">• Update on Asset Condition/Health Scoring methodologies<ul style="list-style-type: none">• Incorporate feedback from stakeholders received so far
Q2	<ul style="list-style-type: none">• Review ISO-NE website and document formats to improve accessibility of asset condition-related information
Q3	<ul style="list-style-type: none">• 2024 Asset Condition Project Forecast
Q3	<ul style="list-style-type: none">• Revisit PAC presentation guidelines
Q4	<ul style="list-style-type: none">• 2024 update to Asset Condition Database

Additionally:

- The NETOs would like feedback from PAC on whether additional educational presentations on asset condition-related topics would be beneficial in 2024
- The NETOs look forward to further discussions on “right-sizing” in 2024

Questions

