

Proposed PTF Asset Condition Database

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Presentation Overview

- Background
- Purpose of PTF Asset Condition Database
- Proposal
 - Scope of Database
 - Proposed Line Information
 - Proposed Transformer Information
- Topics for Further Discussion
- Next Steps / Stakeholder Feedback

Background

- This presentation summarizes a New England Transmission Owner (NETO) proposal to provide a Pool Transmission Facility (PTF) asset condition database for use by ISO-NE and regional stakeholders
- Developed in response to July 14 NESCOE [letter](#) detailing requested asset condition project process improvements

Purpose of PTF Asset Condition Database

- Provide system-wide age-related information for PTF assets for review and use by ISO-NE and regional system planning stakeholders
 - [Asset Condition Projects Update](#) presented to PAC in July only focused on providing more forward-looking information for *planned* asset condition work
- Provide indication of future asset condition issues that may require NETO intervention through refurbishment/replacement/rebuild
- While asset age is not only barometer for determining overall asset health, intent is to provide some data to ISO-NE and regional stakeholders that could provide earlier indications of future needed asset condition work
 - By extension, allows for earlier ISO-NE/stakeholder input into potential asset condition project “right-sizing” opportunities

Proposal - Scope of Database

- PTF lines and transformers
 - Represents the majority of PTF asset condition investment
 - Most impactful to overall system performance
- Database would be updated and published on an annual basis on the ISO-NE website
 - Timing/Location TBD
- NETOs are also currently evaluating possible overlap with [PTF Catalog](#)

Proposal - Line Information

- Primary Equipment Owner * (CMP, National Grid, Eversource, etc.)
- Line Number *
- Operating Voltage (kV) *
- Terminal Substation Names *
- Circuit Length (mi) *
- State
- Original In-Service Year and Age (years)
- Primary Conductor Type *

- If line is Overhead:
 - Number of Structures
 - Primary Structure Construction Type (Single-Pole, Double-Pole, etc.)
 - Primary Structure Material (Wood, Laminated Wood, Steel, etc.)
 - % Original Structures Remaining
- If line is Underground:
 - Underground Technology Type (Pipe-type, solid dielectric, etc.)
- General inspection timing information (specifics still under discussion)

* Currently provided in PTF Catalog

Proposal - Transformer Information

- Primary Equipment Owner (CMP, National Grid, Eversource, etc.)
- Transformer ID
- PTF Operating Voltages (kV)
- Substation Name
- State
- Original In-Service Year and Age (years)
- General inspection/testing timing information (specifics still under discussion)

Possible Future Additions

- “Asset Health” Metrics
 - NETOs are currently in early discussions on developing such metrics at NESCOE’s request
 - Currently expecting to complete this work sometime in 2024
 - Asset Health metric information may be CEI – will be evaluated during development process
- Inclusion of Additional PTF Elements, such as
 - Control houses
 - Circuit breakers
 - Relays
- More granular structure age data

Next Steps / Stakeholder Feedback

- NETOs propose a phased approach to asset condition database development
 - Phase 1: all information listed on Slides 6 and 7 of this presentation
 - Expected to complete compilation of this data by end-of-year 2023
 - NETOs will work with ISO-NE to find a suitable location to post the database on the ISO-NE website
 - Phase 2: All information included in Phase 1, plus Asset Health metrics
 - Subject to further NETO discussion/development
 - Expected some time in 2024
- Please submit any written comments on this presentation/proposal within 30 days to robin.lafayette@eversource.com and pacmatters@iso-ne.com

Questions?

