

**MINUTES OF THE
PLANNING ADVISORY COMMITTEE (PAC)
MEETING HELD ON JANUARY 18, 2024**

Attendee	Organization
J. Truswell – Chair	ISO New England
J. Macura – Secretary	ISO New England
M. Ainspan	NRG Energy
R. Albrecht	Principal Engineer
S. Allen	Eversource Energy
A. Aluko	Enerzinx
P. Asarese	ISO New England
J. Bagnoli	Eversource Energy
N. Baldenko	Eversource Energy
K. Bane	ISO New England
D. Bergeron	Maine Public Utility Commission
P. Bernard	ISO New England
C. Bothwell	Dept. of Energy
R. Brody	CT Global
A. Browne	Con Edison Transmission
D. Burnham	Eversource Energy
D. Cavanaugh	Energy New England
E. Chapin	Onward Energy
A. Chaplin	New Leaf
C. Collins	ISO New England
D. Conroy	RLC Engineering
W. Coste	ISO New England
M. Drzewianowski	ISO New England
L. Durkin	ISO New England
F. Etori	VELCO
K. Fabry	National Grid
J. Fenn	Fennco, LLC
B. Forshaw	Energy Market Advisors
M. Fossum	NH Office of Consumer Advocates
B. Fowler	Sigma Power Consulting
J. Fundling	Eversource Energy
A. Gillespie	Calpine
M. Gonzalez	ISO New England
R. Guay	ME Public Utilities Commission
L. Guilbault	H.Q. Energy Services

J. Halpin	Eversource Energy
R. Harvey	IEEE
M. Haskell	Maine Public Utility Commission
N. Hutchings	NextEra Energy Resources
J. Iafrati	Customized Energy Solutions
S. Judd	ISO New England
S. Keane	NESCOE
R. Kornitsky	ISO New England
N. Krakoff	Conservation Law Foundation
A. Krich	Boreas Renewables
F. Kugell	Central Maine Power Company
R. Lafayette	Eversource Energy
S. Lamotte	ISO New England
A. Landry	Maine Office of Public Advocate
T. Lundin	LS Power
K. Mankouski	ISO New England
J. Martin	National Grid
T. Martin	National Grid
C. Mattioda	Synapse Energy
P. McDonald	ISO New England
D. Milman	Viridon
D. Murphy	MMWEC
S. Nikolov	ISO New England
B. Oberlin	ISO New England
A. O'Connell	MA Attorney General's Office
R. Panos	National Grid
K. Pastoriza	Member of the Public
D. Patnaude	Eversource Energy
M. Patrick	National Grid
M. Perben	ISO New England
E. Perez Cervera	ISO New England
K. Pol	Daymark Energy Advisors
J. Porter	National Grid
H. Presume	VELCO
F. Pullaro	RENEW Northeast
K. Quach	ISO New England
M. Ribeiro Dahan	ISO New England
B. Robertson	Eversource Energy
J. Rotger	Customized Energy Solutions

E. Runge	Day Pitney
G. Saulmon	ISO New England
D. Schwarting	ISO New England
M. Scott	National Grid
J. Slocum	MA Department of Public Utilities
B. Snook	Governor's Energy Office (Maine)
C. Soderman	Eversource Energy
P. Sousa	South Coast Wind
M. Spector	Grid United
B. Swalwell	Tangent Energy
C. Szmodis	Rhode Island Energy
Z. Teti	Avangrid
B. Thomson	Rhode Island Energy
G. Twigg	NECPUC
P. Vijayan	ISO New England
K. Wei	NextEra Energy Resources
M. Winne	ISO New England
J. Zhang	ISO New England
L. Zhong	Plus Power

Item 1.0 – Chairs Remarks

Ms. Jody Truswell welcomed PAC and reviewed the day’s agenda. Ms. Truswell gave a few brief announcements. On January 11, 2024, ISO-NE posted an addendum to the Upper Maine Solutions Study. This addendum describes an update to the preferred solution at the Orrington substation. As engineering work progressed, the original preferred solution for Orrington was found to be physically infeasible. ISO-NE and Versant Power have collaborated to develop a new solution to this time-sensitive need, which is described in the Upper Maine Solutions Study Addendum. This addendum has been posted to the PAC and Maine Key Study Area sections of the ISO website, and the original preferred solution will be replaced with the new preferred solution in the next RSP Project List update. PAC members can submit feedback on this addendum to PAC Matters by February 2, 2024. Ms. Truswell reminded PAC the next EAG meeting is on February 16 at 9:30 AM. Interested participants are encouraged to participate and can submit presentations on environmental topics to eagmatters@iso-ne.com.

Item 2.0 – Hurd State Park Corridor Rebuild

Mr. Chris Soderman (Eversource Energy) presented three alternatives for the Hurd State Park Corridor rebuild in Connecticut focused on lines 362, 376, and 1772. Eversource Energy’s preferred solution requires a full right-of-way rebuild with an overhead river crossing that is in-service by Q4 2024. The rebuilds’ estimated PTF costs are \$43.6M (-25/ +50%). Eversource Energy proposes to expand the project’s scope to include reconductoring between Hurd State Park and Haddam Neck Substation. The addition will raise PTF costs \$13.3M (-25/ +50%) and estimated in-service by Q2 2025.

In response to stakeholder questions, Eversource Energy issued the following statements:

- Eversource selected the 1590 ACSS conductor due to blow out concerns.
- The 2050 Transmission Study indicated a small overload for line 1772 (115kV), but no overloads for lines 362 and 376 (345 kV).
- Eversource anticipates construction to begin in late Q2/early Q3 2024.
- Eversource did not consider ACCC conductors for the Hurd State Park project because a lighter conductor would not have addressed blow out concerns along the edge of the right-of-way. An ACCC conductor stretches more under physical load, providing a counter acting effect. An ACCC conductor would not offer substantial project cost savings either.
- The preferred project solution would not change if Eversource incorporated life cycle costs into the underground project solution (Alternative 2).
- OPGW's benefits are focused on secured, protected communication to substations. OPGW provides a controlled, alternate fiber communication path that supports the long-term buildout of the fiber optic network and eliminates the need for a private phone line, which has become an increasingly high expense. High-speed protection is critical for addressing stability issues (especially on 345 kV lines).
- Eversource provides its contact information the end of its presentation. Stakeholders and members of the public are welcome to submit their questions, comments, and concerns regarding matters outside the direct scope of this presentation.

The following comments was issued:

- It is important New England considers right-sizing as the region continues to invest in the grid's future, regardless of formalized procedures.
- Eversource should considering separating project costs by structure priority level to evaluate cost differentials between “minimal defects” (Priority B) and a “moderate defects” (Priority C).
- Eversource should use data to show the benefits of OPGW, versus traditional ground wire.
- The height of a new structure is pertinent to evaluating an asset condition proposal. As such, Eversource should include more project specific details, such as height, in the early stages of project development subject to PAC review, especially in light of recent efforts to refine the quality of asset condition presentations.

Item 3.0 – NPCC Directory 1 Implementation Plan Phase 4 Update

Mr. John Porter (Rhode Island Energy) presented a cost update for RIE's NPCC Directory 1 Implementation Plan. Phase 4 includes three 115 kV lines (R-144N, Q-143, and V-148N). RIE's preferred solution includes CCVT/wave trap installation on the V-148N line, monitoring equipment, standby generator and system 1 & 2 batteries, and upgrading line protection to dual high-speed systems. No other alternatives were reviewed, as this is the only feasible option to satisfy NPCC mandated requirements. The project has an estimated PTF cost of \$5.1M (+50%/-25%) and an in-service date in Q3, 2025.

ISO-NE issued the following comment:

- ISO-NE has traditionally run testing to maintain the Bulk Power System (BPS) list. ISO-NE evaluated all BPS buses in 2022. ISO-NE did not observe statuses change for the applicable buses in the most recent comprehensive assessment in 2022. These buses' status has not changed since the Directory 1 Implementation Plan began in 2015.

Item 4.0 – Initiation of the 2024 Economic Study

Ms. Marianne Perben (ISO-NE) notified stakeholders that the 2024 Economic Study cycle process initiated in accordance with Attachment K, Section 17. The 2024 Economic Study cycle timeline specifies the Benchmark Scenario analysis will be complete late Q1 or early Q2. The Stakeholder Requested Scenario submittals are due at the end of March or early April. The Economic Study Process Tariff Changes Phase 2 commence at the TC during Q2. ISO-NE will provide the Policy & Stakeholder Requested Scenarios/Sensitivities in Q3 or Q4. The 2024 Economic Study Cycle concludes after ISO-NE delivers the MENS Scenario and Sensitivities sometime in Q1 2025.

In response to stakeholder questions, ISO-NE issued the following statements:

- EPCET's pilot study is set to wrap up at PAC's February meeting. ISO-NE plans to issue a report compiling all EPCET's key findings and takeaways by the end of Q2 2024.
- ISO-NE anticipates future study work will closely align with EPCET, providing stakeholders a reference to assumptions and sensitivities previously conducted.
- ISO-NE is focused on implementing Tariff changes for Economic Study Process Change Phase 2 at the Transmission Committee. ISO-NE current priority is implementation Tariff changes for Economic Study Process Change Phase 2. As such, revised timelines for the Economic Study Process are not currently under consideration.
- ISO-NE anticipates future study work will closely align with EPCET, providing stakeholders a reference to assumptions and sensitivities previously conducted.

The following comments were issued:

- The placement for the Stakeholder Requested Scenarios in the Economic Study process seems problematic. It may be difficult for stakeholders to develop requests ahead of the MENS Scenario. There is some concern over using EPCET's assumptions (set 4+ years ago) because a significant time lapse could affect the accuracy of future applications.

Item 5.0 – Overview of Economic Study Technical Guide

Mr. Richard Kornitsky (ISO-NE) provided an overview of the Economic Study Technical Guide, which aims to increase accessibility to stakeholders, policy makers, and the public to deepen their understanding of the Economic Study process. The Technical Guide is broken down into three primary sections (Study Process, Input Assumptions, and Output Metrics) and three appendices (Appendix A, Appendix B, and Appendix C). The changes to the Technical Guide will mimic the processes for Transmission Planning Technical and Process Guides, requiring PAC presentations and public comment prior to finalizing updates.

In response to stakeholder questions, ISO-NE issued the following statements:

- ISO-NE will discuss whether it is feasible to remove market sensitives from the EPCET base case in order to publish alongside its study report. Stakeholder may find Appendix B particularly useful, as it provides specific sources of input data used in Economic Studies.
- ISO-NE is prioritizing work to finalize the Economic Process and Improvements Phase 2 Tariff changes. After this effort is complete, ISO-NE can assess how to address base case assumption concerns in an updated version of the Technical Guide.
- ISO-NE plans to discuss the MENS Scenario base case in Q3 or Q4.
- ISO-NE will provide more detail on the distinctions for classifying Planning Procedures versus Technical Guides.
- The Technical Guide describes how PLEXOS models storage.

The following comments were issued:

- The varying durations of battery storage seem problematic as a model input.

Item 6.0 – A201/B202 230 kV Line Asset Condition Project

Mr. Rafael Panos (National Grid) presented A201/B202's asset condition project. These lines span between the North Litchfield Switchyard in Londonderry, NH and the Comerford Station in Monroe, NH. A recent asset condition assessment revealed deterioration and equipment damage, prompting a rebuild. National Grid proposes two design alternatives, targeting this rebuild at either 230 kV or 345 kV (operating at 230 kV). The project has an estimated in-service date of Q4 2031.

In response to stakeholder questions, National Grid issued the following statements:

- National Grid will clarify its OPGW installation plans for A201/B202 during its next asset condition update.
- The A201/B202 asset condition project would be incremental to the needs of the Twin States project if National Grid rebuilds these lines at 230 kV lines, in which case the Twin States project would require updates.
- National Grid has not identified any line de-ratings. The project rebuild mitigates against future risk.
- National Grid will changes in losses during its next A201/B202 asset condition update.

ISO-NE issued the following comment:

- ISO-NE does not believe A201 or B202 were identified as overloaded in the 2050 Transmission Study.

Item 7.0 – Closing Remarks/Adjourn for the Day

Ms. Truswell announced the next PAC meeting will be held on Wednesday, February 28, 2024. As a reminder on CEII presentation protocol, when dialing in, PAC members should clearly state and spell their full names, as well as specify their affiliation to ensure an efficient screening process and prompt start to the meeting.

The meeting adjourned at 10:44 A.M.

Respectfully submitted,

 /s/

Jillian Macura

Secretary, Planning Advisory Committee