MINUTES OF THE
PLANNING ADVISORY COMMITTEE (PAC)
MEETING HELD ON JUNE 16, 2025

Name	Affiliation
S. Abhyankar	ISO New England (Chair)
J. Macura	ISO New England (Secretary)
P. Abucewicz	New England Power Company (National Grid)
S. Allen	Eversource Energy
P. Asarese	ISO New England
D. Bergeron	Maine Public Utilities Commission
P. Bernard	ISO New England
J. Bihrle	Massachusetts Attorney General's Office
T. Blanco	New England Power Company (National Grid)
D. Bradt	Oxford Power, consulting for NESCOE
H. Bruan	Ampersand
J. Brodbeck	EDP Renewables
D. Burnham	Eversource Energy
J. Cefaratti	Avangrid (Central Maine Power/United Illuminating)
L. Cioffi	Rhode Island Energy (Narragansett Electric Co.)
D. Conroy	RLC Engineering, Inc.
P. Das	ISO New England
L. DeFlumeri	New England Power Company (National Grid)
J. Donovan	Massachusetts Attorney General's Office
M. Doolin	Eversource Energy
M. Drzewianowski	ISO New England
L. Durkin	ISO New England
F. Ettori	Vermont Electric Power Company, Inc. (VELCO)
J. Fenn	FENNCO, LLC
B. Forshaw	Energy Market Advisors
N. Forster	NESCOE
M. Fossum	New Hampshire Office of Consumer Advocate
J. Fundling	Eversource Energy
A. Gagnon	Massachusetts Executive Office of Energy and Environmental Affairs
J. Halpin	Eversource Energy
R. Harvey	IEEE
C. Heilferty	ISO New England
T. Hill	New England Power Company (National Grid)
A. Hofmann	New England Power Company (National Grid)
J. Iafrati	Customized Energy Solutions
J. Kasow	ISO New England
S. Keane	NESCOE

D. Kell	Conservation Law Foundation
A. Kleeman	ISO New England
A. Krich	Boreas Renewables
F. Kugell	Avangrid (Central Maine Power/United Illuminating)
E. Kuligowski	Rhode Island Energy (Narragansett Electric Co.)
C. Lambrinos	National Grid
P. Lopes	Massachusetts Department of Energy Resources (MA DOER)
T. Martin	New England Power Company (National Grid)
J. Martin	New England Power Company (National Grid)
P. Melzen	Eversource Energy
T. Mirman	New England Power Company (National Grid)
C. Modlish	MA AGO
S. Molodetz	NextEra Energy
B. Oberlin	ISO New England
R. Panos	New England Power Company (National Grid)
D. Patnaude	ISO New England
E. Perez Cervera	ISO New England
D. Phelan	New Hampshire Public Utilities Commission
J. Porter	Rhode Island Energy (Narragansett Electric Co.)
M. Ribeiro Dahan	ISO New England
H. Presume	Vermont Electric Power Company, Inc. (VELCO)
B. Robertson	Eversource Energy
J. Rotger	Customized Energy Solutions
E. Runge	Day Pitney
M. Saravanan	ISO New England
D. Schwarting	ISO New England
M. Siddiqui	New England Power Company (National Grid)
K. Slonski	Eversource Energy
B. Snook	Maine Governor's Energy Office
C. Soderman	Eversource Energy
R. Somayajulu	New England Power Company (National Grid)
J. St. Pierre	Avangrid (Central Maine Power/United Illuminating)
J. Standiford	National Grid
J. Talbert-Slagle	Connecticut Office of Consumer Counsel
B. Thomson	Rhode Island Energy (Narragansett Electric Co.)
M. Valencia Perez	ISO New England
P. Vijayan	ISO New England
M. Winne	ISO New England
S. Yasutake	Gabel Associates
M. Young	New Hampshire Dept. of Energy
J. Zhang	ISO New England

Item 1.0 – Chairs Remarks

Mr. Shounak Abhyankar (ISO-NE) welcomed the PAC and reviewed the day's agenda.

Item 2.0 – NH Line Asset Condition Structure Replacement – Lines 373, 385, 391

Mr. Chris Soderman (Eversource) presented an asset condition structure replacement project comprised across three lines (373, 385, & 391) located on the same right-of-way (ROW) stretching from Scobie Pond substation through Deerfield substation and up to the Maine border. Eversource's 2024 inspections identified similar structural concerns with wood structures (wood decay, top rot, cracking, etc.) across the ROW. As such, Eversource proposed the following preferred solutions:

Line 373 – Scobie Pond substation to Deerfield substation (18.6 miles)
Replace 27 total wood structures (23 Category C wood structures and 4 Category B proximity structures) with steel H-frame 3-pole structures. This has an estimated cost of $9.253M (-25%, +50%). Major construction commences Q1 2026, with a Q1 2028 in-service date.

Line 385 – Deerfield substation to Maine border (18.7 miles)
Replace 54 total wood structures (28 Category C, 12 proximity Category B structures, and the last 14 remaining Category B wood structures) with steel H-frame 3-pole structures. This has an estimated cost of $16.456M (-25%, +50%). Major construction commences Q1 2026, with a Q1 2028 in-service date.

Line 391 – Scobie Pond substation to Maine border (37.3 miles)
Replace 89 total wood structures (36 Category C structures, 32 proximity Category B structures, and the remaining 21 Category B wood structures) with steel H-frame 3-pole structures. This has an estimated cost of $25.822M (-25%, +50%). Major construction commences Q1 2026, with a Q1 2028 in-service date.

In response to questions, Eversource issued the following statements:

- Based on Eversource's recent experience, assets are reaching the end of their useful life at a more rapid rate. As such, it is difficult to estimate with certainty when the remaining wood structures located across the ROW would degrade.
- Replacing all the existing wood structures on the three lines could provide ample cost savings through lower mobilization costs accessing the ROW.
- Eversource speculates most of the new structures could be capable of accepting a larger conductor (barring any sections on an angle).
- The summer LTE rating could be as high as 3357 MVA for 2-1590 conductors.
- A few stakeholders expressed interest in the overlap between the Longer-Term Transmission Planning (LTTP) request for proposal (RFP) and the New Hampshire and Maine interfaces. In response, Eversource stated there could be many broad possibilities, so it anticipates reassessing closer to 2026 after having the opportunity to review the ISO's summary of RFP proposals. Eversource will provide a PAC update after it has more insight into the RFP's outcome.

- Part of the incremental costs are attributed to access and mobilization.
- Eversource would complete a full analysis with a 1590 conductor if it were asked later to meet a certain rating which required a full design.
- Some of the steel structures are close to 14 years old and they show signs of aging, which resulted in them being categorized as Priority B category. Priority B structures are to be considered for replacement but are not yet a concern.
- All three lines experienced severe overloads in the Winter Peaking 57 GW scenario of the ISO-NE 2050 Study. The other severe overloads documented outside of the Winter Peaking 57 GW scenario were in the 51 GW Winter Peaking scenario.

The following comments were issued:

- Multiple stakeholders complimented the presentation's content, layout, and links to prior PAC presentations.
- A stakeholder suggested a breakdown of the project's incremental costs would be beneficial in reviewing the project.
- A stakeholder emphasized the difference between a line's thermal ratings versus system ratings.
- A stakeholder requested Eversource provide an overall cost breakdown of the total dollars invested in the ROW since 2016.

Item 3.0 – Orchard Substation - 115 kV Circuit Breaker Asset Condition Replacement

Mr. Paul Melzen (Eversource) presented the Orchard Substation asset condition replacement project located in Springfield, MA. Eversource's recent inspections have indicated that the two 115 kV ABB SF6 circuit breakers show clear signs of rusting and aging as they approach the end of their useful life (~40 years). Eversource proposes replacing these with new 115 kV Hitachi SF6 circuit breakers, plus replacing five associated 115 kV disconnect switches and one 1200A MOD transformer disconnect switch. The current breakers are the last remaining units of this model type in service in the Eversource system. No alternatives were considered for this project because a like-for-like replacement of the breakers cost-effectively addresses the need. The project's estimated cost is $6.1 M (-25%, +50%), with $5.5M in PTF and $0.6M in distribution costs. The start of major construction is anticipated in Q3 2025 with an in-service date of Q4 2025.

In response to questions, Eversource issued the following statements:

- Eversource is reaching the end of its SF6 pilot study and plans to eventually phase out the SF6 breakers on its system to meet its carbon reduction goals. However, Eversource feels it needs more operational and maintenance experience with vacuum breakers before it could consider recommending them as an alternative for SF6 breakers.
- The major concern with SF6 breakers lies with older breakers leaking, not the installation of new SF6 breakers on the system. Eversource has found that newer SF6 breakers demonstrate much lower leakage rates.

Item 4.0 – A-179 Asset Condition Refurbishment Project

Mr. Rafael Panos (National Grid) presented a cost update for the A-179 115 kV line asset condition refurbishment project. National Grid's preferred solution addresses both the primary and secondary needs identified. This includes replacing damaged shieldwire and attachment hardware, replacing damaged insulation, repairing foundations of towers crossing the Saugus River, increasing the clearance over the Saugus River, providing a communication path between Lynn and Saugus substations, and switch installation. The estimated cost for the project is $11.473M PTF (+50% / -25%). Major construction is proposed to commence in Q3 2025, with an in-service date of Q1 2027.

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

- If necessary, the proposed design could accommodate 795 ACSS conductor.
- National Grid has not considered other conductors for this project. That alternative would require additional engineering analysis.
- Repairing the foundations of the structures on the river is sufficient, rather than replacing them. National Grid does not foresee additional maintenance will be required at this location in the near future.
- National Grid plans to utilize existing structures, and only replace hardware as part of this project.

Item 5.0 – RSP Project List and Asset Condition List June 2025 Update

Mr. Marvin Valencia Perez (ISO-NE) summarized the June update for the Regional System Plan (RSP) Project List and Asset Condition List (ACL). From March to June 2025, the RSP project list had no major changes to cost estimates greater than $5M, there were no upgrades placed in-service, there were no projects cancellations, and two additional projects were added.

From March to June 2025, the ACL had four projects increase their cost estimates (greater than $5M), 20 new projects were added (totaling $83.9M), 11 upgrades were placed in-service (totaling $203.6M), and no projects were canceled.

There were no comments or questions on this topic.

Item 6.0 – Closing Remarks/Adjourn for the Day

Mr. Abhyankar reminded PAC that its GETs Day Forum would be held on Wednesday, June 18, 2025 at the DoubleTree Hotel in Westborough, MA. He announced the next PAC meeting is on Wednesday, July 23, 2025.

The meeting adjourned at 10:40 A.M.

Respectfully submitted,

_____/s/_____

Jillian Macura

Secretary, Planning Advisory Committee