Minutes of the
Planning Advisory Committee (PAC)
Wednesday, July 23, 2025

Name	Affiliation
S. Abhyankar	ISO New England (Chair)
J. Macura	ISO New England (Secretary)
J. Adadjo	Eversource Energy
S. Allen	Eversource Energy
P. Asarese	ISO New England
J. Augelli	Eversource Energy
D. Bergeron	Maine Public Utilities Commission
J. Bihrle	Massachusetts Attorney General's Office
B. Blair	New Hampshire Dept. of Energy
B. Bloomer	Vermont Electric Power Company (VELCO)
C. Bothwell	U.S. Department of Energy (DOE)
D. Bradt	Oxford Power, consulting for NESCOE
H. Bruan	Ampersand
M. Bringolf	ISO New England
J. Brodbeck	EDP Renewables
D. Burnham	Eversource Energy
D. Carrier	Avangrid (Central Maine Power/United Illuminating)
L. Cecere	Vermont Dept. of Public Service
L. Cioffi	Rhode Island Energy (Narragansett Electric Co.)
S. Cochran	Vitol Inc.
M. Coleman	Canal Marketing LLC
R. Collins	ISO New England
D. Conroy	RLC Engineering, Inc.
P. Das	ISO New England
L. DeFlumeri	New England Power Company
J. Donovan	Massachusetts Attorney General's Office
M. Doolin	Eversource Energy
F. Ettori	Vermont Electric Power Company (VELCO)
J. Fenn	FENNCO, LLC
B. Forshaw	Energy Market Advisors
N. Forster	New England States Committee on Electricity (NESCOE)
M. Fossum	New Hampshire Office of Consumer Advocate

B. Fowler	Sigma Power Consult
J. Fundling	Eversource Energy
A. Fuzaylov	Synapse
N. Gangi	ISO New England
A. Gillespie	Calpine Energy Services, LP
S. Grecco	NextEra
R. Guay	Maine Public Utilities Commission
J. Halpin	Eversource Energy
R. Harvey	IEEE
M. Haskell	Maine Public Utilities Commission (ME PUC)
M. Herman	New England Power Company
A. Hofmann	New England Power Company
P. Holloway	Massachusetts Department of Energy Resources (MA DOER)
J. Iafrati	Customized Energy Solutions (CES)
M. Ide	Massachusetts Municipal Wholesale Electric Company (MMWEC)
S. Ingalls	Unaffiliated
A. Izuwah	New England Power Company
M. K	Vermont Public Utilities Commission (VT PUC)
J. Kasow	ISO New England
B. Keen	Unaffiliated
D. Kelly	Conservation Law Foundation
R. Kornitsky	ISO New England
N. Krakoff	Conservation Law Foundation
G. Krenzler	Climate Jobs National Resource Center (CJNRC)
A. Krich	Boreas Renewables
F. Kugell	Avangrid (Central Maine Power/United Illuminating)
K. Lagunilla	Rhode Island Energy (Narragansett Electric Co.)
C. Lambrinos	New England Power Company
S. Lamotte	ISO New England
J. Lamson	RTO Insider
A. Landry	Maine Office of Public Advocate
J. LaRusso	Acadia Center
A. Lawton	Advanced Energy United (AEU)
J. Leydon	Massachusetts Municipal Wholesale Electric Company (MMWEC)
D. Littlefield	Avangrid (Central Maine Power/United Illuminating)
P. Lopes	Massachusetts Department of Energy Resources (MA DOER)
T. Martin	New England Power Company
J. Martin	New England Power Company
L. Mott	Grid United

R. Mozumder	ISO New England
K. Nimako	AES Renewable Holdings, LLC
B. Oberlin	ISO New England
V. Parekh	New Media Project
H. Pathan	Eversource Energy Service Company
E. Perez Cervera	ISO New England
D. Phelan	New Hampshire Public Utilities Commission
J. Porter	Rhode Island Energy (Narragansett Electric Co.)
D. Poulin	ISO New England
K. Quach	ISO New England
C. Richards Jr.	Rhode Island Energy (Narragansett Electric Co.)
B. Robertson	Eversource Energy Service Company
E. Ross	ISO New England
J. Rotger	Customized Energy Solutions (CES)
E. Runge	Day Pitney
K. Schlichting	ISO New England
M. Scott	New England Power Company
S. Shenstone-Harris	Synapse
K. Slonski	Eversource Energy Service Company
B. Snook	Maine Governor's Energy Office (ME GEO)
C. Soderman	Eversource Energy Service Company
J. St. Pierre	Avangrid (Central Maine Power/United Illuminating)
J. Talbert-Slagle	Connecticut Office of Consumer Counsel
B. Thomson	Rhode Island Energy (Narragansett Electric Co.)
J. Vaile	Eversource Energy Service Company
A. van Diepen-Hedayat	Climate Jobs National Resource Center (CJNRC)
E. Vaz	Glenvale LLC
S. Walcott	ISO New England
J. Walters	Connecticut Department of Energy & Environmental Protection (CT DEEP)
B. Wilson	ISO New England
M. Winne	ISO New England
S. Yasutake	Gabel Associates
L. Zhang	Calpine Energy Services, LP

Item 1.0 – Chairs Remarks

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

Item 2.0 – 2026 RNS Rate Overview & Forecast

Mr. Dave Burnham (Eversource Energy) reviewed the Regional Network Service (RNS) rate's five-year forecast and the planned asset condition project investments for 2025 and 2026.

The ISO uses the RNS rate to calculate monthly charges for wholesale regional transmission service in New England. This year, the RNS rate decreased ~$1.57/kW, from $185.28/kW-year to $183.71. The 2026 RNS rate change was driven by regional project forecasting ($6.52), annual true-ups ($-5.41), billing determinants ($-2.25), and other revenue requirements (-$0.43).

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

- The data from Table 1 does not feed into Table 2. Table 1 provides the RNS rate forecasted for 2026 through 2030. Table 2 shows the forecasted regional investment for 2025 and 2026.
- It is possible that the inclusion of construction work in progress (CWIP) in the value listed in Table 1, Row 4 accounts for the discrepancy with the 2026 total forecasted regional investment provided in Table 2.

Item 3.0 – New Hampshire Asset Condition Structure Replacement – Line T198

Mr. Chris Soderman (Eversource Energy) presented the T198 asset condition structure replacement project. This 115 kV line extends 11.2 miles from Emerald Street Substation in Keene, NH to Monadnock Substation in Troy, NH. In 2024, drone inspections identified 25 wood structures with woodpecker damage and other forms of decay. Eversource's preferred solution replaces 48 wood structures (25 Category C structures, 3 uplift structures, & 20 proximity Category B structures). The estimated cost is $24.431M (-25%, +50%). Eversource anticipates the start of major construction in Q4 2025, with an in-service date in Q4 2026.

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

- The large cracking near the pole's hardware weakens the structure's condition. Eversource's proposed structure replacement addresses this concern.
- This project includes the one Category C structure replacement in coordination with the Monadnock Substation Rebuild Project (ES-23-LSP-132).
- Eversource has not assessed an alternative that replaces every wood structure on the line. Eversource's preferred solution includes proximity structures that offer cost efficiencies.
- At this time, Eversource did not identify any conductor issues, so there is no immediate need for replacement.
- The Priority C structure replacements are located on either side of the corridor, providing Eversource with a strategic opportunity to address its seasonal flooding concerns. Eversource has not identified the incremental cost associated with addressing this issue.
- Likely, the project's higher cost per structure is driven by a combination of inflation and matting costs. Previous asset condition projects focused on sections of the line that

did not deal with the same river and right-of-way (ROW) issues. The estimated access costs for this section of the line are $7.7 M of the project's overall cost, which is larger than most projects.
- Eversource cannot predict the rate at which its assets will degrade.
- Eversource standardized tubular steel replacements on its transmission lines a few years ago to address woodpecker damage. The cost difference between wood and steel structures is minimal.
- Eversource assessed the use of advanced conductors for the short span of conductor replacement using its PLS-CADD software. Given New Hampshire's severe ice load, Eversource did not feel this was a viable solution.

The following comment was issued:

- A stakeholder noted that certain advanced conductor designs can handle severe ice scenarios. This stakeholder offered to share their expertise with Eversource and collaborate on solutions.

Item 4.0 – New Hampshire Asset Condition Structure Replacement – Line S153

Mr. Chris Soderman (Eversource Energy) presented the asset condition structure replacement project for Line S153. This 115 kV line extends 4.6 miles, spanning from Great Bay Substation in Stratham, NH to Ocean Road Substation in Greenland, NH. Eversource's recent inspections identified wood structures with woodpecker damage, pole top rot, pole top splits, and other forms of decay. As such, Eversource's preferred solution replaces 15 total wood structures (6 Category C structures and 9 Category B proximity structures). Eversource feels this solution minimizes future disturbances to the ROW and avoids near-future project costs associated with replacing the original wood structures near the planned work sites. The estimated project costs are $5.988 M (-25%, +50%). Eversource anticipates the start of major construction in Q4 2025, with an in-service date in Q4 2026.

In response to a question, Eversource Energy issued the following statement:

- Currently, S153 has 34 steel single circuit H frame structures (averaging 6 years old). In 2023, Eversource replaced 16 of these structures for an asset condition project. The remaining 18 structures were replaced during a different project 10 years ago.

Item 5.0 – CT 2034 Needs Assessment Update

Ms. Eleanett Perez Cervera (ISO-NE) reviewed the results of additional analysis required due to new modeling information provided by The Narragansett Electric Company (d/b/a Rhode Island Energy) following the posting of the Connecticut 2034 Needs Assessment (NA) report. In April, RIE notified the ISO that Rhode Island's load distribution for the state was inaccurate. As a result, the load assigned to the stations in SWRI, adjacent to the

Connecticut study area had been overstated. The lower loads in SWRI could reduce the severity of the needs observed in the Draft Connecticut 2034 NA report along the ECT/SWRI border.

There were no comments or questions on this topic.

Item 6.0 – 2024 Economic Study: Additional Policy Scenario & Stakeholder-Requested Scenario Sensitivities

Mr. Richard Kornitsky, Ms. Ellie Ross, and Ms. Kim Quach (ISO-NE) presented the 2024 Economic Study's additional Policy Scenario and Stakeholder-Requested Scenario sensitivities. The Policy Scenario explores the potential benefits of a conceptual flexible demand program. PLEXOS can shift the timing of a portion of baseload or electric vehicle (EV) load each day to reduce the overall cost of serving demand. The associated sensitivities assess whether increased demand-side flexibility could reduce inefficiencies in the reference buildout.

The Stakeholder-Requested Scenario evaluates the operation of peaker generation plants under the ISO's forecasted heating and EV charging loads combined with expected growth of clean generation. Since May, the ISO received a sensitivity request to lower the capital costs of Small Modular Reactors (SMR) and BESS100 (100-hour batteries) such that it would enable these resources to be built in the mid-2030s timeframe.

In response to questions, the ISO issued the following statements:

- Transmission and capacity costs are part of the wholesale costs associated with the load for the bulk power system in 2050, but PLEXOS does not consider these costs during optimization.
- Congestion is not modeled in the Policy Scenario.
- Preliminary demand shifting results showed production cost savings by implementing flexible demand in the model but has the potential for increases in peak demand. Based on the 2050 Transmission Study's findings, a 51 GW peak load constraint was implemented in the flexible demand sensitivity capacity expansion and production cost models. The peak load constraint is applied to net load because behind-the-meter photovoltaics (BTM-PV) reduces demand that must be served by the bulk power system.
- The modeling costs do not include those associated with demand shifting.
- Batteries are modeled as part of the upfront capital costs.
- The results compare flexible load cost savings across varying participation levels for demand shifting programs.
- The ISO's External Affairs department has been overseeing the coordination with NECPUC on flexible demand research efforts.

- Due to a limited timeline, the ISO will be accepting feedback on the System Efficiency Needs Scenario (SENS) modeling assumptions and preliminary results presented to the PAC in August.

The following comments were issued:

- A stakeholder noted interest in additional information regarding the ISO's operating characteristics for generators used in the 2024 Economic Study.
- A stakeholder offered appreciation for the diligence of these sensitivities.

Item 7.0 – Resource Outlook Study

Mr. Donald Poulin (ISO-NE) introduced the Resource Outlook Study, which delivers the resource adequacy results used in the Regional System Plan (RSP). The ISO will now conduct the Resource Outlook Study in lieu of the Representative Net-ICR analysis.

In response to questions, the ISO issued the following statements:

- The ISO clarified that the large decrease (~4,300 MW) in assumed resource values between the FCM period (CCPs 2025-2026 through 2027-2028) on slide 9 and beyond the FCM period (CCPs 2028-2029 through 2034-2035) on slide 10 reflects the ISO's differing treatment of passive demand resources (PDR) within the 2024 and 2025 CELT reports.
- In reference to methodology changes to the ISO's loss of load expectation (LOLE) analysis, the ISO explained that the data indicates not much has changed throughout the study period. The reliability metric has remained below the 0.1 loss of load expectation (LOLE) reliability criterion but has steadily increased over the 10 study years. For the FCM period, a very small risk was identified (<0.001 LOLE), and beyond the FCM period, the metric begins to slightly increase (peaking at ~0.09 LOLE) due to modeling the effect of a growing load forecast without adding additional resources. In the future, there will be shifts in the resource mix as resources enter and leave after the Capacity Auction Reforms (CAR) are implemented.

The following comment was issued:

- A stakeholder stated they were unsure how stakeholders could form expectations about the system's future given the LOLE values provided.

Item 8.0 – Closing Remarks/Adjourn for the Day

Mr. Abhyankar announced the next PAC meeting is on Wednesday, August 20, 2025.

The meeting adjourned at 11:31 A.M.

Respectfully submitted,

_____/s/_____

Jillian Macura

Secretary, Planning Advisory Committee