MINUTES OF THE PLANNING ADVISORY COMMITTEE (PAC) MEETING HELD ON OCTOBER 23, 2024

Name	Affiliation
S. Abhyankar	ISO New England (Chair)
J. Macura	ISO New England (Secretary)
S. Abhyankar	ISO New England
P. Abucewicz	National Grid
J. Adadjo	Eversource Energy
A. Adhikari	National Grid
B. Ahern	National Grid
Z. Ahmed	ISO New England
R. Albrecht	Ray Albrecht, Principal Engineer
S. Ali	NextEra Energy
S. Allen	Eversource Energy
B. Andrew	Eversource Energy
E. Annes	Connecticut Department of Energy & Environmental Protection (CT DEEP)
R. Apollonia	Connecticut Department of Energy & Environmental Protection (CT DEEP)
P. Asarese	ISO New England
M. Azzolini	Con Edison Transmission
N. Baldenko	Levitan & Associates Inc.
P. Bartlett	Maine Public Utilities Commission
S. Beale	NESCOE
J. Bentz	NESCOE
D. Bergeron	Maine Public Utilities Commission
P. Bernard	ISO New England
M. Berninger	Con Edison Transmission
J. Bihrle	Massachusetts Attorney General's Office (MA AGO)
B. Blah-Deonarine	Con Edison Transmission
T. Blanco	National Grid
B. Bloomer	VELCO
C. Bothwell	Department of Energy (DOE)
P. Boughan	ISO New England
D. Bradt	Oxford Power, consulting for NESCOE
J. Breard	ISO New England
T. Brennan	National Grid
J. Brodbeck	EDPR
D. Burnham	Eversource Energy
K. Caiazzo	Massachusetts Attorney General's Office (MA AGO)
D. Cavanaugh	Energy New England (ENE)

J. Cebrik	Avangrid (CMP/UI)
A. Cienfuegos	Avangrid (CMP/UI)
C. Cockshaw	Mott MacDonald
C. Coleman	Connecticut State Office of Consumer Counsel
M. Coleman	JERA Americas
R. Collins	ISO New England
K. Collins	H.Q. US
K. Colson	Eversource Energy
F. Dallorto	ISO New England
B. D'Antonio	Eversource Energy
P. Das	ISO New England
R. Dolan	NextEra Energy
J. Dong	Eversource Energy
J. Donovan	Massachusetts Attorney General's Office (MA AGO)
M. Doolin	Eversource Energy
M. Drzewianowski	ISO New England
A. Dumontheil	National Grid
F. Ettori	VELCO
J. Fabiano	Rhode Island Energy
M. Farhan Siddiqui	National Grid
J. Fenn	FENNCO, LLC
P. Fitzgerald	INS Engineering
J. Forest	NextEra Energy
B. Forshaw	Energy Market Advisors
N. Forster	NESOCE
M. Fossum	New Hampshire Office of Consumer Advocate (NH OCA)
B. Fowler	Sigma Power Consulting
P. Fuller	Autumn Lane Energy
J. Fundling	Eversource Energy
M. Gagne	Clearway Energy
A. Gagnon	Massachusetts Executive Office of Energy and Environmental Affairs (MA EOEEA)
R. Gahagan	Treadwood LLC
N. Gangi	ISO New England
G. Garcia	Avangrid (Central Maine Power/United Illuminating)
R. Gaudet	CMEEC
R. Gibbons	Avangrid (Central Maine Power/United Illuminating)
C. Gilbert	Maine Public Utilities Commission
A. Gillespie	Calpine
S. Glackin-Coley	Avangrid (Central Maine Power/United Illuminating)
R. Guay	Maine Public Utilities Commission
L. Guilbault	H.Q. US

J. Halpin	Eversource Energy
R. Harlan	Onward Energy
J. Harris	Department of Energy (DOE)
R. Harvey	IEEE
A. Hastings	Eversource Energy
E. Hernandez	Eversource Energy
T. Hill	National Grid
H. Hunt	NESCOE
N. Hutchings	NextEra Energy
J. Iafrati	Customized Energy Solutions (CES)
F. Ibrahim	ISO New England
C. Jayavendra	National Grid
R. Jordan	Paddle Energy
S. Kasina	Wood Mackenzie
T. Kaslow	First Light Energy
J. Kasow	ISO New England
S. Keane	NESCOE
M. Keenen	Grid United
A. Kleeman	ISO New England
S. Koester	Synapse Energy
R. Kornitsky	ISO New England
A. Krich	Boreas Renewables
M. Krolewski	Vermont Public Utilities Commission (VT PUC)
F. Kugell	Avangrid (Central Maine Power/United Illuminating)
R. Lafayette	Rhode Island Energy
K. Lagunilla	Rhode Island Energy
C. Lambrinos	National Grid
S. Lamotte	ISO New England
J. Lamson	RTO Insider
A. Landry	Maine Office of Public Advocate
J. LaRusso	Acadia Center
S. Lattrell	VHB
A. Lawton	Advanced Energy United (AEU)
B. Lesko	FERC
S. Libonatti	Avangrid (Central Maine Power/United Illuminating)
M. Licata	Eversource Energy
X. Liu	Eversource Energy
B. Londo	ISO New England
P. Lopes	Massachusetts Department of Energy Resources (MA DOER)
T. Lott	National Grid
K. Loy	NBC Connecticut WVIT
J. Lucas	Eversource Energy

T. Lundin	LS Power
J. Marinstein	Invenergy
T. Martin	National Grid
J. Martin	National Grid
C. Mattioda	Synapse Energy
R. McCarthy	Vista Corp.
B. McKinnon	South Hadley Electric Light Department
J. Miller	Clearway Energy
T. Mirman	National Grid
A. Mitchell	National Grid
S. Molodetz	NextEra Energy
L. Mott	Grid United
R. Mozumder	ISO New England
D. Mulvey	LS Power
D. Norman	Versant Power
M. Novello	Wagner Forest Management, Ltd.
K. Osman	VELCO
R. Panos	National Grid
T. Paradise	CTC Global
B. Parker	Connecticut Office of Consumer Counsel (CT OCC)
K. Pastoriza	Member of the Public
D. Patnaude	ISO New England
E. PerezCervera	ISO New England
C. Perez-Perez	National Grid
D. Phelan	New Hampshire Public Utilities Commission (NH PUC)
J. Porter	Rhode Island Energy
H. Presume	VELCO
F. Pullaro	RENEW Northeast
C. Putney	Eversource Energy
N. Raike	ISO New England
J. Rauch	Avangrid (Central Maine Power/United Illuminating)
A. Rawat	National Grid
C. Richards Jr.	Rhode Island Energy
B. Robertson	Eversource Energy
E. Ross	ISO New England
J. Rotger	Customized Energy Solutions (CES)
M. Rowe	Eversource Energy
C. Rowland	Swift Current Energy
E. Runge	Day Pitney
M. Safi	Rhode Island Energy
A. Sarmadi	National Grid
K. Schlichting	ISO New England
D. Schwarting	ISO New England

M. Sciarrotta	VELCO
M. Scott	National Grid
P. Scully	Maine Public Utilities Commission (ME PUC)
K. Shaarbafi	Eversource Energy
P. Shattuck	Power Advisory
G. Shen	ENTRUST Solutions Group
W. Signorelli	NextEra Energy
K. Sirowich	ISO New England
J. Slocum	Massachusetts Department of Public Utilities (MA DPU)
B. Snook	Maine Governor's Energy Office
N. Sobhani	Daymark Energy Advisors
C. Sooy	National Grid
P. Sousa	Avangrid (Central Maine Power/United Illuminating)
K. Sreenivasachar	ISO New England
E. Steltzer	Mott MacDonald
M. Stoker	Avangrid (Central Maine Power/United Illuminating)
V. Strauss	National Grid
T. Sweeney	New Hampshire Department of Energy (NH DOE)
J. Talbert-Slagle	Connecticut Office of Consumer Counsel (CT OCC)
P. Tatro	ENTRUST Solutions Group
A. Terrones	National Grid
B. Thomson	Rhode Island Energy
M. Tierney	Continuum Industries
N. Toleman	Viridon
A. Trotta	Avangrid (Central Maine Power/United Illuminating)
G. Twigg	NECPUC
M. Valencia Perez	ISO New England
P. Vijayan	ISO New England
S. Walcott	Eversource Energy
J. Walters	Connecticut Department of Energy & Environmental Protection (CT DEEP)
B. Wilson	ISO New England
M. Winne	ISO New England
K. Yamaguchi	Eversource Energy
J. Zhang	ISO New England
C. Zhu	National Grid

<u>Item 1.0 – Chairs Remarks</u>

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

Item 2.0 – RSP Project List and Asset Condition List October 2024 Update

Mr. Andrew Kniska (ISO-NE) provided October's Regional System Plan (RSP) Project List and Asset Condition List (ACL) updates since June 2024. The RSP Project List saw one major cost estimate change, added no additional projects, placed three upgrades in-service, and no projects were cancelled. The ACL identified a number of major cost estimate changes, added 14 new projects (totaling \$976.7M), placed 17 upgrades in-service (totaling \$315.7M), and cancelled three projects.

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

- In approximately 2015, the ISO separated projects onto the ACL and RSP Project List. The ACL contains any project greater than \$5M.
- The cumulative investment of New England's transmission reliability and asset condition projects through 2032 is the summation of slides 8 and 19.
- The ISO will discuss internally whether to provide expected future spending in its graph depicting New England's cumulative investment through 2032.

Item 3.0 – Potential Transmission Needs for a Longer-term Transmission Planning RFP

Ms. Sheila Keane (NESCOE) reviewed NESCOE's October 16 letter, which notified the ISO of the potential transmission needs for a Longer-Term Transmission Planning (LTTP) request for proposal (RFP). NESCOE is considering possible ways to solicit proposed solutions that strengthen the connection between northern and southern New England and further facilitate the integration of additional generation resources in northern Maine.

In response to stakeholder questions, NESCOE issued the following statements:

- NESCOE, consistent with its longstanding practice, plans to discuss all RFP related matters at the PAC.
- NESCOE primarily seeks stakeholder feedback on the needs related to strengthening the connection between northern and southern New England and facilitating the integration and deliverability of additional generation resources beyond Surowiec. NESCOE also welcomes any feedback that may help foster a successful solicitation, such as cost containment.
- NESCOE is assessing the possibility of addressing Boston reliability needs with LTTP RFP.
- NESCOE relied on the 2050 Transmission Study analysis and subsequent consultation with the ISO when identifying potential needs. This included the ISO's near finished offshore wind point of interconnection (POI) analysis.
- The six New England states agreed upon the needs identified in the letter.
- NESCOE aims to keep transmission technologies for RFP solutions that are proposed as broad as possible.
- NESCOE is assessing the question of the RFP's periodicity; however, its primary focus is on the 2025 horizon. NESCOE does not have a firm timeline for when it will submit its final RFP request.
- NESCOE acknowledged the stakeholders desire for additional PAC updates on its next steps.
- NESCOE's definition of "need" does not align with the ISO's reliability study process because the 2050 Transmission Study looks much further out, bringing greater uncertainty.

- NESCOE's original intent was to incrementally increase the Maine-New Hampshire interface by 1,000 MW. However, the proposed minimum allows for flexibility and consideration of cost versus benefits.
- The difference between Options 3 and 4 hinges on whether the solution would be categorized as a preference or requirement.
- NESCOE initially envisioned one RFP, but it is open to feedback supporting multiple RFP requests.
- The letter was framed in terms of capacity, but NESCOE is open to suggestions from stakeholders on integrating intermittent generation.
- NESCOE is open to defining discrete needs to maximize competition, emphasizing that this decision would need to be made in conjunction with discussions with the ISO.

The ISO issued the following statements:

- It is difficult to estimate an RFP timeline, but as of now, the ISO plans to issue an RFP in March, give stakeholders a six-month period to respond, and then review submissions for up to a year due to complicated nature of the Maine system.
- NESCOE's definition of "need" meets Tariff requirements.
- The ISO will have to complete a transfer capability study as part of its bid review to ensure that the proposals meet requirements.
- During the project selection process, the ISO will select a project if more a bid has a greater than 1.0 Benefit-to-Cost Ratio (BCR). NESCOE has option to utilize the supplemental process if no projects have a greater than 1.0 BCR.
- The ISO anticipates having post-NECEC interface limit results sometime in late 2024 or early 2025.
- The Tariff supports the issuance of multiple RFPs, but how an RFP is split will require further discussion with NESCOE.
- Smaller RFPs have tradeoffs, possibly discouraging a one larger solution that is more cost effective.
- The avoided cost of an RFP is not included in benefit metrics.
- The ISO would need to assess the applicable assumptions for determining the economic limitations of increases to the Maine-New Hampshire interface.

The following comments were issued:

- A stakeholder requested ISO provide bidders with the base case as early as possible.
- Multiple stakeholders suggested that issuing separate RFPs could be beneficial.
- A stakeholder offered lessons learned from Maine's recent RFP and cautioned about complications acquiring rights of way (ROW) in Northern Maine. This stakeholder urged NESCOE to consider weighing ROW complications as a strong evaluation factor for proposals and noted that breaking the RFP into multiple parts could provide bidders some flexibility with ROW issues across different areas with tight interfaces.
- A stakeholder was interested in whether Grid Resilience and Innovation Partnerships (GRIP) funding played a consideration in NESCOE's needs identification.
- The state of Maine is in the process of assessing the scope of a northern Maine RFP.

Item 4.0 – Boston 2033 Solutions Study Update

Mr. Andrew Kniska (ISO-NE) provided the PAC with a status update on the Boston 2033 Solutions Study. This presentation captured modeling corrections, recent developments, and project impacts.

The ISO provided the high voltage solution to the time-sensitive needs in Downtown Boston. The needs were driven by N-1-1 scenarios, involving reactors in the downtown Boston area and a failure of a breaker to operate when initiated by the Stoughton RAS. As such, the ISO finds that modification to the protection systems at Hyde Park and K-Street and the Stoughton RAS is the preferred solution to address the critical contingencies associated with the Stoughton RAS, as well as installing an 80 MVAR shunt reactor at both K Street and Electric Avenue 115 kV. The ISO plans to discuss the cost estimates and projected in-service dates for all projects in Q1 2025.

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

- The Reliability Committee will review Eversource's changes to its 3rd Somerville distribution transformer.
- The ISO will not rely on battery resources in the Boston Area that do not have a contractual obligation or a Forward Capacity Market (FCM) commitment.
- The minimum load has been declining since the Greater Boston Study in 2016.
- The ISO uses a 1,200 MW daytime minimum load assumption and a 7,500 MW nighttime minimum load assumption.

The following comments were issued:

- A stakeholder expressed interest in the non-time sensitive needs triggered by this study.
- A stakeholder questioned the need for a second reactor for this project given the daytime minimum and nighttime minimum load assumptions.

Item 5.0 – PAC Presentation Template for Transmission Line Asset Condition Projects

Mr. David Burnham (Eversource), on behalf of the NETOs, presented the draft PAC presentation template to be used when presenting asset condition projects on transmission lines. The template slides cover: Project Summary, Background Information, Project Needs and Drivers, Relevant Transmission Studies, Evaluated Solution Alternatives, Comparative Analysis of Alternatives, and Planned Schedule.

In response to stakeholder questions, the NETOs issued the following statements:

- Transmission Owners (TOs) generally use a map to depict affected communities traversed by their proposed project in their presentations.
- The TOs will discuss whether information regarding stakeholder engagement will be included in the template. Notably, public engagement varies state to state and project by project and PAC presentations only represent a small piece of the community outreach.

- The TOs' draft template covers standard project information. The TOs plan to expand the information provided as necessary.
- The TOs chose not to include interconnection studies in their presentation template due to concerns over the volume of studies completed each year. However, situations may arise where TOs reference relevant interconnection studies in their presentations.
- The TOs will assess whether the presentation templates could provide a project schedule that indicates when the project can no longer be modified.

The following comments were issued:

- A stakeholder encouraged TOs to provide more information than required by the template.
- A stakeholder requested TOs consider including interconnection studies in the template.

Item 6.0 – Asset Condition Process Guide Update

Mr. David Burnham (Eversource) presented recent changes to the Asset Condition Process Guide (ACPG) on behalf of the NETOs. The major revisions included an introduction of the "base alternative" as a minimum solution, additional appendices containing details on the stakeholder review process and uniform structure grading categories, and additional information on the decision-making process.

In response to stakeholder questions, the NETOs issued the following statements:

- Different advanced conductors possess properties beneficial for particular circumstances. In many cases, standard conductors are more effective.
- The "bathtub curve" was removed because it seemed to cause confusion rather than providing clarity, since it didn't apply.
- The TOs do not expect new assets placed in-service to immediately fail since they use proven technologies.
- Government and community goals and concerns were removed from Section 5.1 and added elsewhere to clearly indicate its association with local community concerns.
- The TOs are evaluating certain process enhancements suggested by stakeholders. If feasible, these changes could be implemented during next periodic update to the ACPG.
- The TOs will incorporate revision numbers and dates on subsequent ACPG updates.
- The TOs do not have a definite timeline on the publication of the next version ACPG. The TOs intend to adjust the guide after reviewing stakeholder feedback.

The following comment was issued:

• A stakeholder voiced concern over the ACPG's treatment of structure grading and the recommended actions.

Item 7.0 – Eversource - Line X-178 Rebuild Project Update

Mr. Chris Soderman (Eversource) provided an update on the X-178 project following the June 20, 2024 PAC meeting. The presentation addressed additional information requested by

NESCOE and Consumer Advocates of New England (CANE), as well as updated alternative analysis following Eversource's 2024 line inspections.

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

- The 2024 inspections indicated that a significant portion of X-178 is facing accelerated ground rot. Structures can deteriorate rapidly as assets approach their end of life.
- Drone pilots were present during the 2024 line inspections and were trained to follow EPRI guidelines.
- Eversource considered ACCC and 3M conductors, but they did not provide benefits.
- A transmission line's life span can vary greatly depending on its location. The wood structures in Eversource's service area have seen different deterioration rates across different environmental conditions.
- Eversource has experienced some extreme cases of woodpecker damage over short periods of time.
- Eversource conducts Osmose pole inspections every 8 years to extend the life of the pole. Eversource is unsure when it was last completed.
- A full rebuild will address electrical code changes that have occurred over a number of years.
- Eversource felt it was not strategic to replace only certain structures when the entire line will eventually need to be replaced.
- Eversource's performed sag calculations for ACCC conductor, instead of creating profiles.
- Eversource aims to complete most of the line work live.
- Eversource captured over 12,000 pictures on the X-178 line that were subject to engineer review.
- The pole rating process follows a detailed review.
- When reviewing project alternatives, 2025 serves as year zero and Eversource made assumptions for year 5 and year 13.
- The line access and mobilization costs are a mixture of bids and quotes, some of which Eversource has yet to receive.
- Eversource used a 3% rate for escalation costs on slide 12 and used a 3-5% escalation range on its comparison of project alternatives using net present value (NPV) on slide 14.
- The NPV accounts for depreciation.
- Eversource suggested that one should not think about a full line rebuild in terms of stranded assets due to the way wood structures are accounted for and grouped.
- Eversource does not have cost estimates for emergency repairs.
- Eversource sees variability in cost/mile across its territory areas.

A stakeholder issued the following comment:

- A stakeholder suggested that Eversource consider an advanced conductor alternative to reduce the number of structure replacements to create a least cost solution.
- Multiple stakeholders requested that Eversource disclose X-178's inspection reports.
- A stakeholder inquired whether the age of poles taken down as an opportunity replacement are factored into the calculation for the line's average age.

- A stakeholder suggested that engineering solutions could solve uplift issues without requiring a full line rebuild.
- A stakeholder felt that pictures did not adequately capture the pole degradation and urged Eversource to share its inspection reports.
- A stakeholder noted the challenges with the X-178 presentation convey why the states are advocating for asset condition process changes. This stakeholder stated the current process does not lend comfort.
- A stakeholder felt Eversource's recommendation for a full rebuild was reasonable given the information presented. The stakeholder noted that the line is critical for renewable generation and provides great ancillary benefits. The stakeholder referenced the NPV as a good indicator of the project's merit.
- A stakeholder felt Eversource's proposed full line rebuild would be cheaper for the region if all the repairs are completed correctly at once.

Item 8.0 – VELCO K19 Line Structure Replacement

Mr. Frank Ettori (VELCO) discussed the K19 line's asset condition needs requiring direct replacement of 41 degraded 115 kV structures. Line K19 stretches 8.88 miles from the Georgia substation in Georgia, Vermont to the Sand Bar in Milton, Vermont. Recent inspections performed in 2020 and 2021 have identified 41 of 93 wood structures with woodpecker damage, pole top rot, cracked cross arms, splitting poles, and other forms of decay. These structures must be replaced to maintain reliability and ensure ongoing integrity of the line.

VELCO's preferred solution addresses the 41 structures, 15 structures of which were rated Category D (replace immediately), 22 structures were rated C (initiate planned structure replacement project or replace as part of upcoming structure replacement project) and 4 structures were rated B (consider replacement in conjunction with other structure replacements). The project's estimated cost is \$5.8 M (-10%/+10%) with an in-service date of Q2 2025.

In response to stakeholder questions, VELCO issued the following statements:

- The typical 60-year useful life is a VELCO-specific metric.
- In comparing the benefits of shieldwire to OPGW, VELCO explained that shieldwire provides lightning protection and that the fiberoptic communications can be included with the shieldwire or somewhere below. VELCO noted that shieldwire can be installed without taking a line out of service, unlike OPGW that requires an outage. VELCO cautioned that that OPGW is accessible to lightning and when that fiber is hit it can cause a lapse in communication. Generally, VELCO finds that ADSS installation is cheaper (\$50,000/mile).
- If a pole is booked in VELCO's inventory and then transferred to the project, the pole is booked to the project.
- VELCO does not anticipate upgrading the PV20 to 230 kV will overload the K19 line; however, outages would warrant rebuild of the line.
- VELCO places its new pole structures in the most advantageous location from an engineering perspective.
- To date, roughly 44% of the K19 line has been replaced.

Item 9.0 – B-154N/C-155N King Street Tap Asset Condition Refurbishment

Mr. Rafael Panos (National Grid) discussed the asset condition drivers for the B-154N/C-155N King Street Tap in Boston. National Grid's recent inspections performed in 2019 and 2020 identified 103 wood structures with woodpecker damage, pole top rot, cracked cross arms, splitting poles, and other forms of decay. National Grid's preferred solution replaces all structures, reconductors, and installs OPGW. The estimated project's cost is \$74.399M (+50%, 25%), with PTF costs totaling \$46.653M PTF costs and non-PTF costs reaching \$27.746M.

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

- National Grid feels the cost to install OPGW installation versus shieldwire is comparable.
- National Grid will review its application of "base alternative" to ensure it meets the specifications in the new PAC templates.
- National Grid will follow up on what alternative technologies were considered for this project.
- A stakeholder raised concerns regarding addressing the need based on consequential load loss due to the N-1-1 loss of the two lines being upgraded. It was noted that the load loss need was a non-time sensitive need that would be addressed after the completion of the ongoing Boston 2033 Solutions Study.
- National Grid considers multiple construction practices when determining the most costeffective option.
- An asset's expected life cannot be based on age alone. It is dependent on a myriad of factors in the zone it presides in, such as weather, environmental conditions, and terrain.

The following comment was issued:

• A stakeholder reiterated the importance of clearly defining "primary" and "secondary" needs within PAC presentations. This member felt varying applications could be problematic.

Item 10.0 – Nashua St #25 – Substation Asset Condition Refurbishment

Mr. Anil Adhikari (National Grid) discussed the asset condition needs at the Nashua St #25 substation. Nashua St is a 115/13.8 kV substation located in Worcester, MA, and was built in 1967. The site is supplied by two 115 kV transmission lines (O-141 and O-141S) and has one inline Gas Circuit Breaker #141. The driver for this project is asset condition and the NPCC Directory 1 implementation plan.

National Grid's preferred solution replaces the 115 kV assets. The project's estimated cost is \$9.18M (+/- 10%), with \$5.51M PTF and \$3.67M non-PTF. The project's estimated in-service date is December 31, 2024.

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

• Due to a lack of non-SF6 inventory, National Grid will replace the leaking SF6 breaker with another SF6 breaker.

- National Grid is assessing its SF6 beaker concerns on a case-by-case basis before transitioning into a replacement program.
- The estimated life span for an SF6 breaker is 40 years.

Item 11.0 – 2024 Economic Study – Interregional Model Assumptions/High Level Results

Mr. Ben Wilson (ISO-NE) presented the 2024 Economic Study's interregional model assumptions and high-level results.

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

- While historical analysis in and out of New Brunswick (NB) indicates that Hydro-Quebec (HQ) is selling energy to New England through NB, the ISO does not have insight into the more marginal transactions. The ISO is not privy to those real-world data and is limited to the net transfers.
- The ISO modeled five different areas (Ontario, Quebec, Maritimes, New York, and New England) using its production cost tool. There was also a high level representation of PJM flows into NYISO.
- New resources modeled in the LTRA must meet an inclusion criteria, including financial contracts, started construction, or a capacity obligation
- The ISO will research whether charges wheeling power through a particular area put friction on HQ.
- The models import capabilities were upgraded to reflect New England Clean Energy Connect (NECEC) and Champlain Hudson Power Express (CHPE).
- The model used the 2019 load profiles for specific areas that were pulled from external area websites. Any scaling up was based on the LTRAs summer peak, winter peak, and annual energy targets.
- The ISO's future load assumptions in New England will include the reforms and assumptions discussed at the Load Forecasting Committee.
- The ISO is accepting stakeholder feedback on its assumptions and high-level results ahead of the December PAC meeting.
- Wheeling charges filter out the noise of pricing between different area. The ISO plans to use real wheeling charges if they are accessible.

The following comment was issued:

• A stakeholder expressed his confusion over the ISO's use of historical load profiles versus real load profiles and the ISO's wind evaluation.

Item 12.0 - Closing Remarks/Adjourn for the Day

Mr. Abhyankar announced the next PAC meeting is on Wednesday, November 20, 2024. The meeting adjourned at 4:00 P.M.

Respectfully submitted,

<u>/s/</u>

Jillian Macura

Secretary, Planning Advisory Committee