

**MINUTES OF THE
PLANNING ADVISORY COMMITTEE (PAC)
MEETING HELD ON FEBRUARY 26, 2025**

Name	Affiliation
S. Abhyankar	ISO New England (Chair)
J. Singh	ISO New England (Acting Secretary)
P. Abucewicz	New England Power Company
A. Adhikari	New England Power Company
A. Ahmed	ISO New England Inc.
Z. Ahmed	ISO New England Inc.
V. Albino	Eversource Energy Service Company
R. Albrecht	Unaffiliated
S. Allen	Eversource Energy Service Company
E. Al-Sibai	New England Power Company
A. Amahatsion	Avangrid
J. Anderson	SP Global
P. Asarese	ISO New England Inc.
S. Ashkouri	New England Power Company
J. Bagnoli	Eversource Energy Service Company
S. Beale	NESCOE
R. Benitez	BENGCC LLC
D. Bergeron	Maine Public Utilities Commission
P. Bernard	ISO New England Inc.
M. Berninger	ConEd Transmission
D. Beron	New England Power Company
B. Blair	NH DOE
T. Blanchard	Member of the Public
T. Blanco	New England Power Company
B. Bloomer	VELCO
C. Bothwell	Boston Government Services, LLC
P. Boughan	ISO New England Inc.
J. Bower	Daymark Energy Advisors
D. Bradt	Oxford Power
H. Braun	London Economics International LLC
T. Brennan	New England Power Company
J. Brodbeck	Marble River, LLC
R. Brody	CTC Global
D. Burnham	Eversource Energy Service Company
K. Caiazzo	Commonwealth of Massachusetts Office of the Attorney General
D. Caron	Eversource Energy Service Company

D. Cavanaugh	Belmont Municipal Light Dept., Block Island Utility District, Braintree Electric Light Dept., Chester Municipal Light Dept., Concord Municipal Light Plant, Danvers Electric Division, Georgetown Municipal Light Dept., Groveland Electric Light Dept., Hingham Municipal Lighting Plant, Littleton (MA) Electric Light Dept., Mass. Bay Transportation Authority, Merrimac Municipal Light Dept., Middleborough Gas and Electric Dept., Middleton Municipal Electric Dept., North Attleborough Electric Dept., Norwood Municipal Light Dept., Pascoag Utility District, Reading Municipal Light Dept., Rowley Municipal Lighting Plant, Stowe (VT) Electric Dept., Taunton Municipal Lighting Plant, Village of Hyde Park (VT) Electric Dept., Wallingford, Town of, Wellesley Municipal Light Plant, Westfield Gas & Electric Light Dept.
J. Cebrik	Avangrid
J. Cefaratti	Central Maine Power Company
S. Chaudhury	ISO New England Inc.
T. Checker	PSEG
A. Cienfuegos	Avangrid
L. Cioffi	Rhode Island Energy
R. Collins	ISO New England Inc.
J. Collins	New England Power Company
K. Collison	ICF
K. Colson	Eversource Energy Service Company
W. Coste	ISO New England
V. Covill	Eversource Energy Service Company
R. Coxe	Mosaic Energy Insights
A. Culoso	New England Power Company
D. Davies	New Project Media
C. DeAngelis	PSEG
J. Dobiac	New England Power Company
R. Dolan	NextEra Energy Resources, LLC
J. Dong	Eversource Energy Service Company
B. Donmez	Longroad Energy
J. Donovan	Commonwealth of Massachusetts Office of the Attorney General
M. Doolin	Eversource Energy Service Company
S. Doran	New England Power Company
M. Drzewianowski	ISO New England Inc.
L. Durkin	ISO New England Inc.
F. Etori	Vermont Electric Power Company, Inc.
J. Fenn	Versant Power
P. Fitzgerald	SGC Engineering

B. Forshaw	Connecticut Municipal Electric Energy Cooperative, New Hampshire Electric Cooperative, Inc., Vermont Public Power Supply Authority
N. Forster	NESCOE
S. Fortna	Eversource Energy Service Company
M. Fossum	New Hampshire Office of the Consumer Advocate
B. Fowler	Wheelabrator North Andover Inc., Calpine Energy Service, LP, Generation Bridge Connecticut Holdings, LLC, Nautilus Power, LLC, Constellation Energy Generation, LLC, Dynegy Marketing and Trade, LLC, Emera Energy Services Subsidiary No. 1 LLC
B. Frimpong-Duah	Quanta Technology
J. Fundling	Eversource Energy Service Company
A. Fuzaylov	Synapse
M. Gagne	ISO New England Inc.
A. Gagnon	Massachusetts Federal and Regional Energy Affairs
R. Gahagan	Treadwood LLC
N. Gangi	ISO New England
G. Garcia	Avangrid
A. Gillespie	Calpine Energy Services, LP
S. Glackin-Coley	Avangrid
L. Gonynor	New England Power Company
M. Gonzalez	ISO New England
D. Green	RLC Engineering
R. Guay	Maine Public Utilities Commission
Y. Guo	Eversource Energy Service Company
J. Halpin	Eversource Energy Service Company
R. Harlan	Onward Energy
R. Harvey	Sierra Club
M. Haskell	Maine Public Utilities Commission
A. Hastings	ISO New England Inc.
D. Hastings	PSEG
M. Hausseguy	New England Power Company
B. Havill	RLC Engineering
M. Hekmat	ConEd Transmission
S. Herbert	Vineyard Wind
E. Hernandez	Eversource Energy Service Company
E. Hibbard	Department of Energy
J. Howes	Reland Energy
S. Hunter	Eversource Energy Service Company
D. Hurley	Icetec Energy Services, Inc.
N. Hutchings	NextEra Energy Resources, LLC
J. Iafrati	Galt Power Inc.

M. Ide	Massachusetts Municipal Wholesale Electric Company and Member Companies (Ashburnham Municipal Light Plant, Boylston Municipal Light Dept., Chicopee Municipal Lighting Plant, Groton Electric Light Dept., Holden Municipal Light Dept., Holyoke Gas & Electric Dept., Hull Municipal Lighting Plant, Ipswich Municipal Light Dept., Mansfield Municipal Electric Dept., Marblehead Municipal Light Dept., Paxton Municipal Light Dept., Peabody Municipal Light Plant, Princeton Municipal Light Dept., Russell Municipal Light Dept., Shrewsbury's Electric & Cable Operations, South Hadley Electric Light Dept., Sterling Municipal Electric Light Dept., Templeton Municipal Lighting Plant, Wakefield Municipal Gas and Light Dept, West Boylston Municipal Lighting Plant)
F. Jade	NextEra Energy Resources, LLC
L. Kapiloff	Telos Energy
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E. Kennedy	RLC Engineering
H. Khireddine	New England Power Company
K. Kilgallen	Avangrid
A. Kleeman	ISO New England Inc.
S. Kode	Eversource Energy Service Company
R. Kornitsky	ISO New England Inc.
T. Kraklio	PPL Engineering
N. Krakoff	Conservation Law Foundation
A. Krich	Large RG Group Member, Generation Group Member, Walden Renewables
M. Krolewski	Vermont Public Utilities Commission
F. Kugell	Avangrid
R. Lafayette	The Narragansett Electric Company
K. Lagunilla	Rhode Island Energy
S. Lamotte	ISO New England Inc.
J. Lamson	RTO Insider
A. Landry	State of Maine - Maine Public Advocate Office
J. LaRusso	Acadia Center
Y. Lavi	Department of Energy
S. Libonatti	Avangrid
X. Liu	Eversource Energy Service Company
A. Logan	Eversource Energy Service Company
J. Lucas	Eversource Energy Service Company
T. Lundin	LS Power
J. Martin	New England Power Company

T. Martin	New England Power Company
R. McCarthy	Dynegy Marketing and Trade, LLC
R. McGee	Daymark Energy Advisors
J. Miller	Clearway Energy Group
T. Mirman	New England Power Company
S. Molodetz	NextEra Energy Resources, LLC
R. Mone	RLC Engineering
R. Mozumder	ISO New England Inc.
S. Nair	New England Power Company
M. Navarro	Power Advisory LLC
B. Oberlin	ISO New England
F. Omokaro	Eversource Energy Service Company
A. Onwuachumba	RLC Engineering
R. Panos	New England Power Company
D. Patnaude	ISO New England
K. Pastoriza	Member of the Public
H. Pathan	Eversource Energy Service Company
R. Pavolini	United Illuminating
G. Pease	Eversource Energy Service Company
T. Pelzer	Daymark Energy Advisors
G. Peniuk	Power Advisory LLC
E. Perez Cervera	ISO New England Inc.
A. Pethe	Daymark Energy Advisors
B. Pierson	Walden Renewables
J. Porter	The Narragansett Electric Company
F. Pullaro	RENEW Northeast
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N. Raike	ISO New England Inc.
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H. Roberts	RLC Engineering
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E. Ross	New England Power Company

J. Rotger	BP Energy Company, Cross-Sound Cable Company, LLC, DTE Energy Trading, Inc., Galt Power Inc., Mercuria Energy America, LLC
M. Rowe	Eversource Energy Service Company
E. Runge	Day Pitney
Z. Samuels	Eversource Energy Service Company
J. Sanchez	Avangrid
M. Saravanan	ISO New England Inc.
K. Schlichting	ISO New England Inc.
A. Schutzman	Rhode Island Energy
D. Schwarting	ISO New England Inc.
M. Scott	New England Power Company
C. Sedlacek	Eversource Energy Service Company
K. Shaarbafi	Eversource Energy Service Company
A. Shadab	NextEra Energy Resources, LLC
P. Shattuck	Power Advisory LLC
G. Shen	Entrust Solutions
M. Siddiqui	New England Power Company
B. Snook	State of Maine - Maine Public Advocate Office
R. Somayajulu	New England Power Company
P. Sousa	EDP Renewables
M. Spector	Grid United
K. Sreenivasachar	ISO New England Inc.
J. Standiford	New England Power Company
E. Steltzer	Mott MacDonald
D. Stenclik	Telos Energy
J. Stroba	INS Engineering
R. Surprenant	Norwich Public Utilities
B. Swalwell	Tangent Energy Solutions, Inc.
J. Talbert-Slagle	Connecticut Office of Consumer Counsel
P. Tatro	Entrust Solutions
A. Terrones	New England Power Company
R. Thammineni	Eversource Energy Service Company
D. Thammineni	Eversource Energy Service Company
B. Thomson	The Narragansett Electric Company
N. Toleman	Viridon
A. Trotta	Avangrid
P. Turner	Conservation Law Foundation
J. Vaile	Eversource Energy Service Company
M. Valencia	ISO New England Inc.
P. Vijayan	ISO New England Inc.
S. Walcott	Eversource Energy Service Company
J. Walters	CT DEEP

C. Wang	New England Power Company
T. White	Eversource Energy Service Company
B. Wilson	ISO New England
M. Winne	ISO New England Inc.
S. Xu	ISO New England Inc.
S. Yasutake	Gabel Associates
J. Zhang	ISO New England Inc.
H. Zheng	NextEra Energy Resources, LLC

Item 1.0 – Chairs Remarks

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

Item 2.0 – SEMA-RI Cost Update Presentation

Mr. Joe Dobiak (National Grid) presented an update on the SEMA-RI Group 2’s project component RSP 1722 cost estimate and rationale, which extends Line 114 by ~4.2 miles from the Dartmouth town line (Eversource – NGRID border) to Bell Rock. National Grid stated that schedule delays and post-pandemic inflationary pressures are the primary cost drivers for the project. The project now has an estimated cost of \$22.62 M with a projected in-service date of 12/2026.

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

- Regarding cost increases of varying magnitudes across projects, the company stated that differences in cost increases are due to the age of the original cost estimates. Older estimates did not fully account for subsequent post-pandemic supply chain disruptions.
- National Grid spoke to incurred costs (2023) with a significantly less delta from original estimated costs (2017) for a different project, 1721, as it was placed in service in 8/2023. A spokesperson highlighted the identified variances within the presentation.
- The company expressed confidence in the current estimates, based on the expectation of near-term siting approval and the procurement of a sizable portion of materials, which has stabilized material costs.

The following comments were issued:

- A stakeholder questioned the level of confidence and a potential for change in the current cost estimates.
- A stakeholder questioned the alignment of high inflationary periods and its reflection in National Grid’s provided cost estimates.
- A stakeholder raised concerns around the significant variations in cost increases and timelines across projects affected by similar post-pandemic supply chain issues.
- A stakeholder inquired about the confidence level of cost estimates for projects awaiting siting approval and why those estimates were presented to the PAC before approval.

Item 3.0 – A-179 Asset Condition Refurbishment Project

Mr. Rafael Panos (National Grid) presented the A-179 115kV Line Asset Condition Refurbishment Project's background, drivers, solution alternatives. National Grid reports excessive wear to shield wire with inappropriate hardware attachments (fraying), deteriorated insulators, and underwater inspections reporting cracks in river tower structure foundations.

National Grid's preferred solution (Alternative 2) incorporates the base alternative and replaces damaged shield wire with optical ground wire (OPGW). The project has an estimated cost of \$11.960M (+200%/-50%). The anticipated start of construction is Q3 2025 and has a projected in-service date of Q1 2027.

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

- Most replacement hardware for this project is shield wire and no conductors, but the river foundation work is a considerable portion of the project as well.
- No additional testing was performed for rust damage of the shield wire. National Grid clarified that when static wire needs to be replaced, OPGW is generally the most suitable solution.
- National Grid estimates that OPGW costs \$3/ft more and structures are generally replaced as needed, independently of shield wire.
- National Grid is awaiting foundation cost bids since they are unique and will update the PAC with cost estimates upon receipt.

The following comments were issued:

- A stakeholder observed that the proposed solution with OPGW has a negligible cost increase, noting a perceived discrepancy with previously presented project costs.

Item 4.0 – Congress 115kV Substation Flood Mitigation Update

Mr. Joshua Cefaratti (Avangrid UI) discussed the final cost for the Congress Substation Floodwall project. The start of construction was on 7/31/2022 and had an in-service date of 9/29/2024. Variance from previous cost estimates were attributed to increase in labor and equipment, engineering, permitting, and allowance for funds used during construction (AFUDC). The project resulted in a final cost of \$53.9M.

In response to questions, UI issued the following statements:

- The project consists of approximately 95% PTF and 5% non-PTF assets.
- There are no projects at the railroad happening simultaneously with this project; the site is adjacent to a railroad bridge that experienced settling during excavation.
- The wall is designed to the 100-year flood level plus three feet which is higher than previous floods.
- PAC presentations are typically made at 30-50% project engineering completion. The company uses internal engineering for preliminary work, then contracts a consultant after

preliminary engineering is completed. Finalizing designs and bids can result in project changes. In this project, some site exploration was not completed, and as-built drawings were used, leading to unforeseen issues.

- The other ongoing floodwall projects started at the same time and the team is working to limit similar cost overruns but do expect some. They are within the margins presented at the PAC.

The following comments were issued:

- A stakeholder voiced dissatisfaction with the lack of ability to act on a completed project.

Item 5.0 – Eastern Massachusetts Underground Cable Modernization Program (UCMP)

Mr. Chris Soderman (Eversource) presented the Eastern MA UCMP, reviewing underground transmission line technologies and respective concerns, risks, and alternatives. Eversource is beginning to convert high-pressure fluid-filled (HPFF) pipe-type cables (PTCs) to solid dielectric cables using cross-linked polyethylene (XLPE) technology due to long-term HPFF cable/parts supply concerns, environmental concerns, and reliability risks for current aging HPFF infrastructure.

The overview introduced the first phase of anticipated PTF projects going in service between 2028-2033, addressing 67 circuit-miles of HPFF, requiring 35 miles of new duct bank construction, ranging from \$46-51M per mile according to recent cost estimates. Eversource's preferred solution is Alternative 3, which replaces existing HPFF cables with XLPE in new duct banks and feels that emergency repairs (Alt. 1) and periodic refurbishment (Alt. 2) do not address HPFF cable availability and service concerns. Eversource acknowledges several factors that may affect in-service dates and anticipates returning to the PAC with additional details and cost estimates in Q3 2025.

In response to questions, Eversource issued the following statements:

- Regarding installation methods, the density of urban streets with numerous utility crossings necessitates conduit installation. Using high density concrete allows for control of the thermal properties.
- In response to inquiries about outage risks, Eversource clarified that they rely on internal asset data and observations of cable and pipe conditions, rather than external databases, to assess failure rates. They also highlighted concerns regarding the long-term availability of HPFF cables and specialized labor.
- The company performs dissolved gas analysis (DGA) on HPFF cables, similar to transformer oil analysis, to monitor cable health. However, the limited circulation of fluid in HPFF cables can make it challenging to detect localized degradation. They stated that they do look for trends in the gases, and that they have seen rapid deterioration in past projects.
- Concerning spare conduit and cable, Eversource explained that the high cost of additional vaults and new conduit makes it more economical to pull and replace cables as needed.
- The cost figures provided are based on trench miles with two circuits, with Phase 1 involving 35 miles of new duct bank. They also stated that the bulk of the cost is trench-related civil construction, with cable costs approximately \$90 per foot, or \$1.5 to \$2 million per mile.

- The conductors used within XLPE cables are either aluminum or copper, with enameled conductors representing the current state of the art.
- There are more manufacturers globally for XLPE than HPFF. Eversource is concerned about production rates of XLPE rather than general availability and are actively establishing alliance agreements.
- Eversource acknowledged differences in charging between pipe-type and XLPE cables, with XLPE typically exhibiting 60-70% of HPFF charging capacitance due to geometric and dielectric constant differences. They stated that this will drive a 30-40% decrease in charging impedance. Additionally, there is a change to the inductive impedance due to the spacing of the cables and the elimination of the steel pipe. The company subsequently confirmed that large-scale XLPE cable replacement will likely trigger the need for in-depth system studies.
- While HPFF cables have demonstrated high reliability, there are valid concerns about pipe integrity. They also noted that XLPE cable failures can occur shortly after installation, and that underground repairs are considerably more time consuming regardless of technology. As such, the outlook is as follows: HPFF has foreseeable pipe and conductor issue concerns, but XLPE will remove pipe failures from consideration and reduce cable issues.
- Eversource clarified that the Connecticut project costs were for single-circuit replacements, whereas the current project involves double-circuit replacements in a common duct bank, explaining the cost difference. They also noted that PTF vs non-PTF needs to be accounted for. The company intends to implement the project over decades to manage costs and prioritize projects based on need.
- Eversource confirmed that South Wire is a vendor for small XLPE cables for retrofitting existing pipes, and that they are working with EPRI and other utilities on this practice. They also stated that placing new XLPE in existing pipes will have significant derates.
- This project will return to the PAC in the summer with more information. Eversource has spoken with existing utilities on hybrid technology pilot approaches. They noted that most transmission lines in these areas are increasing in load, making derating a concern.
- Eversource clarified that the 179 miles represent all future phases, which will involve a mix of single and double circuits. The first round of costs will be in the ballpark of \$1.5 to \$2 billion, with 3-4 phases expected over decades. The team stated it is not prudent to predict the cost of Phase 2 in 10 years.
- The Company is communicating with the ISO to provide long-term forecasts of cable replacements for their studies.

The following comments were issued:

- Stakeholders raised concerns about the long-term availability of HPFF cable, and the availability of labor to maintain it.
- NESCOE expressed concern about the projects being conducted outside of the normal planning process, due to the subsequent systematic overhaul to New England's largest load center. The organization would appreciate regional discourse and ISO opinion.

Item 7.0 – Composite Load Model in Transmission Planning Studies

Ms. Meena Saravanan (ISO-NE) provided a general overview, impact, transition roadmap, and RFP focus of the use of the Composite Load Model (CMLD).

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

- The data is currently available from the NERC Load Modeling Working Group, with the final output being a spreadsheet from NERC that includes all regions. Note that the ISO's analyses left parameters unchanged, other than using a value of 9999 to defeat motor stalling, and feeder impedance is not used since New England explicitly models the step-down transformers.
- The dynamic model is used for stability analysis only and has no effect on power flow analysis. CMLD is a more realistic representation, reflecting lower voltage drop, potentially resulting in system instability (i.e., DERs (distributed energy resources) tripping)).
- While load composition data has not changed recently, there are ongoing studies for modeling specific, newer types of loads which can easily substitute as inputs in the model upon availability. No changes, however, are currently foreseeable.
- Electromagnetic Transient (EMT) software developers are working on a model similar to CMLD. The ISO is investigating this further.

The following stakeholder comments were issued:

- A stakeholder inquired about any ongoing initiatives involving a corresponding PSCAD (power systems computer aided design) model for CMLD.

Item 8.0 – Longer-Term Transmission RFP: Analysis Details

Mr. Reid Collins, Patrick Boughan and Dan Schwarting (ISO-NE) presented on the modeling and analysis of transmission, economic modeling and analysis, benefit-to-cost ratio (BCR) calculation and preferred proposal selection, and closed with the procedural aspects of the RFP.

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

- "Avoided Transmission Investment" includes wreck-and-rebuild scenarios on existing rights-of-way, such as replacing a 115 kV line with a 345 kV line. It also includes the retirement of an existing asset, though the ISO does not anticipate this as an outcome. It does not refer to new greenfield projects.
- The ISO will work with incumbent Transmission Owners (TOs) to handle upgrades of portions of lines on a case-by-case basis. The ISO's BCR calculations may differ from those of project proposers.
- 40 years is a generic assumption for asset replacement, not a definitive lifespan. The ISO reviews the cost of asset condition projects, and projects are reviewed as part of any required siting process. Provided cost estimates are generic; real projects will submit their costs. The ISO noted that asset condition issues are not under the purview of the NESCOE-requested Tariff required RFP process currently under discussion. The RFP is not being issued under an Order 1920 process.
- Proposal summaries and cost information for the proposals will be made public. Cost verification details will not be public.

- A substation with one connection is acceptable for 1200 MW of wind; more requires two connections.
- New build costs are less likely to be used. New build costs are for avoided costs due to the proposal, not the proposal itself. If a reliability project is avoided by the RFP, that is possible to be counted as avoided transmission costs. If there are types of 40+ year old elements not listed on the table, the ISO will oversee those on a case-by-case basis.
- The ISO may consider adjusting per-mile cost estimates for underground cables to reflect Eversource's Underground Cable Modernization Plan (UCMP) costs, noting key difference that ISO provided estimates use circuit miles whereas Eversource used trench miles. Cost estimates are not intended to be regionally adjusted. The 40-year cutoff is December 31, 2035.
- The ISO will use the original cost estimate (before tolerance) for BCR calculations.
- Corollary upgrades are upgrades to existing elements. The following clarifications were provided:
 - Rebuilding existing lines (e.g., 115 kV to 345 kV) is acceptable.
 - Adding new equipment like circuits or elements are not.
 - Joint proposals with incumbent TOs are permissible.
 - Non incumbents can propose corollary upgrades.
- Loss of right-of-way is considered an extreme contingency. Loss of right-of-way testing will be used to compare proposals, but proposals do not need to make the system secure for these events.
- True up studies intend to show if upgrades are needed beyond those provided for by this RFP. Generic wind generator models will be used for evaluations. The preferred solution will go into the base case following I.3.9 approval.
- The 3rd Maine resource study availability is uncertain. The NECEC transfer limit report will be released before the RFP.
- 65% factor for onshore wind is a winter transmission planning assumption. Capacity auction reform is discussed at the Markets Committee. Only I.3.9 projects will be considered.
- Based on discussions with NESCOE, winter snapshots were included since the capacity market will likely go to seasonal but will discuss further internally.
- Project changes are not allowed after submission.
- 1200 MW of onshore wind in northern Maine is included in base cases. Adverse impact cases may vary from released RFP cases.
- Generator lead line costs should not be included in proposals but will be captured by the economic analysis portion of the RFP.
- Besides land-based wind, there are no generation type caps.
- Regarding economic modeling approaches:
 - The ISO may consider releasing previous analyses indicating frequency of unserved energy.
 - Expected unserved energy is valued at \$3500/MWh, which comes from the reserve constraint penalty factor.
 - Load forecasts will all be similar to the 2050 study.
 - The 2055 production cost model uses the generation built by the capacity expansion model.
 - Interface transfer limits are the same in 2035 and 2055.
 - RFP upgrade project costs are not included in capacity expansion costs.

- Some benefit metrics can be zero or negative if either no savings are generated by the project or the project increases costs (e.g. losses go up or production costs increase).
- The ISO does not dictate a level of accuracy requirement in the RFP, but cost certainty is a factor.
- Regarding onshore wind costs and the capacity expansion model: The ISO will clarify if it includes 3rd Maine Resource Integration Study (MRIS) upgrades (included in capital costs). Public capacity expansion models will be released.
- If BCR is greater than 1, the ISO selects the preliminary preferred solution; if the BCR is less than or equal to 1, NESCOE can select the ISO's recommended proposal and provide the associated cost allocation or request additional analysis from the ISO on up to three of the proposals.
- Cost containment provisions are a factor outside the BCR.
- Proposals can be modified until the submission window closes but cannot be modified after that time. Corollary upgrade estimates are handled with respective Transmission Owners. The ISO does not intend to review cost estimates but may consider independent checks and review TO estimated costs for similar projects in its proposal.
- The ISO may consider publicly sharing screening process information.
- The 2050 study could be updated, or else NESCOE could request a completely different study.
- NESCOE provided tier order recommendations for submitters to review for factor and qualitative weight considerations.

The following stakeholder comments were issued:

- A stakeholder voiced concerns about load forecast consistency.

Item 9.0 – 2024 Economic Studies, Preliminary Stakeholder-Requested Scenario Results

Mr. Richard Kornitsky (ISO-NE) reviewed the 2024 Economic Study via stakeholder-requested assumptions and preliminary results. A timeline and the next steps were introduced.

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

- The model input used representative days based on load profiles but can consider limiting variability in the future.
- The analysis considered the combined electrification of heating and EV loads, not heating load alone. A sensitivity could be conducted to the latter's effect.
- The study uses an unconstrained model, and therefore, does not consider transmission congestion. Including regional constraints is possible but would significantly alter the scope of the study.
- The base case assumption of 100% electrification by 2050 is based on policy scenarios. 2040 results are indicative of a snapshot working towards 2050 policy scenarios which does not expand electrification adoption but rather accelerates.
- Stakeholders will have the opportunity to suggest sensitivity analyses if not included in this presentation.
- Changed model assumptions vary in scope of work and lead time.

- The ISO will have an update regarding the inclusion of Grid Enhancing Technologies (GETs) in transmission planning as part of the Annual Work Plan (AWP).

The following stakeholder comments were issued:

- A stakeholder commented on the use of a different set of representative days for each scenario and recommended using a control set going forward to minimize variability.

Item 10.0 – Closing Remarks/Adjourn for the Day

Mr. Abhyankar announced the next PAC meeting is on Wednesday, March 19, 2025.

The meeting was adjourned at 4:36 P.M.

Respectfully submitted,

_____/s/____

Jasleen Singh

Acting Secretary, Planning Advisory Committee