

January 18, 2024

VIA E-MAIL

**TO: PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES**

**RE: Initial Notice of February 1, 2024 Participants Committee Meeting**

Pursuant to Section 6.6 of the Second Restated New England Power Pool Agreement, initial notice is hereby given that the February 2024 meeting of the Participants Committee will be held **in person on Thursday, February 1, 2024, at 10:00 am at the Renaissance Boston Waterfront Hotel, located at 606 Congress Street, Boston, MA 02210** for the purposes set forth on the attached agenda and posted with the meeting materials at [nepool.com/meetings/](https://nepool.com/meetings/).

For those who otherwise attend NEPOOL meetings but plan to participate in the February 1 meeting virtually, please use the following dial-in information: **866-803-2146; Passcode: 7169224**. To join WebEx, click this [link](#) and enter the event password **nepool**.

**FOR PARTICIPANTS, PARTICULARLY THOSE WHO DO NOT TYPICALLY RECEIVE INVOICES FROM ISO-NE, PLEASE NOTE THAT 2024 ANNUAL FEES WILL BE INCLUDED ON THE MONTHLY STATEMENTS TO BE ISSUED ON FEBRUARY 12, 2024.** Participants that were members on January 1, 2024 will be assessed that Annual Fee, which must be paid, if the annual fee billing results in an invoice, on or before the close of business on Wednesday, February 14, 2024 in order to avoid penalties and interest. Please plan accordingly. If there are questions, you can reach out to Pat Gerity (860-275-0533; [pmgerity@daypitney.com](mailto:pmgerity@daypitney.com)) or to ISO New England's Participant Support and Solutions (413-540-4220; [askISO@iso-ne.com](mailto:askISO@iso-ne.com)).

Looking ahead, the March Participants Committee meeting is scheduled for Thursday, March 7, 2024 and will be held in person. We will in future notices provide more detailed information regarding the location and arrangements for those seeking accommodations the evening before that meeting.

Respectfully yours,

/s/

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Sebastian Lombardi, Secretary

## INITIAL AGENDA

1. To approve the draft minutes of the December 7, 2023 Participants Committee meeting. Please provide us with any comments on the draft minutes, which will be circulated under separate cover early next week, *on or before 5:00 p.m., Thursday, January 25, 2024.*
2. To adopt and approve the actions recommended by the Technical Committees set forth on the Consent Agenda included with this initial notice and posted with the meeting materials. In accordance with the Participants Committee Bylaws, if you wish to remove any of the recommended actions from the Consent Agenda, you must so indicate by notifying the Secretary *on or before 5:00 p.m., Thursday, January 25, 2024.*
3. To receive an update on activities of the Joint Nominating Committee and information from and about ISO Board member Michael Curran, one of the incumbent ISO Board of Directors who is eligible for re-election to the Board this year.
4. To receive an ISO Chief Executive Officer report. The February CEO report will be circulated and posted in advance of the meeting.
5. To receive an ISO Chief Operating Officer report. The February COO report will be circulated and posted in advance of the meeting. The January COO report was previously circulated and is posted on the NEPOOL and ISO websites.
6. To consider, and take action, as appropriate, on changes to Tariff §§ I.2.2 (Definitions) and III.9.3 (Forward Reserve Auction Offers), as recommended by the Markets Committee at its January 9–11, 2024 meeting, to update the Forward Reserve Offer Cap and delay the publication of the Forward Reserve Auction Offer data. Background materials and a draft resolution will be included and posted with the supplemental notice.
7. To receive a report on current contested matters before the FERC and the Federal Courts. The end of January litigation report will be circulated and posted in advance of the meeting. The January 11, 2024 Report is posted on the NEPOOL website.
8. To receive reports from Committees, Subcommittees and other working groups:
  - Markets Committee
  - Reliability Committee
  - Transmission Committee
  - Budget & Finance Subcommittee
  - Membership Subcommittee
  - Others
9. Administrative matters.
10. To transact such other business as may properly come before the meeting.

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**Protocols.** The NEPOOL general business portions and plenary sessions of the meeting will be recorded, as are all the NEPOOL Participants Committee meetings. NEPOOL meetings, while not public, are open to all NEPOOL Participants, their authorized representatives and, except as otherwise limited for discussions in executive session, consumer advocates that are not members, federal and state officials and guests whose attendance has been cleared with the Committee Chair. All those participating in this meeting must identify themselves and their affiliation at the meeting. Official records and minutes of meetings are posted publicly. No statements made in NEPOOL meetings are to be quoted or published publicly.

**COVID-19 Considerations.** To [safeguard](#) the well-being of yourself and others, please refrain from attending a NEPOOL meeting in person if you have confirmed that you [have COVID-19](#). If you [suspect that you might have COVID-19](#), or [if you have been exposed to COVID-19](#), please take the [precautions](#) recommended by the CDC. In any case, all are encouraged to be respectful of others' personal space, and to respect individual choices with respect to wearing or not wearing masks. Should you receive a COVID-19-positive test result within 10 days of attending a NEPOOL meeting in person, we'd kindly ask that you contact NEPOOL Counsel ([pmgerity@daypitney.com](mailto:pmgerity@daypitney.com)) to report that result.

## **PRELIMINARY**

Pursuant to notice duly given, the 2023 annual meeting of the NEPOOL Participants Committee was held beginning at 10:00 a.m. on Thursday, December 7, 2023, at the Colonnade Hotel, Boston, Massachusetts. A quorum, determined in accordance with the Second Restated NEPOOL Agreement, was present and acting throughout the meeting. Attachment 1 identifies the members, alternates and temporary alternates who participated in the meeting, either in person or by telephone.

Mr. David Cavanaugh, Chair, presided, and Mr. Sebastian Lombardi, Secretary, recorded. Mr. Cavanaugh welcomed the members, alternates and guests who were present. Members expressed their appreciation for Mr. Cavanaugh's leadership during his tenure and the grace with which he guided the Committee during the extremely challenging pandemic and afterward. Mr. Cavanaugh then addressed the Committee and remarked that any success achieved had been the direct result of the thoughtful and collaborative engagement among the Participants, together with our partners at NESCOE, NECPUC and the ISO.

## **2023 NEPOOL ANNUAL REPORT**

Mr. Cavanaugh referred the Committee to the 2023 NEPOOL Annual Report distributed at the meeting and posted on the NEPOOL website. Mr. Cavanaugh thanked the Day Pitney team and the Vice-Chairs of each Sector and the Technical Committees for their efforts assembling and completing the Annual Report. He encouraged members to review the Annual Report.

## **APPROVAL OF NOVEMBER 2, 2023 MEETING MINUTES**

Mr. Cavanaugh then referred the Committee to the preliminary minutes of the November 2, 2023 meeting, as circulated and posted in advance of the meeting. Following motion duly made and seconded, the preliminary minutes of that meeting were unanimously approved as circulated, with an abstention by Mr. Jon Lamson noted.

## **CONSENT AGENDA**

Mr. Cavanaugh referred the Committee to the Consent Agenda that was circulated and posted in advance of the meeting. Following motion duly made and seconded, the Consent Agenda was unanimously approved as circulated, with an abstention by Mr. Jon Lamson noted.

## **REMARKS BY FERC CHAIRMAN WILLIE PHILLIPS**

Mr. Cavanaugh invited ISO Board Chair Ms. Cheryl LaFleur to introduce to the Committee FERC Chairman Willie Phillips, who was accompanied by his Critical Infrastructure and Resilience Advisor, Mr. Kal Ayoub. Ms. LaFleur warmly summarized Chairman Phillip's experience prior to joining the FERC, as well as the hallmarks thus far of his tenure as Chairman, and briefly introduced to Chairman Phillips the key issues facing, and work underway in, New England.

Thanking Ms. LaFleur, Chairman Phillips expressed his appreciation for the opportunity to speak in person to the Committee, notwithstanding the briskness of Boston in December (particularly in comparison to warm and sunny California where he had just been). He was grateful to build upon the efforts and experience of the June New England Winter Gas-Electric Forum (Forum) convened in Maine, by addressing NEPOOL directly. Chairman Phillips emphasized that the FERC continued to take very seriously the comments, remarks, and

feedback received following the FERC Forum and appreciated the participation in that process. He stressed the importance to him of the issues facing New England, noting that his team, his office and his door was always open, encouraging members to come by and call on them.

Chairman Phillips acknowledged the critical role and importance he ascribed to the stakeholder process. He remarked that stakeholder groups like NEPOOL were critical to ensuring that wholesale electricity markets work for everyone and providing an opportunity for every sector's perspective to be heard, adding that an effective stakeholder process facilitated efforts to address, better understand and achieve some certainty with respect to the multitude of issues facing the grid system. The Chairman thanked those around the table for their active engagement in the process and specifically thanked NEPOOL leadership for the invitation and opportunity to speak to the Participants Committee. He put forward his commitment to be a Chairman focused on ensuring the reliability of energy delivery systems, affordability for all consumers and businesses, and planning for a sustainable energy future for all, including environmental justice communities. He proceeded in turn to address generally each of those areas.

With respect to his commitment to system reliability and affordability, Chairman Phillips summarized the recently released joint statement he penned with NERC's CEO, noting his ongoing concerns with the reliability of New England's grid. He suggested that extreme weather of all kinds was restraining both the region's gas and electric systems. Referring also to the FERC/NERC final report on Winter Storm Elliot, he suggested that extreme weather events, with accompanying generator outages/losses, were becoming more the norm, if not predictable. He recounted a couple of examples of reliability-threatening, low pressure events on natural gas delivery pipelines that underscored for him the need to have an entity responsible for the

reliability of the natural gas delivery system. That entity did not have to be the FERC, he said, but it would have to be an entity with the responsibility and authority to enact and enforce natural gas reliability standards. Winter Storms Elliot and Uri each serve as sobering examples of how extreme weather events could have severe, adverse impacts on both the gas and electric systems, as well as on the well-being of the population as a whole.

Chairman Phillips urged New England's vigilance and proactive efforts in addressing how extreme weather and a changing resource mix impact winter reliability. Noting the region's reliance on natural gas resources and liquefied natural gas (LNG), and the potential, if not likely, effects of a prolonged cold spell, he was pleased that assessments for Winter 2023/24 projected a milder winter, but cautioned that hoping for or relying on milder winters could not be a sustainable plan for ensuring winter reliability. While the Chairman highlighted the ISO's expectation that, under normal conditions, adequate resources would be available for the upcoming winter and that the near-term energy security outlook may not be as dire as initially projected, he remained concerned about winter reliability in New England, for Winter 2023-24 and beyond.

Looking ahead to potential solutions, Chairman Phillips opined that there were not simple solutions or easy fixes, nor could any one entity be relied upon to solve the problem. However, he expressed confidence that the critical players and best ideas would be found around the NEPOOL table, and all would have a role to play. He emphasized the importance of information availability, which would support well-informed decision-making. Identifying key sources of such information, he urged continued consideration and evaluation of the assumptions and methodologies underlying the region's assessments and studies. He was optimistic that NPCC's northeastern regional gas infrastructure study (including hydraulic modeling of gas systems in

New England and New York) would help address some information gaps identified during the June Forum.

Turning to wholesale electric market design, Chairman Phillips noted the potential for Resource Capacity Accreditation (RCA) and other reforms to help address winter reliability issues by appropriately valuing the capacity of certain resources. He encouraged the region to consider such potential reforms in a holistic manner. He further encouraged the region, including the New England States (States), to ensure that the changing resource mix is implemented in a way that supports grid reliability. He noted concern with the impacts of the premature retirement of certain energy resources, including critical infrastructure like the Everett LNG facility, particularly during extreme weather events. Nonetheless, he applauded the efforts to implement ambitious clean energy goals, and emphasized that, in reaching for those goals, system reliability be kept top of mind.

Chairman Phillips spoke to the FERC's *Order 2023* interconnection reforms, which he characterized as a great first step on the "Transmission Reform Journey", as well as to FERC's long-term regional transmission planning rule efforts. Both of those efforts are intended to build upon developments in the various regions of the country and would be integral to preparing for the goals and a future 20-30 years down the road, by making necessary, critical and foundational decisions today.

Chairman Phillips then addressed environmental justice and equity (EJ). He articulated the industry's obligation to be sensitive to the cost and benefits of how energy is produced, procured and delivered. Noting that impacts had not historically been shared equally, he offered personal testimony to the challenges faced by EJ communities. He said it would be incumbent upon the industry moving forward to improve that balance so that the system planned for

benefits all. He reported that the FERC hoped to issue in the near future an outward facing guidance document that would help utilities, advocates, and all those involved in the stakeholder processes better understand the FERC's expectation with respect to EJ communities, how to engage those communities, and how these issues can be addressed in the stakeholder process.

In response to questions, he suggested that, to achieve a successful transition, many would have to be encouraged and lead into what for them may be unfamiliar and uncomfortable territory, through education and changed behavior. Education would have to include a focus on the cost (both capital and human) of not taking certain steps/actions. He further challenged the members to work together to help ensure that the transition to a cleaner grid could be achieved, reliably. He was also optimistic that the transition solution space would, with the appropriate adjustments, work with competitive wholesale markets, which he firmly believed added value when functioning properly.

When asked for thoughts on cost evaluation, Chairman Phillips referred to ongoing FERC proceedings addressing transmission costs. He believed there could be long-term savings, particularly given the impending need to replace aging infrastructure. He believed it more costly to reactively address aging infrastructure following operational failures, rather than proactively updating/upgrading that infrastructure. The benefits attendant to new projects, including economic, reliability, sustainability, and policy benefits, would all have to be considered, as well as the weighing of the costs of doing nothing.

There being no further questions, and on behalf of the Committee, Mr. Cavanaugh thanked Chairman Phillips for the generosity of his time and for his very thoughtful comments.



## ISO CEO REPORT

Mr. Gordon van Welie, ISO Chief Executive Officer (CEO), referred the Committee to the summary of ISO New England Board and Board Committee meetings, which had been circulated and posted in advance of the meeting. There were no questions or comments on the summaries.

Reacting to discussion from, and in reference to the Annual Report distributed earlier in, the meeting, Mr. van Welie stressed the importance of the values articulated in the Annual Report's theme – candor, respect and collaboration – as enhanced by “succeeding together”. He suggested that the journey to refine and decarbonize the region's energy system could only be achieved through a collective, team effort, which in turn would rely and be furthered by those values. He expressed his appreciation, not only for the express recognition afforded those values, but to the collaboration between the States, NEPOOL, and the ISO to support and achieve that outcome. He committed the ISO to those values.

Mr. van Welie recognized Mr. Cavanaugh for his “impeccable” leadership as NEPOOL Chair over the prior three years, complimenting him for how he helped NEPOOL navigate through the challenges it faced during his tenure as Chair. He looked forward to working with the next Chair, who he believed would likely face a similar series of challenges.

Finally, Mr. van Welie thanked Chairman Phillips and his staff for the thoughtful and substantive remarks offered earlier in the meeting. He was pleased how, from reliability, to cost and environmental justice, to gas-electric issues, the Chairman had addressed, and was affirmatively working on, many of the dimensions underlying the challenges facing the region.

## ISO COO REPORT

### *Operations Highlights*

Dr. Chadalavada referred the Committee to his December operations report, which had been circulated and posted in advance of the meeting. Dr. Chadalavada noted that the data in the report was through November 29, 2023, unless otherwise noted. The report highlighted: (i) Energy Market value for November 2023 was \$378 million, up \$118 million from the updated October 2023 value and down \$275 million from November 2022; (ii) November 2023 average natural gas prices were 144% lower than October average prices; (iii) average Real-Time Hub Locational Marginal Prices (LMPs) for November (\$35.96/MWh) were 48% higher than October averages; (iv) average November 2023 natural gas prices and Real-Time Hub LMPs over the period were down 40% and down 47%, respectively, from November 2022 average prices; (v) average Day-Ahead cleared physical energy during peak hours as percent of forecasted load was 100.6% during November (down from 101.6% reported for October), with the minimum value for the month of 95.2% on November 18; and (vi) Daily Net Commitment Period Compensation (NCPC) payments for November totaled \$4.9 million, which was up \$0.4 million from October 2023 and up \$1.1 million from November 2022. November NCPC payments, which were 1.3% of total Energy Market value, was comprised of \$4.9 million in first contingency payments (up \$0.4 million from October). There were no second contingency or voltage NCPC payments in November.

Dr. Chadalavada reported that November 2023 was colder than normal -- 6° F colder than November 2022 and 2° F colder than an average November in New England. Loads were slightly higher than November 2022, despite a significant increase in behind-the-meter photovoltaic (PV) installations and output (November 2023 averaged 3,900 MW of PV output,

600 MW more than 2022). He added that the pace of New England PV installations was averaging 600-800 MW per year. Tight system conditions were experienced on three days in November (the 6<sup>th</sup>, 29<sup>th</sup> and 30<sup>th</sup>), with each day having loads slightly higher than forecast, forced outages, and in a couple of instances, imports slightly below the Day-Ahead Energy Market level. On those days, there were binding reserve constraints, but not to the point where any capacity deficiency was forecasted.

Turning to upcoming planned transmission outages, Dr. Chadalavada noted two: (i) Line 312/393 (Northfield to Alps), which would be out of service from December 5 to December 10, and was expected to reduce in both directions the New York-New England interface limit to roughly 900 MW; and (ii) Line 369 (Seabrook-to-Timberswamp), which would be out of service from December 11 to December 16, potentially exposing New Hampshire and Maine to second contingency costs.

Dr. Chadalavada also reported that the Tariff revisions to make front-of-meter solar installations dispatchable under “do not exceed” (DNE) rules that account for the resources’ variable output and any congestion on the transmission system was successfully implemented on December 5, 2023. He said that approximately 50-60 assets, totaling roughly 620 MW, were participating in the Solar DNE program, with 35-40 of those assets having put in place the necessary protocols to receive ISO dispatch instructions, and the remainder expected to submit, as permitted, plans to come into compliance before the expiration of the Tariff’s compliance grace period. Implementation was smooth and comparable to implementation of the Wind DNE dispatch provisions. The ISO was pleased with the progress of solar assets’ participation in the markets and the additional performance visibility that participation in the Solar DNE program provided to Control Room operators.

In response to questions, Dr. Chadalavada indicated that progress was being made with respect to PV load forecasting. He pointed to increased sampling of data sets, more accurate “machine learning”, and better weighting of composite forecasts as contributing to that progress. Also, ISO adjustments had minimized what had previously been a consistent underforecasting bias. Several additional improvements were planned, including as the science would allow improvements to cloud cover forecasts, a key variable to PV forecasting. Dr. Chadalavada committed, with the benefit of additional experience and data, to come back to the Committee to review and discuss the performance of this ongoing effort.

#### ***New England 2023/24 Winter Outlook Update***

Dr. Chadalavada then updated the Committee on the 2023/24 Winter Outlook. He reported that there was a 40-60% chance that temperatures would be above normal, and a 33-40% chance that, for southern New England, precipitation would be above normal (with an equal chance for above or below normal precipitation for northern New England). He noted that the Mystic cost-of-service agreement would continue through Winter 2023/24 and the IEP program would be in effect both for Winter 2023/24 and 2024/25. Winter demand for Winter 2023/24 was forecast to be roughly 250 MW to 350 MW (or 1.3% to 1.6%) higher than the prior winter. The ISO expected roughly 31 billion cubic feet (Bcf) of LNG to be available to thermal resources. Aggregate fuel-oil inventory was roughly 188 million gallons (48% of the max) and following commissioning earlier in the year, and additional 500 MW of dual-fuel capability/flexibility was available to the ISO. The Energy analysis for Winter 2023/24 remained unchanged from previous reports, with sufficient capacity and energy, with just a few possible but limited exceptions, generally available under both moderate and severe weather scenarios.

Addressing the IEP, Dr. Chadalavada estimated 2023/24's forward cost to be roughly \$78 million, with total forward elections at 844,201 MWh. He noted an increase in the spot energy inventory elections, which had jumped since his November report, to an estimated 287,022 MWh. He added that, because spot participation would be compensated at \$9.25/MWh on days meeting the IEP day threshold (an IEP Day), each IEP Day would add roughly \$2.65 million to the overall program costs.

### ***nGem Program Overview***

Dr. Chadalavada then provided a long-anticipated high level overview of the next Generation Electricity Market (nGEM) program that General Electric (GE) had been developing for more than five years and would replace the existing GE platform being used by a number of the RTOs, including ISO-NE, MISO and PJM. nGem, he explained, would not replace the functionality of the ISO's current GE platform, but would introduce flexibility and new features, including a design that incorporates industry standard cyber security requirements, support for faster market rule implementation, improved test automation, and Kubernetes/containers-based technology that parses out and manages application code in smaller, more individually maintained chunks. nGem would be more easily monitored, maintained and standardized. He estimated New England would put up roughly \$15 million towards initial development and total expected project cost over the next 10 years and its 20-year lifespan would run approximately \$80-90 million.

Members thanked the ISO for the additional information and insight related to this enhanced market tool. In response to questions, Dr. Chadalavada further explained how the containerization of the platform would facilitate more expedited development, testing and

implementation of market rule changes. He provided further context and examples of how nGem represented a significant improvement over previous platforms and tools.

## **ELECTION OF 2024 PARTICIPANTS COMMITTEE OFFICERS**

Mr. Cavanaugh referred the Committee to the proposed slate of 2024 NEPOOL Participants Committee Officers circulated and posted in advance of the meeting. The following motion was duly made, seconded and unanimously approved, with an abstentions noted by the New Hampshire Office of Consumer Advocate and Mr. Lamson:

WHEREAS, Section 4.6 of the Participants Committee Bylaws sets forth procedures for the nomination and election of a Chair and Vice-Chairs of the Participants Committee; and

WHEREAS, pursuant to those procedures the individuals identified in the following resolution were nominated and elected for 2024 to the offices of Chair and Vice-Chair, as set forth opposite their names; and

WHEREAS Section 7.1 of the Second Restated NEPOOL Agreement provides that officers be elected at the annual meeting of the Participants Committee.

NOW, THEREFORE, IT IS

RESOLVED, that the Participants Committee hereby adopts and ratifies the results of the election held in accordance with Section 4.6 of the Bylaws and elects the following individuals for 2024 to the offices set forth opposite their names to serve until their successors are elected and qualified:

Chair	Sarah Bresolin
Vice-Chair	Dave Cavanaugh
Vice-Chair	Michelle Gardner
Vice-Chair	Aleks Mitreski
Vice-Chair	Paul Roberti
Vice-Chair	Alan Trotta
Secretary	Sebastian Lombardi
Assistant Secretary	Pat Gerity

## **ESTIMATED BUDGET FOR 2024 NEPOOL EXPENSES**

Mr. Tom Kaslow, Budget & Finance Subcommittee (B&F) Chair, reported that the B&F Subcommittee reviewed, at its November 28, 2023 meeting, the estimated budget for 2024 Participant Expenses, a copy of which was circulated and posted in advance of the meeting and is included as Attachment 2 to these minutes. He reported that there were no concerns or objections identified by Subcommittee members. Without further discussion, the following motion was duly made, seconded and approved unanimously, with an abstention noted by Mr. Lamson:

RESOLVED, that the Participants Committee adopts the estimated budget for NEPOOL expenses for 2024 as presented at this meeting.

## **FAP CHANGES – FCM DELIVERY FINANCIAL ASSURANCE**

Mr. Kaslow then introduced proposed changes to the ISO Financial Assurance Policy (FAP) to update the provisions related to the FCM Delivery Financial Assurance requirements (the FCM Delivery FA Changes). He explained that the FCM Delivery FA Changes were intended to better align the financial assurance (FA) required with respect to FCM pay-for-performance (PFP) penalties with the potential risk of non-payment of those penalties. He reported that the FCM Delivery FA Changes were discussed by the B&F Subcommittee at its September 26, October 30 and November 28 meetings, with no Subcommittee member at those meetings objecting to the Changes. Following motion duly made and seconded, the Committee unanimously approved the following motion, with an abstention by Mr. Lamson noted:

RESOLVED, that the Participants Committee supports the changes to the FAP related to the calculation of FCM Delivery Financial Assurance, as proposed by the ISO and as circulated to this Committee with the November 30, 2023 supplemental notice, together with such non-substantive changes as may be approved by the Chair of the Budget & Finance Subcommittee.

## **IMM 2022 ANNUAL MARKETS REPORT**

Mr. David Naughton, ISO Internal Market Monitoring (IMM) Executive Director, referred members to the summary of the IMM's 2022 Annual Markets Report (2022 IMM Annual Report) circulated and posted with the materials for the meeting. He also highlighted an accompanying primer, entitled "An Overview of New England's Wholesale Electricity Markets" (Primer). He explained that the Primer was intended to be a resource to explain the underlying mechanics of New England Markets, while the 2022 IMM Annual Report focused on key trends, the drivers of those trends, and an evaluation of the overall competitiveness and performance of the Markets.

Turning to the performance of New England markets in 2022, he reported that, due to high natural gas prices, 2022's energy prices were the highest since standard market design (SMD) was implemented in 2003; the region's overall market costs were the highest experienced since 2008. Looking ahead to 2023, he anticipated that energy prices and overall costs would be significantly lower.

Next, Mr. Naughton presented the IMM's simulation of generator profitability, namely, how much hypothetical combined cycle and combustion turbine generators could have earned in the wholesale markets. Referring to a chart, he explained that the results indicated that revenues for hypothetical combined cycle and combustion turbine generators in 2022 were above their calculated Cost of New Entry (CONE). He explained that this was the first time since 2018 that the wholesale markets provided enough revenues to make it profitable for a new gas-fired generator in the region. The cold spells experienced in Winter 2022/23 contributed to this result. In response to a question, Mr. Naughton confirmed that the



simulation model included Regional Greenhouse Gas Initiative (RGGI) costs but not those from the Commonwealth of Massachusetts' Global Warming Solutions Act.

Addressing virtual transactions, Mr. Naughton showed a trend in 2022 indicating a significant increase in virtual supply submissions and clearances between hours ending 9 through 17. Mr. Naughton explained the relationship between virtual supply and PV generation, especially on days with high solar output. Because most solar generation participates as settlement-only generation (SOG) and cannot participate in the Day-Ahead Energy Market, he explained that virtual supply offers replaced the price-taking SOGs that show up in Real-Time. Thus, he reasoned that virtual transactions add value to the market by helping converge Day-Ahead prices downward to Real-Time prices. Relatedly, he discussed virtual transaction profitability. He noted that NCPC charges impact the profitability of virtual transactions. Given the expected increase of intermittent generation, Mr. Naughton pointed to a long-standing IMM recommendation to improve the NCPC-related rules to reduce NCPC charges to virtual transactions.

Mr. Naughton then discussed reserve pricing under fast-start pricing. He observed a higher rate of non-zero reserve pricing when the reserve constraint is not binding, i.e., a physical reserve surplus exists, contrary to the purpose of reserve prices. To explain, he referred to an illustrative example showing that, on December 12, 2022, fast-start pricing generated reserve pricing for 85 minutes despite the reserve constraint binding for only 20 minutes. These points notwithstanding, Mr. Naughton opined that fast-start pricing generally supported better price formation in the Real-Time Energy Market by enabling fast-start generators to set the clearing price. In any case, he recommended that the ISO reassess the

reserve pricing mechanism under fast-start pricing to address the frequency of non-zero reserve pricing when there is a physical reserve surplus.

Next, Mr. Naughton noted that energy market mitigation remained very low. He did, however, point out the December 24, 2022 mitigation event where an unusual step was taken to mitigate certain resources upward. Mr. Naughton explained that the FERC issued a show cause order, directing the ISO to review its mitigation rules. Following that review, the ISO filed a NEPOOL-supported proposal to eliminate the risk of upward mitigation, which as of the date of his report remained pending before the FERC. Mr. Naughton also stated that he supported a proposal to revise the Tariff provisions relating to the fuel price adjustment construct. That proposal was still being considered in the stakeholder process. Following this summary of energy market mitigation, he reviewed four recommendations for energy market mitigation design and responded to questions concerning two of the recommendations.

In the final portion of his presentation, Mr. Naughton commented on the Forward Reserve Market (FRM). He stated his concerns with the material offer price increase and related structural market power issues. He explained his recommendation for revisions to the offer cap and delaying the publication of FRM offer data, both making their way through the stakeholder process.

## **LITIGATION REPORT**

Mr. Lombardi referred the Committee to the December 6 Litigation Report that had been circulated and posted before the meeting. He highlighted (i) the deadline for comments on the ISO's FCA18 Qualification Informational Filing set to end later that day, and (ii) the many joint ISO/NEPOOL filings that were pending FERC action, all the product of significant and recent efforts in the stakeholder process, including: the FCA19 schedule changes; FCM CONE and Net

CONE updates; Energy Supply Offer Mitigation changes; Retirement/Permanent De-List Bid Price Flexibility changes; changes to the qualification rules for Distributed Energy Capacity Resources; and the compliance filing to make eligible to participate in the Inventoried Energy Program (IEP) pumped storage resources participating as Electric Storage Facilities.

## COMMITTEE REPORTS

***Markets Committee (MC).*** Mr. William Fowler, the MC Vice-Chair, reported that the next MC meeting was scheduled for December 12-14 in Westborough, MA. He indicated that key topics would include the RCA project, discussion on Analysis Group's report and key findings on alternative FCM commitment horizons, and various market rule enhancements and compliance-related changes.

***Reliability Committee (RC).*** Mr. Robert Stein, the RC Vice-Chair, reported that, in addition to the December 12-13 joint meeting with the Markets Committee to consider RCA issues, the RC would itself meet on December 18-19. Key topics for the RC's two-day meeting would include, in addition to continuation of RCA discussions and consideration of a number of Proposed Plan Applications and Transmission Cost Allocations, an introduction to the Regional Energy Shortfall Threshold (REST), a project to determine what level of reliability the region should strive to attain.

***Transmission Committee (TC).*** Mr. Dave Burnham, the TC Vice-Chair, reported that the next TC meeting was scheduled in person in Westborough for December 21. Key topics would include longer/extended-term transmission planning and the ongoing FERC *Order 2023* compliance effort. With respect to *Order 2023* compliance, TC members could expect to see draft ISO-proposed Tariff redlines posted the following day and an additional TC meeting to be scheduled in early January to allow primarily for consideration of stakeholder amendments. He

encouraged those with *Order 2023*-related amendments that had not already done so to reach out to him and the TC Chair, Ms. Emily Laine.

***Budget & Finance Subcommittee.*** Mr. Kaslow reported that the next B&F Subcommittee meeting was scheduled for January 24, 2024.

***Membership Subcommittee.*** Ms. Ashley Gagnon, Membership Subcommittee Chair, reported that the next Membership Subcommittee meeting was scheduled for December 11.

## **ADMINISTRATIVE MATTERS**

Mr. Lombardi noted the possibility that January 4, 2024, then the date of the next regularly-scheduled Participants Committee meeting, might instead be used for the additional Transmission Committee discussion needed on amendments to the ISO's *Order 2023* compliance proposal. He encouraged members to stay tuned for further information and confirmation of the schedule for that day. Mr. Cavanaugh noted the membership orientation that would follow the meeting and encouraged members interested in additional information and insight on membership and stakeholder process issues to participate. He wished all a safe and joyful holiday season.

There being no other business, the meeting adjourned at 12:40 p.m.

Respectfully submitted,

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Sebastian Lombardi, Secretary

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES  
PARTICIPATING IN DECEMBER 7, 2023 MEETING**

PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
Advanced Energy United	Associate Non-Voting		Alex Lawton	
Ashburnham Municipal Light Plant	Publicly Owned Entity		Matt Ide	Dan Murphy
Associated Industries of Massachusetts	End User			Mary Smith (tel)
AVANGRID: CMP/UI	Transmission	Alan Trotta	Jason Rauch	Zach Teti (tel)
Bath Iron Works Corporation	End User			Bill Short (tel)
Belmont Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
Block Island Utility District	Publicly Owned Entity	Dave Cavanaugh		
BlueWave Public Benefit Corp.	AR-DG	Mike Berlinski		
Boylston Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
BP Energy Company (BP)	Supplier			José Rotger
Braintree Electric Light Department	Publicly Owned Entity		Dave Cavanaugh	
Brookfield Renewable Trading and Marketing	Supplier	Aleks Mitreski		
Castleton Commodities Merchant Trading	Supplier			Bob Stein
Chester Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
Chicopee Municipal Lighting Plant	Publicly Owned Entity		Matt Ide	Dan Murphy
CLEARresult Consulting, Inc.	AR-DG	Tamera Oldfield		
Clearway Power Marketing LLC	Supplier			Pete Fuller
Concord Municipal Light Plant	Publicly Owned Entity		Dave Cavanaugh	
Connecticut Municipal Electric Energy Coop.	Publicly Owned Entity	Brian Forshaw (tel)		
Connecticut Office of Consumer Counsel (CT OCC)	End User		Jamie Talbert-Slagle	Jackie Litynski
Conservation Law Foundation (CLF)	End User	Phelps Turner (tel)	Priya Gandbnir	
Constellation Energy Generation	Supplier	Gretchen Fuhr	Bill Fowler	
CPV Towantic, LLC (CPV)	Generation	Joel Gordon		
Cross-Sound Cable Company (CSC)	Supplier		José Rotger	
Danvers Electric Division	Publicly Owned Entity		Dave Cavanaugh	
Dominion Energy Generation Marketing, Inc.	Generation	Wes Walker (tel)		
DTE Energy Trading, Inc. (DTE)	Supplier			José Rotger
Durgin and Crowell Lumber Co., Inc.	End User			Bill Short (tel)
Dynegy Marketing and Trade, LLC	Supplier	Andy Weinstein		Bill Fowler
ECP Companies Calpine Energy Services, LP (Calpine) New Leaf Energy	Generation	Brett Kruse Liz Delaney	Andy Gillespie	Bill Fowler Alex Chaplin
EDF Trading North America, LLC	Supplier	Eric Osborn (tel)		
Elektrisola, Inc.	End User			Bill Short (tel)
Emera Energy Services	Supplier			Bill Fowler
Enel X North America, Inc.	AR-LR	Alex Worsley		
ENGIE Energy Marketing NA, Inc.	AR-RG	Sarah Bresolin	Joe Dalton	
Eversource Energy	Transmission	James Daly	Dave Burnham (tel)	Vandan Divatia
Excelerate Energy LP	Associate Non-Voting	Gary Ritter		
FirstLight Power Management, LLC	Generation	Tom Kaslow		
Galt Power, Inc. (Galt)	Supplier	José Rotger	Jeff Iafrati (tel)	
Garland Manufacturing Company	End User			Bill Short (tel)
Generation Bridge Companies	Generation	Bill Fowler		
Generation Group Member	Generation	Dennis Duffy	Abby Krich	
Georgetown Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
Groton Electric Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Groveland Electric Light Department	Publicly Owned Entity		Dave Cavanaugh	
H.Q. Energy Services (U.S.) Inc. (HQ US)	AR-RG	Louis Guibault (tel)	Bob Stein	
Hammond Lumber Company	End User			Bill Short (tel)

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PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
High Liner Foods (USA) Incorporated	End User		William P. Short III (tel)	
Hingham Municipal Lighting Plant	Publicly Owned Entity		Dave Cavanaugh	
Holden Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Holyoke Gas & Electric Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Hull Municipal Lighting Plant	Publicly Owned Entity		Matt Ide	Dan Murphy
Icetec Energy Services, Inc.	AR-LR	Doug Hurley		
Ipswich Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Jericho Power LLC (Jericho)	AR-RG	Ben Griffiths	Nancy Chafetz (tel)	Marji Philips
Jupiter Power	AR-RG		Ron Carrier (tel)	
Lamson, Jon	End User	Jon Lamson		
Littleton (MA) Electric Light and Water Department	Publicly Owned Entity		Dave Cavanaugh	
Littleton (NH) Water & Light Department	Publicly Owned Entity		Craig Kieney (tel)	
Long Island Power Authority (LIPA)	Supplier	Bill Kilgoar (tel)		
Maine Power LLC	Supplier	Jeff Jones (tel)		
Maine Public Advocate's Office	End User	Drew Landry		
Mansfield Municipal Electric Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Maple Energy LLC	AR-LR			Doug Hurley
Marblehead Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Mass. Attorney General's Office (MA AG)	End User	Ashley Gagnon	Jamie Donovan (tel)	
Mass. Bay Transportation Authority	Publicly Owned Entity		Dave Cavanaugh	
Mass. Department of Capital Asset Management	End User	Paul Lopes	Nancy Chafetz (tel)	
Mass. Municipal Wholesale Electric Company	Publicly Owned Entity	Matt Ide	Dan Murphy	
Mercuria Energy America, LLC	Supplier			José Rotger
Merrimac Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
Middleborough Gas & Electric Department	Publicly Owned Entity		Dave Cavanaugh	
Middleton Municipal Electric Department	Publicly Owned Entity		Dave Cavanaugh	
Moore Company	End User			Bill Short (tel)
Narragansett Electric Co. (d/b/a RI Energy)	Transmission	Brian Thomson	Lindsay Orphanides (tel)	
Nautilus Power, LLC	Generation		Bill Fowler	
New Hampshire Electric Cooperative	Publicly Owned Entity			Brian Forshaw (tel)
New Hampshire Office of Consumer Advocate	End User	Donald Kreis		
New England Power (d/b/a National Grid)	Transmission	Tim Brennan	Tim Martin	
New England Power Generators Assoc. (NEPGA)	Associate Non-Voting	Bruce Anderson		Molly Connors (tel)
NextEra Energy Resources, LLC	Generation	Michelle Gardner	Nick Hutchings	
North Attleborough Electric Department	Publicly Owned Entity		Dave Cavanaugh	
Norwood Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
Nylon Corporation of America	End User			Bill Short (tel)
Pascoag Utility District	Publicly Owned Entity		Dave Cavanaugh	
Pawtucket Power Holding Company LLC	Generation	Dan Allegretti	Kevin Telford	
Paxton Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Peabody Municipal Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
PowerOptions, Inc.	End User			Jackie Litynski
Princeton Municipal Light Department	Publicly Owned Entity	Matt Ide		
Reading Municipal Light Department	Publicly Owned Entity		Dave Cavanaugh	
RI Division (DPUC)	End User	Paul Roberti		
Rowley Municipal Lighting Plant	Publicly Owned Entity		Dave Cavanaugh	
Russell Municipal Light Dept.	Publicly Owned Entity	Matt Ide		
Saint Anselm College	End User			Bill Short (tel)
Shell Energy North America (US), L.P.	Supplier	Jeff Dannels		
Shipyard Brewing LLC	End User			Bill Short (tel)

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PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
Shrewsbury Electric & Cable Operations	Publicly Owned Entity		Matt Ide	Dan Murphy
Sierra Club	End User	Casey Roberts (tel)		
South Hadley Electric Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Sterling Municipal Electric Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Stowe Electric Department	Publicly Owned Entity		Dave Cavanaugh	
Sunrun Inc.	AR-DG			Pete Fuller
SYSO Inc.	AR-DG	Doug Matheson		
Tangent Energy Inc.	AR-LR	Brad Swalwell (tel)		
Taunton Municipal Lighting Plant	Publicly Owned Entity		Dave Cavanaugh	
Templeton Municipal Lighting Plant	Publicly Owned Entity	Matt Ide		Dan Murphy
The Energy Consortium	End User		Mary Smith (tel)	
Vermont Electric Cooperative	Publicly Owned Entity	Craig Kieney (tel)		
Vermont Electric Power Company (VELCO)	Transmission	Frank Ettori		
Vermont Public Power Supply Authority	Publicly Owned Entity			Brian Forshaw (tel)
Versant Power	Transmission	Dave Norman (tel)		
Village of Hyde Park (VT) Electric Department	Publicly Owned Entity	Dave Cavanaugh		
Wakefield Municipal Gas & Light Department	Publicly Owned Entity		Matt Ide	Dan Murphy
Walden Renewables Development LLC	Generation			Abby Krich
Wallingford DPU Electric Division	Publicly Owned Entity		Dave Cavanaugh	
Wellesley Municipal Light Plant	Publicly Owned Entity		Dave Cavanaugh	
West Boylston Municipal Lighting Plant	Publicly Owned Entity		Matt Ide	Dan Murphy
Westfield Gas & Electric Department	Publicly Owned Entity		Dave Cavanaugh	
Wheelabrator North Andover Inc.	AR-RG		Bill Fowler	
Z-TECH LLC	End User			Bill Short (tel)

**ESTIMATED 2024 NEPOOL BUDGET COMPARED TO  
2023 NEPOOL BUDGET AND 2023 PROJECTED ACTUAL EXPENSES**

<u>Line Items</u>	<u>2023 Approved Budget</u>	<u>2024 Proposed Budget</u>	<u>2023 Current Forecast</u>
NEPOOL Counsel Fees (1)	\$4,350,000	\$4,350,000	\$4,350,000
NEPOOL Counsel Disbursements (1)	\$ 30,000	\$ 30,000	\$ 30,000
Independent Financial Advisor Fees and Disbursements (2)	\$ 48,000	\$ 48,000	\$ 47,000
Committee Meeting Expenses (1)	\$ 900,000	\$ 920,000	\$ 720,000
Generation Information System (4)	\$1,022,400	\$1,086,700	\$1,022,000
Credit Insurance Premium (3)	\$ 799,000	\$ 578,800	\$ 484,700
NEPOOL Audit Management Subcommittee ("NAMS") Consultant (5)	\$ _____ 0	\$ _____ 0	\$ _____ 0
SUBTOTAL EXPENSES	\$7,149,400	\$7,013,500	\$6,653,700
<u>Revenue</u>			
NEPOOL Membership Fees (3)	(\$2,300,000)	(\$2,300,000)	(\$2,300,000)
Generation Information System (4) (6)	(\$1,022,400)	(\$1,086,700)	(\$1,022,000)
Credit Insurance Premium (3) (7)	<u>(\$ 799,000)</u>	<u>(\$ 578,800)</u>	<u>(\$ 484,700)</u>
TOTAL REVENUE	(\$4,121,400)	(\$3,965,500)	(\$3,806,700)
<b>TOTAL NEPOOL EXPENSES</b>	<b>\$3,028,000</b>	<b>\$3,048,000</b>	<b>\$2,847,000</b>



Notes

- (1) 2024 proposed estimate provided by Day Pitney LLP, NEPOOL counsel.
- (2) 2024 proposed estimate provided by Michael M. Mackles, NEPOOL's Independent Financial Advisor, and reflects responsibility for reviewing meeting and travel expenses.
- (3) 2024 proposed estimate provided by ISO New England Inc. (ISO).
- (4) Based on fee arrangement in Extension of and First Amendment to Amended and Restated Generation Information System Administration Agreement, pursuant to which the annualized fixed fee for 2024 is projected to be \$1,047,400 for three months and \$1,099,700 for nine months. Estimate assumes NEPOOL will not exceed 520 development hours for changes to GIS, and any additional development hours would impose additional charges on NEPOOL.
- (5) If NEPOOL determines that an audit should be performed in 2024, funding for that audit will be addressed separately.
- (6) GIS costs are paid by "GIS Participants" under Allocation of Costs Related to Generation Information System, which was approved by the NEPOOL Participants Committee on June 21, 2001 and amended by the NEPOOL Participants Committee on May 6, 2016.
- (7) Credit insurance premium is paid by Qualifying Market Participants according to methodology described in Section IX of the ISO Financial Assurance Policy. The 2023 sales figure that was estimated using future pricing turned out to be higher than the actual pricing for the 2023 policy period, resulting in a lower actual premium than projected in the 2023 NEPOOL Budget.

## CONSENT AGENDA

### *Markets Committee (MC)*

*From the previously-circulated notice of actions of the MC's **January 9-11, 2024 meeting**, dated January 11, 2024.<sup>1</sup>*

#### **1. Revisions to Market Rule 1 (Further Order 2222 Compliance)**

Support revisions to Market Rule 1 to designate the Distributed Energy Resource (DER) Aggregator as the entity responsible for providing metering information for its DER Aggregations (DERAs) and to provide DER Aggregators the option to choose a metering provider for DERAs providing energy injection and/or withdrawal service, as recommended by the MC at its September 12-13, 2023 meeting, together with such further non-material changes as the Chair and Vice-Chair of the MC may approve.

The motion to recommend Participants Committee support was approved with two opposed in the Alternative Resources Sector, and two abstentions in the End User Sector.

### *Reliability Committee (RC)*

*From the previously-circulated notice of actions of the RC's **December 18-19, 2023 meeting**, dated December 19, 2023.<sup>2</sup>*

#### **2. Revisions to OP-24 and Appendix B to OP-24 (Expansion of the number of facilities where fault clearing information (OP-24B data) is required to be provided on an annual basis)**

Support revisions to ISO New England Operating Procedure (OP) No. 24 (Protection Outages, Settings and Coordination) and Appendix B to OP-24 (Transmission Relaying Characteristics),<sup>3</sup> as recommended by the RC at its December 18-19, 2023 meeting, together with such further non-material changes as the Chair and Vice-Chair of the RC may approve.

The motion to recommend Participants Committee support was approved unanimously.

#### **3. Revisions to PP 5-6 (system modeling assumption updates, adopt IEEE Standard 2800, and improved IBR modeling requirements)**

Support revisions to Planning Procedure 5-6 (Interconnection Planning Procedure for Generation and Elective Transmission Upgrades),<sup>4</sup> as recommended by the RC at its December 18-19, 2023 meeting, together with such further non-material changes as the Chair and Vice-Chair of the RC may approve.

The motion to recommend Participants Committee support was approved with one opposed and one abstention, each in the Generation Sector.

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<sup>1</sup> MC Notices of Actions are posted on the ISO-NE website at: [https://www.iso-ne.com/committees/markets/markets-committee/?document-type=Committee Actions](https://www.iso-ne.com/committees/markets/markets-committee/?document-type=Committee%20Actions).

<sup>2</sup> RC Notices of Actions are posted on the ISO-NE website at: [https://www.iso-ne.com/committees/reliability/reliability-committee/?document-type=Committee Actions](https://www.iso-ne.com/committees/reliability/reliability-committee/?document-type=Committee%20Actions).

<sup>3</sup> The recommended revisions to OP-24 and Appendix B to OP-24 include changes to: (i) expand the number of facilities where fault clearing information (OP-24B data) is required to be provided on an annual basis; and (ii) the data format in OP-24B to primarily cover single-line-to-ground faults and IPT status of breakers.

<sup>4</sup> The recommended revisions to PP 5-6 include changes to: (i) update system modeling assumptions to align with the operating conditions expected to result from the clean energy transition; (ii) describe the adoption of the new IEEE Standard 2800 (Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems); and (iii) improve modeling requirements for IBRs.