

## **FINAL**

Pursuant to notice duly given, the annual meeting of the NEPOOL Participants Committee was held via teleconference, beginning in executive session at 9:30 a.m. on Thursday, December 3, 2020.

Ms. Nancy Chafetz, Chair, presided and Mr. David Doot, Secretary, recorded.

### **EXECUTIVE SESSION**

The Committee began the meeting in executive session to afford Participants an opportunity to provide confidential feedback to the Participant members of the Joint Nominating Committee (JNC) on the one incumbent ISO Board Director whose term was scheduled to expire in 2021 and who had not yet served three full terms. Committee members provided that feedback. Prior to concluding the executive session, Mr. Doot explained that the Participant representatives on the JNC would consider the feedback received, along with any other feedback members might wish to separately share with those representatives, in the JNC deliberations over a recommended slate of three candidates for consideration by the Participants Committee in 2021.

### **GENERAL SESSION**

Following a short recess, the NEPOOL Participants Committee reconvened, beginning at 10:00 a.m. 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 teleconference meeting.

Ms. Chafetz began the general session by providing an update on the JNC process, which for the 2021 class year, was scheduled to begin later in the month. She noted expectations that there would be at least two vacancies to fill, given that Ms. Kathleen Abernathy and Mr. Phil

Shapiro would be completing their third consecutive three-year terms, requiring them, absent an unexpected term limit waiver, to step off the ISO Board in 2021. Referring to recent discussions on potential changes to the selection process for new Board members, she noted that the NEPOOL representatives on the JNC planned to explore with the full JNC refinements to the selection process, and time would be set aside at a future meeting to continue those discussions with the benefit of preliminary feedback from the ISO Board and the new JNC.

### **CONSENT AGENDA**

Ms. Chafetz 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 approved with opposition noted by Jericho Power and abstentions noted by Avangrid and the representative for Mr. Kuser. The Jericho Power and Avangrid representatives stated that their votes were each attributable to Consent Agenda Item 1 (Modifications to the qualification of Energy Efficiency (EE) in the Forward Capacity Market (FCM)). The Jericho Power representative explained that, while Jericho Power supported the proposed changes, it objected to the ISO's plan to delay the changes until early 2022, which would retain for another year a flaw in the Market Rules. The Avangrid representative explained that he had abstained due to United Illuminating's concerns with the materially increased administrative requirements to implement the proposal.

### **REVISIONS TO APPENDIX K TO OP-23 AND REVISIONS TO OP-24**

Ms. Chafetz referred the Committee to revisions to Appendix K to Operating Procedure (OP) 23 (Response Rate Auditing Calculation) (OP-23) and to OP 24 (Protection Outages, Settings and Coordination), including changes to each of its Appendices (together, OP-24), each as unanimously recommended by the Reliability Committee (RC) at its November 18, 2020

meeting and described in materials circulated in advance of the Participants Committee meeting. She said that the revisions to OP-23 and OP-24 would have been on the Consent Agenda but for the timing of the RC's consideration and vote.

The following motions were duly made, seconded and unanimously approved in a single vote without comment, with an abstention by Mr. Kuser's representative noted:

RESOLVED, that the Participants Committee supports the revisions to Appendix K to OP-23, as recommended by the Reliability Committee at its November 18, 2020 meeting, together with such other non-substantive changes as may be agreed to after the meeting by the Chair and Vice-Chair of the Reliability Committee.

RESOLVED, that the Participants Committee supports the revisions to OP-24 (including changes to each of Appendices A, B, C, and D to OP-24), as recommended by the Reliability Committee at its November 18, 2020 meeting, together with such other non-substantive changes as may be agreed to after the meeting by the Chair and Vice-Chair of the Reliability Committee.

## **ISO CEO REPORT**

Mr. van Welie referred the Committee to the summaries of the ISO Board and Board Committee meetings that had occurred since the November 5 Participants Committee meeting, which had been circulated and posted in advance of the meeting. There were no questions or comments on the summaries.

## **ISO COO REPORT**

Dr. Vamsi Chadalavada, ISO Chief Operating Officer (COO), reviewed highlights from the December COO report, which had been circulated and posted in advance of the meeting on the NEPOOL and ISO websites. He noted that the data in the report was through November 23. The report highlighted: (i) Energy Market value for November 2020 was \$197 million, down \$42 million from October 2020 and down \$134 million from November 2019; (ii) August 2020 average natural gas prices were 4.7 percent higher than October average prices; (iii) the average

Real-Time Hub Locational Marginal Prices (LMPs) for November (\$27.10/MWh) were 0.8 percent higher than October averages; (iv) average November 2020 natural gas prices and Real-Time Hub LMPs over the period were down 39 percent and 21 percent, respectively, from November 2019; (v) the average Day-Ahead cleared physical energy during peak hours as percent of forecasted load was 99.6 percent during November (down from 100.8 percent during October), with the minimum value for the month (95.3 percent) on November 14; and (vi) the Daily Net Commitment Period Compensation (NCPC) payments for November (data through November 22) totaled \$1.6 million, which was down \$1.2 million from October 2020 and down \$2.1 million from November 2019. November NCPC, which was 0.8 percent of total Energy Market value, was comprised of (a) \$1.4 million in first contingency payments (down \$800,000 from October); (b) \$233,000 in second contingency payments (down \$313,000 from October); and (c) \$9,000 in distribution payments (down \$33,000 from October).

Dr. Chadalavada remarked that November had been relatively quiet, with peak load at 17,100 MW and temperatures across the region three degrees above normal. He highlighted continuing low levels of NCPC payments, stating that total annual payments for 2020, projected to be approximately \$22 million, would be the lowest over the past 12 years. During that time, annual NCPC payments had averaged between \$80 to \$100 million, with their highpoint at \$160 million to \$180 million in 2013 and 2014.

Dr. Chadalavada reported that there would be a three-day transmission outage, from December 8 through December 10, on the Long Mountain to Cricket Valley 398 line, reducing transfers from New York to New England. Reductions in import and export capacity of 600 MW were expected with the total resulting anticipated import and export capacities of 800 MW and 400 MW, respectively.

Dr. Chadalavada then turned to load forecast expectations for winter 2020/21, indicating that the ISO would continue to monitor closely for any shifts between residential and commercial consumption. School and college closings could result in changes to consumption patterns, but were not expected to be as great as the changes experienced over the summer. Daily forecast volatility remained possible, but the ISO would continue to monitor and tune the forecast model as needed, reflecting continuing discussions with industry experts regarding and incorporating emerging technologies/trends and methods. The ISO would also closely monitor residential gas demand, particularly during prolonged cold periods, for its overall impact on the electric system.

Concluding his report, Dr. Chadalavada noted that the process for the development of the 2021 load forecast had begun, with discussions at the Load Forecast Committee, Energy Efficiency Forecast Working Group and Distributed Generation Forecast Working Group. Moody's macroeconomic forecast would be presented at the Planning Advisory Committee on December 16, followed by discussions in March and April about the preliminary 10-year forecast, which would then be finalized and published in the ISO's 2021 Forecast Report of Capacity, Energy, Loads, and Transmission (CELT Report).

In response to questions, Dr. Chadalavada confirmed that the transmission line outages discussed during the November report had resulted two days of second contingency commitments, with payments of about \$50,000 - \$60,000, and a few days of commitments in the east load zones. Addressing questions concerning the accuracy of the ISO's load forecasting, he explained that additional time was needed to identify the reasons for recent under forecasts relative to the back cast models being used by the ISO for weekly COVID-19 impact reports, and cautioned that, after several months of consistent forecasts, the region was likely entering a new period of uncertainty. Dr. Chadalavada indicated that the ISO still planned, but had not yet

completed, the process to analyze and better understand changing consumption patterns as a result of the pandemic.

### **2020 NEPOOL ANNUAL REPORT**

Ms. Chafetz referred the Committee to the 2020 NEPOOL Annual Report, “Moving Forward, Together”, which was circulated to the Committee electronically and posted on the NEPOOL website. Ms. Chafetz thanked the Day Pitney team, and Messrs. Harold Blinderman and Pat Gerity particularly, for their efforts to assemble and complete the Annual Report. Ms. Chafetz highlighted the new NEPOOL logo, the refresh of the NEPOOL website, the inclusion of WebEx photos throughout the Report, and the last page which highlighted some of the things members miss most about in-person meetings. Mr. Doot noted that the Annual Report demonstrated that NEPOOL had achieved much in 2020 and could expect continued challenges in 2021. He encouraged Participant feedback on the format and substance of the Annual Report. Messrs. Blinderman and Gerity thanked Ms. Chafetz as the Report’s editor-in-chief, the officers for their input, and members for all their contributions to the report. Printed copies would be made available upon request.

### **ELECTION OF 2021 PARTICIPANTS COMMITTEE OFFICERS**

Ms. Chafetz referred the Committee to the proposed slate of 2021 NEPOOL Participants Committee Officers circulated and posted in advance of the meeting.

The following motion was duly made, seconded and unanimously approved, with an abstention noted by Mr. Kuser’s representative:

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 2021 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 2021 to the offices set forth opposite their names to serve until their successors are elected and qualified:

Chair	David A. Cavanaugh
Vice-Chair	Christina H. Belew
Vice-Chair	Nancy P. Chafetz
Vice-Chair	Francis J. Etori, Jr.
Vice-Chair	Michelle C. Gardner
Vice-Chair	Douglas Hurley
Secretary	David T. Doot
Assistant Secretary	Sebastian M. Lombardi

#### **ESTIMATED BUDGET FOR 2021 NEPOOL EXPENSES**

Mr. Thomas Kaslow, Budget & Finance Subcommittee (B&F) Chair, referred the Committee to the materials posted in advance of the meeting concerning the estimated budget for 2021 Participant Expenses (a copy of which is included as Attachment 3 to these minutes). He noted that the 2021 budget assumed virtual meetings through May 2021 and in-person meetings thereafter. He indicated that B&F had reviewed and discussed the proposed 2021 Budget and had recommended its adoption without objection.

The following motion was duly made, seconded and approved unanimously, with an abstention noted by Mr. Kuser's representative.

RESOLVED, that the Participants Committee adopts the estimated budget for NEPOOL expenses for 2021 as presented at this meeting.

#### **UPDATED (AS OF FCA16) FCM VALUES/PARAMETERS**

Ms. Chafetz referred the Committee to the materials and draft resolution, circulated and posted in advance of the meeting, concerning proposed Tariff revisions to update the Cost of

New Entry (CONE), Net CONE, and Payment Performance Rate (PPR) values, as well as the Offer Review Trigger Prices (ORTPs) to be used in the Forward Capacity Market. Ms. Mariah Winkler, Markets Committee Chair, then summarized the Market Rule changes and provided the procedural background for the Markets Committee's consideration of the changes. Following that summary, she explained that the ISO had revised certain FCM values after Markets Committee voting to correct an error in the dispatch model for the simple cycle technology and that this correction was applied both to the ISO-proposed FCM values and the relevant FCM values recommended by the Markets Committee. Ms. Chafetz proposed that, absent any objection, Participants Committee action on this matter would include the corrected values. There were no objections. The following motion was then duly made and seconded:

RESOLVED, that the Participants Committee supports revisions to Market Rule 1 as recommended by the Markets Committee and as circulated to this Committee in advance of this meeting, together with the revised FCM parameter values to correct an error in the dispatch model used for calculating those values also as circulated to this Committee in advance of this meeting, and such non-substantive changes as may be approved by the Chair and Vice-Chair of the Markets Committee.

Mr. Sebastian Lombardi, NEPOOL Counsel, noted that, for amendments that had been offered during Markets Committee consideration of these changes and had failed to gain the requisite support for inclusion in the changes recommended for Participants Committee support, neither NEPOOL nor the ISO would raise procedural objections at the FERC based on the failure to submit the amendment for a Participants Committee vote. This understanding would only apply if the party raising its concerns did not ask the FERC to order changes that had not otherwise been previously vetted and voted in the Participant Processes.



### *Jericho Power/NEPGA Amendment*

Ms. Chafetz then invited a Jericho Power representative (on behalf of NEPGA) to describe its amendment to the main motion (Jericho Power/NEPGA Amendment). He summarized the materials circulated in advance of the meeting, explaining that the Jericho Power/NEPGA Amendment would account for the impact the Net CONE unit has on the Locational Forward Reserve Market (LFRM) clearing price by including the Net CONE unit in the LFRM supply stack at its opportunity costs (which would result in an increase to the Net CONE value). He argued that the exclusion of the Net CONE unit from the supply stack would overstate the LFRM revenue potential with a resulting understatement of Net CONE.

A number of members, primarily with supply resources in the region, expressed support for the Jericho Power/NEPGA Amendment and opposition to the ISO's proposal. Some opined that it would be inconsistent to presume a Net CONE reference unit on the system without also accounting for associated LFRM revenue opportunities for that unit, some citing how the Internal Market Monitor (IMM) accounts for resources when it sets unit-specific New Resource Offer Review Prices.

Responding, Mr. Mark Karl, ISO Vice President of Market Development & Settlements, recounted the reasons why the ISO did not support the amendment, describing how the ISO accounted for resources in the LFRM supply stack when updating Net CONE.

Another supporter of the Jericho Power/NEPGA Amendment argued that the Tariff required Net CONE updates did not support the ISO's incorporation of long-term equilibrium conditions in the calculation. Mr. Karl replied that the challenge to the ISO's application of the words "expected first year" was a new argument now being raised, and that the ISO had calculated Net CONE under long-term equilibrium conditions in the past. The supporter of the amendment disagreed and cited examples that, in his view, demonstrated that the ISO had

changed its methodology for calculating Net CONE without first making the changes to the Tariff.

The Committee then considered and did not approve the Jericho Power/NEPGA motion to amend the main motion. That motion, which required a 60% Vote in favor to be approved by the Committee, failed to pass with a 32.97% Vote in favor (Generation Sector – 12.50%; Transmission Sector – 0%; Supplier Sector – 12.82%; AR Sector – 7.57%; Publicly Owned Entity Sector – 0%; End User Sector – 0%; and Provisional Members – 0.08%). (*See* Vote 1 on Attachment 2).

#### ***ORTP Treatment for Co-Located Assets Amendment***

Next, a group of AR Sector and End User Sector members (representing Borrego Solar, ENEL X, ENGIE, and UCS on behalf of RENEW Northeast) proposed a second amendment to the main motion, which was duly made and seconded, to clarify how ORTPs should be assigned to co-located assets. Specifically, for co-located assets that register as a single FCM resource, the amendment would clarify that the IMM would assign an ORTP equal to the weighted average of the ORTPs applicable to the asset(s) comprising the resource, as prescribed in the Tariff. For co-located assets that register as separate FCM resources, the IMM would assign each FCM resource its own ORTP as applicable solely to the technology of the asset(s) underlying the resource. A spokesperson for the amendment walked the Committee through a presentation summarizing the background to and specifics of the amendment that had been circulated to the Committee in advance of the meeting and posted with the meeting materials.

In response, Mr. Jeffrey McDonald, ISO Vice President of Market Monitoring, offered his comments. First, he explained that his ability to respond fully was a challenge because the amendment had not been presented to the Markets Committee for feedback. He had concluded based on his review to date that the proposed amendment could undermine the purpose of the

ORTPs. Accordingly, the IMM did not support the amendment and disagreed that any ambiguity existed in the Tariff.

The co-sponsors challenged the IMM. On process, they explained that the issues related to the amendment were raised prior to, and again at, the November Markets Committee meeting, and that there had been separate outreach directly to the IMM since the Markets Committee's consideration. They also expressed concern that the IMM took the position that the Tariff was unambiguous but was not able to explain how, without the proposed amendments, ORTPs would be determined for offers from co-located resources. They, along with other representatives of Alternative Resources, urged approval of the amendment.

NESCOE's representative explained that NESCOE had not taken a position on this amendment, but encouraged the ISO and the IMM to continue consideration of this issue and other ORTP-related issues, regardless of the vote outcome at this meeting.

Questioning the need for the amendment at all, another member expressed concern with restricting the IMM from looking specifically at offers from co-located resources to decide factually whether mitigation of such offers was needed.

Following further discussion, the Committee then considered and did not approve the amendment. The motion, which required a 60% Vote to pass, failed with a 59.76% Vote in favor (Generation Sector – 8.33%; Transmission Sector – 0%; Supplier Sector – 5.55%; AR Sector – 12.37%; Publicly Owned Entity Sector – 16.67%; End User Sector – 16.67%); and Provisional Members - 0.08%. (*See Vote 2 on Attachment 2*).

#### ***Vote on the Main Motion***

Discussion continued on the unamended main motion. A Participant asked whether the ISO would consider updating the Net CONE value should there be a change in circumstances (e.g. elimination of the LFRM). Responding, Mr. Karl stated that the ISO would make changes,

if and as necessary, were there a material change in circumstances. The NEPGA representative expressed various concerns with aspects of the main motion and agreement with the IMM's opinion on the various amendments that comprised the main motion. The NESCOE representative expressed NESCOE's support for both the ISO's proposal, as well as for the main motion, though NESCOE did not take a position on each and every input assumption on the ORTPs on which the ISO's proposal and the main motion differed. Members of the Publicly Owned Entity Sector and the End User Sector expressed support for the main motion and stated that the CONE and Net CONE values were reasonable.

Offering final comments on behalf of the ISO, Mr. Karl stated that the ISO opposed the main motion for the reasons set forth in the ISO's memorandum circulated in advance of the meeting. Specifically, he expressed concern with the offshore wind ORTP calculation and noted that ORTPs were not meant to preclude resources from entering the market. Rather, ORTPs were thresholds for review that allow resources to justify offers below the relevant ORTP. The ISO representative pointed to the Killingly project as an example. Mr. McDonald reiterated his disagreement, described more fully in the IMM's memo to the Markets Committee on how capital costs would be calculated under the proposal for an offshore wind project, which he believed would, in part, produce an artificially low offshore wind ORTP.

The Committee then considered and approved the main motion with a 71.84% Vote in favor (Generation Sector – 4.17%; Transmission Sector – 16.67%; Supplier Sector – 5.12%; AR Sector – 12.37%; Publicly Owned Entity Sector – 16.67%; End User Sector – 16.67%; and Provisional Members - 0.17%). (See Vote 3 on Attachment 2).

#### ***Vote on the ISO's Unamended Proposal***

The ISO sought a vote on its proposal without any of the Participant-proposed amendments (but with the revised FCM parameter values to correct the error in the dispatch

model used for calculating those values), and a motion was duly made and seconded to approve the ISO's unamended proposal.

Various members expressed their views on the ISO's proposal, some abstaining even though they concluded that the value of energy and cost of contracts were nearer to the ORTP analysis supporting the main motion rather than to the ISO's analysis. The ISO was urged to continue assessing and refining its ORTP calculations based on updated information and more current experiences. Generator representatives, while expressing appreciation for the efforts of the ISO and stakeholders during the long and difficult discussions on these issues, expressed disappointment that the ISO failed to support their proposed amendments at the Markets Committee, which they argued were supported by consultant analysis and their own experiences.

Without further discussion, the motion to support the ISO's unamended proposal was voted and failed to pass with an 18.33% Vote in favor (Generation Sector – 0%; Transmission Sector – 0%; Supplier Sector – 1.66%; AR Sector – 0%; Publicly Owned Entity Sector – 16.67%; End User Sector – 0%; and Provisional Members – 0%). (*See* Vote 4 on Attachment 2).

## **LITIGATION REPORT**

After a brief recess, the meeting resumed via WebEx. Mr. Doot referred the Committee to the December 2, 2020 Litigation Report that had been circulated and posted in advance of the meeting. He then highlighted the following items:

(1) ***Order on Requests for Rehearing of CASPR Order*** – The FERC clarified on rehearing why it properly accepted the Competitive Auctions with Sponsored Policy Resources proposal.

(2) ***ESI Alternatives (ER20-1567)*** – As indicated at the last meeting, the ISO filed for clarification that it may engage in communications with the FERC and FERC staff about the

ESI market design, reserve market design, the option construct, and the voluntary nature of the markets, unfettered by any *ex parte* restrictions.

(3) ***Two New Commissioners*** – The Senate confirmed two new Commissioners, Mark Christie, the former Chair of the Virginia Commission and Allison Clements, a policy consultant for The Energy Foundation. He explained that, once the two were sworn in, the FERC would have five sitting Commissioners for the first time in nearly two years (at least until June 2021 when Commissioner Chatterjee’s term was scheduled to end).

(4) ***FCM Pricing Rules Complaints Remand (EL20-54)*** – The FERC issued an order finding the 7-year price lock to be unjust and unreasonable. The FERC directed the ISO to submit a compliance filing, on or before February 1, 2021, eliminating the price lock and associated zero-price offer rule for new entrants starting in FCA16. The FERC order stated that the “termination of the price lock will not impact price-lock agreements in effect prior to the issuance of the order”.

## COMMITTEE REPORTS

***Markets Committee (MC)***. Mr. William Fowler, the MC Vice-Chair, reported that the next meeting of the Markets Committee was scheduled as a one-day, rather than a two-day, meeting, to be held on December 8, 2020.

***Transmission Committee (TC)***. Mr. José Rotger, the TC Vice-Chair, reported that the next TC meeting would be held by teleconference on Thursday, December 10 and would include discussion on the PTOs’ proposals to address the reconstitution of behind-the-meter generation in the Regional Network Load calculation.

***Reliability Committee***. Mr. Robert Stein, the RC Vice-Chair, reported that the next RC meeting would be on December 15. He highlighted an expected presentation on an I.3.9 application for a 200 MW battery installation.

*Joint MC/RC (Future Grid - Reliability Study).* Mr. Stein also reported that next joint meeting of the MC and RC was scheduled for December 17, when the Committees would continue work on, and would consider input assumptions to be used in, the framework document to be used for all Future Grid scenarios.

*Budget & Finance Subcommittee.* Mr. Kaslow reported that the next B&F meeting was scheduled for January 28, 2021, when he expected discussion on trading Financial Assurance changes to continue. In addition, he highlighted for those interested an e-mail sent to Committee members and alternates providing instructions for accessing a copy of ISO New England's SOC 1 (Service Organization Controls Report) financial report.

## **ADMINISTRATIVE MATTERS**

Mr. Doot reminded the Committee the next Participants Committee meeting was scheduled for January 7, 2021. He urged members to update their calendars with the scheduled 2021 meetings.

Before moving to the final agenda item, Ms. Chafetz noted that the meeting would be her last as Chair. She thanked Committee members for the opportunity to serve as Chair, and also thanked the ISO, NESCOE, NECPUC, NEPOOL officers, and the Day Pitney team for their support. She congratulated Mr. Cavanaugh on his election as Chair for 2021. Mr. Cavanaugh, in turn, expressed his thanks to all members for their support and confidence, and thanked Ms. Chafetz for her leadership. At his request, the Committee showed its appreciation to Ms. Chafetz by a warm round of virtual applause.

## **PATHWAYS TO THE FUTURE GRID**

### *“Capacity as a Commodity”*

Ms. Chafetz then referred the Committee to the materials that were circulated and posted in advance of the meeting and introduced Michael Borgatti, VP, Gabel Associates, for a presentation and discussion of an additional potential market framework for New England. Mr. Borgatti began his presentation with an overview of current market challenges, which he indicated were as follows: (1) undifferentiated capacity models do not value different resources' contributions to reliability; (2) consumer choice and willingness to pay were poorly reflected in market prices today; (3) there is no direct pathway to advance public policies within competitive markets; and (4) the markets are relying on mitigation to produce competitive results. Mr. Borgatti noted that FCM may not represent a durable, long-term solution despite historic success at maintaining reliability. Before reviewing the proposed framework, he explained that the Capacity as a Commodity concept could use the same general FCM timeline, parameters and CELT report, but would impose a new forecast capacity obligation on each load serving entity (LSE) in the ISO-NE footprint, a new ISO resource adequacy metric reflecting reliability needs based on resource fuel mix, a new “Market Specifications” describing available products and terms, and a new capacity trading platform with publicly available market data that LSEs would use to help satisfy their obligations.

In response to questions and discussions through the presentation, Mr. Borgatti clarified the contemplated capacity requirement estimates timeline, and further explained that the proposed framework would include two incremental residual reliability auctions (RRAs), which would provide two additional opportunities for buyers and sellers to transact. The ISO would then be the buyer of last resort in the final RRA. He further explained the resource adequacy



metric as a way to define terms of reliability and allow the market to provide opportunity for consumer choice.

Mr. Borgatti clarified that the framework could be flexible on the time line and further indicated that current resources have shifted to shorter timelines and were now able to be built in much shorter timeframes than in the past. This framework included the pre-auction along with the ISO-NE as the backstop.

***Dr. Frank Felder: Standardized Fixed-Price Forward Contract (SFPFC) and Summary Report, Preliminary Observations and Request for Input***

Ms. Chafetz then turned to Dr. Frank Felder for his presentation. Dr. Felder provided an inventory of all potential pathways shared to date. He then reconfirmed the project goals along with certain functions that were presumed to be retained by the ISO under all of the potential pathways identified to date.

Dr. Felder reviewed his assessment of Dr. Frank Wolak's Standardized Fixed-Price Forward Contract (SFPFC) framework (which had been presented to the Committee on November 5, 2020) and provided the following overview: (1) regulators mandate that LSEs purchase and hold to delivery standardized forward contracts for energy for fractions of their annual energy demand at various horizons; (2) standardized contracts are shaped by hourly demands; (3) clearinghouse manages counterparty risk; and (4) no installed capacity requirement. Dr. Felder shared his preliminary observations that SFPFC did not explicitly address the procurement of clean energy resources to achieve States' energy policy objectives. He further indicated that for SFPFC to be considered a pathway that would help the States achieve certain energy policy goals, it would likely need to be augmented with decarbonization mechanisms. He also noted SFPFC may (or may not) be an improvement over the FCM.

Dr. Felder provided an overview of the final summary report. He indicated the report would include a review of the various pathways along with a summary of the each of the

pathways, with cited references to materials that provide details and articulate the claimed advantages of each. The report would also include high-level findings and identify gaps that would likely need to be addressed. He explained that throughout the process, he had sought to evaluate how each of the pathways addressed the following two questions: (1) whether and to what extent would the pathway support the clean energy policies of States?; and (2) to what extent would the pathway garner efficiency of regional markets?

Dr. Felder then reviewed his general, overall observation that a broad agreement from stakeholders would be required in order to move forward; successful reconciliation was not likely to occur without broad agreement reached among the New England States, NEPOOL stakeholders and ISO-NE. Additionally, the ability to balance resources and services did not always line up with resource adequacy. Dr. Felder addressed questions about how each of the pathways explored to date may or may not meet all of the requirements necessary and the potential need for a portfolio approach.

Dr. Felder then reviewed his high-level findings. First, net carbon pricing would mitigate, but would not necessarily solve, the double payment issue. Net carbon pricing would increase the revenues clean energy resources earn in the energy market, but would not specifically help the States tailor the timing and specific type of clean energy resources they desire to meet their individual policy objectives, as it sets prices not quantities. An advantage of the FCEM and ICCM frameworks is that they would procure the least-cost set of clean energy resources, but only if they reflect broad definitions of clean energy resources that allow a regional demand for these resources with regional competition among the resources. Achieving sufficient regional uniformity for demand would likely require the States to relinquish some control in order to garner the benefits of this model. Ultimately, there was a threshold question

as to whether the States could achieve agreement set forth in these proposed regional market frameworks.

Dr. Felder also discussed the need for a more precise definition of required balancing services needed to ensure reliability in the future. Without knowing these requirements, it was difficult to analyze each of the potential pathways to ensure the markets would continue to be successful in providing necessary resources to keep the lights on.

Dr. Felder next indicated that additional details were required to fully assess the tradeoffs. The identified pathways were high-level proposals that did not specifically identify how they would work along with transmission. The outcomes of the pathways would largely depend on how they interact with transmission (e.g. offshore wind). The intersection of pathways and transmission policy would be critical to achieving the least-cost deployment of generation and transmission resources.

Dr. Felder also noted that several proposed pathways did not define what was actually being delivered and he expressed the need for more thought on this as well as on cost allocation.

Members responded with questions and observations. One member indicated that there were currently many types of projects that had large amounts of generation but did not have necessary transmission, creating a great disparity between discussion of frameworks and the ability of those frameworks to support the States' decarbonization efforts. It was also noted that congestion had historically been viewed as a reliability issue. Dr. Felder indicated that if modeling was run for the different pathways the results might show how current transmission policies affect each pathway and how changes to transmission policies and the frameworks interrelate. Another member expressed the need to evaluate each proposal through specific metrics. Dr. Felder hoped his review would provide the necessary clarity in identifying the next steps in the analytical process of meeting the intended goal. It was also suggested that the transmission

needs of the region required evaluation before new resources could be intelligently located. Dr. Felder indicated both location and variability of intermittent resources should be known in order to advance the discussion.

Dr. Felder concluded his presentation by encouraging Participants to provide written feedback and comments. He intended to provide a draft report within the next few weeks. He would then take additional comments and provide his final report by the end of the year.

Mr. Gerity reminded members of the remaining Sector meetings with State Officials scheduled for the following week.

There being no further business, the meeting adjourned at 4:00 p.m.

Respectfully submitted,

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David Doot, Secretary

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES  
PARTICIPATING IN DECEMBER 3, 2020 TELECONFERENCE MEETING**

PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
Able Grid Infrastructure Holdings, LLC	Provisional			Abby Krich
Acadia Center	End User	Deborah Donovan		Francis Pullaro
Advanced Energy Economy	Fuels Industry Part.	Caitlin Marquis		
American Petroleum Institute	Fuels Industry Part.	Paul Powers		
Anbaric Development Partners LLC	End User			Francis Pullaro
AR Large Renewable Generation (RG) Group Member	AR-RG	Alex Worsley		Francis Pullaro
AR Small Load Response (LR) Group Member	AR-LR	Doug Hurley	Brad Swalwell	
AR Small Renewable Generation Group Member	AR-RG	Erik Abend		
American PowerNet Management	Supplier			Joyceline Chow
Ashburnham Municipal Light Plant	Publicly Owned		Brian Thomson	
Associated Industries of Massachusetts	End User			Roger Borghesani
AVANGRID: CMP/UI	Transmission		Alan Trotta	
Belmont Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Block Island Utility District	Publicly Owned	Dave Cavanaugh		
Borrego Solar Systems, Inc.	AR-DG	Liz Delaney		
Boylston Municipal Light Department	Publicly Owned		Brian Thomson	
BP Energy Company	Supplier			José Rotger
Braintree Electric Light Department	Publicly Owned			Dave Cavanaugh
Brookfield Renewable Trading and Marketing	Supplier	Aleks Mitreski		
Calpine Energy Services, LP	Supplier	Brett Kruse		Bill Fowler
Cape Light Compact	End User			Erin Camp
Central Rivers Power	AR-RG		Dan Allegretti	
Chester Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Chicopee Municipal Lighting Plant	Publicly Owned		Brian Thomson	
CLEARresult Consulting, Inc.	AR-DG	Tamara Oldfield		
Concord Municipal Light Plant	Publicly Owned		Dave Cavanaugh	
Connecticut Municipal Electric Energy Coop.	Publicly Owned	Brian Forshaw		
Connecticut Office of Consumer Counsel	End User		Dave Thompson	
Conservation Law Foundation (CLF)	End User	Phelps Turner		
Consolidated Edison Energy, Inc. (ConEd)	Supplier	Norman Mah		
CPV Towantic, LLC	Generation	Joel Gordon		
Cross-Sound Cable Company (CSC)	Supplier		José Rotger	
Danvers Electric Division	Publicly Owned		Dave Cavanaugh	
DC Energy, LLC	Supplier	Bruce Bleiweis		
Deepwater Wind Block Island, LLC	Generation			Francis Pullaro
Direct Energy Business, LLC	Supplier	Nancy Chafetz		
Dominion Energy Generation Marketing, Inc.	Generation	Mike Purdie		
DTE Energy Trading, Inc.	Supplier			José Rotger
Dynergy Marketing and Trade, LLC	Supplier	Andy Weinstein		Bill Fowler
Enel X North America, Inc.	AR-LR	Michael Macrae		
ENGIE Energy Marketing NA, Inc.	AR-RG	Sarah Bresolin		
Environmental Defense Fund	End User	Jolette Westbrook		
Eversource Energy	Transmission	James Daly	Dave Burnham	Vandan Divatia
Excelerate Energy LP	Fuels Industry Part.			Gary Ritter
Exelon Generation Company	Supplier	Steve Kirk	Bill Fowler	
FirstLight Power Management, LLC	Generation	Tom Kaslow		
Freeport Commodities	Supplier			Abby Krich
Galt Power, Inc.	Supplier	José Rotger		
Generation Group Member	Generation	Dennis Duffy	Abby Krich	

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES  
PARTICIPATING IN DECEMBER 3, 2020 TELECONFERENCE MEETING**

PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
Georgetown Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Great River Hydro	AR-RG			Bill Fowler
Groton Electric Light Department	Publicly Owned		Brian Thomson	
Groveland Electric Light Department	Publicly Owned		Dave Cavanaugh	
H.Q. Energy Services (U.S.) Inc.	Supplier	Louis Guibault	Bob Stein	
Harvard Dedicated Energy Limited	End User	Mary Smith	Joyceline Chow	
High Liner Foods (USA) Incorporated	End User		William P. Short III	
Hingham Municipal Lighting Plant	Publicly Owned		Dave Cavanaugh	
Holden Municipal Light Department	Publicly Owned		Brian Thomson	
Holyoke Gas & Electric Department	Publicly Owned		Brian Thomson	
Hull Municipal Lighting Plant	Publicly Owned		Brian Thomson	
Industrial Energy Consumer Group (IECG)	End User	Alan Topalian		
Ipswich Municipal Light Department	Publicly Owned		Brian Thomson	
Jericho Power LLC (Jericho)	AR-RG	Mark Spencer	Herb Healy	
KCE CT 1, LLC	Provisional			Pete Fuller
Littleton (MA) Electric Light and Water Department	Publicly Owned		Dave Cavanaugh	
Littleton (NH) Water & Light Department	Publicly Owned	Craig Kiemy		
Long Island Power Authority (LIPA)	Supplier		Bill Killgoar	
Maine Public Advocate's Office	End User	Andrew Landry		Erin Camp
Maine Skiing, Inc.	End User	Alan Topalian		
Mansfield Municipal Electric Department	Publicly Owned		Brian Thomson	
Maple Energy LLC	AR-LR			Doug Hurley
Marble River	Supplier		John Brodbeck	Abby Krich
Marblehead Municipal Light Department	Publicly Owned		Brian Thomson	
Mass. Attorney General's Office (MA AG)	End User	Christina Belew		Rebecca Tepper
Mass. Bay Transportation Authority	Publicly Owned		Dave Cavanaugh	
Mass. Municipal Wholesale Electric Company	Publicly Owned	Brian Thomson		
Mercuria Energy America, Inc.	Supplier			José Rotger
Merrimac Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Michael Kuser	End User		Jason York	
Middleborough Gas & Electric Department	Publicly Owned		Dave Cavanaugh	
Middleton Municipal Electric Department	Publicly Owned		Dave Cavanaugh	
National Grid	Transmission	Tim Brennan	Tim Martin	
Natural Resources Defense Council	End User	Bruce Ho		
Nautilus Power, LLC	Generation		Bill Fowler	
New Hampshire Electric Cooperative	Publicly Owned	Steve Kaminski		Brian Forshaw
New Hampshire Office of Consumer Advocate	End User	Pradip Chhtopadhyay	Erin Camp	
NextEra Energy Resources, LLC	Generation	Michelle Gardner		
North Attleborough Electric Department	Publicly Owned		Dave Cavanaugh	
Norwood Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Novatus Energy (Blue Sky West, LLC)	AR-RG			Abby Krich
NRG Power Marketing LLC	Generation		Pete Fuller	
Pascoag Utility District	Publicly Owned		Dave Cavanaugh	
Paxton Municipal Light Department	Publicly Owned		Brian Thomson	
Peabody Municipal Light Department	Publicly Owned		Brian Thomson	
PowerOptions, Inc.	End User			Erin Camp
Princeton Municipal Light Department	Publicly Owned		Brian Thomson	
PSEG Energy Resources & Trade LLC	Supplier	Eric Stallings		
Reading Municipal Light Department	Publicly Owned		Dave Cavanaugh	
Rowley Municipal Lighting Plant	Publicly Owned		Dave Cavanaugh	

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES  
PARTICIPATING IN DECEMBER 3, 2020 TELECONFERENCE MEETING**

PARTICIPANT NAME	SECTOR/ GROUP	MEMBER NAME	ALTERNATE NAME	PROXY
Russell Municipal Light Dept.	Publicly Owned		Brian Thomson	
Shell Energy North America (US), L.P.	Supplier	Matt Picardi		
Shrewsbury Electric & Cable Operations	Publicly Owned		Brian Thomson	
South Hadley Electric Light Department	Publicly Owned		Brian Thomson	
Sterling Municipal Electric Light Department	Publicly Owned		Brian Thomson	
Stowe Electric Department	Publicly Owned		Dave Cavanaugh	
Sunrun Inc.	AR-DG			Pete Fuller
Taunton Municipal Lighting Plant	Publicly Owned		Dave Cavanaugh	
Templeton Municipal Lighting Plant	Publicly Owned		Brian Thomson	
The Energy Consortium	End User	Roger Borghesani	Mary Smith	
Transource	Provisional			Dylan Drugan
Union of Concerned Scientists	End User		Francis Pullaro	
Vermont Electric Coop.	Publicly Owned	Craig Kieny		
Vermont Electric Power Company	Transmission	Frank Etori		
Vermont Energy Investment Corp (VEIC)	AR-LR		Doug Hurley	
Vermont Public Power Supply Authority	Publicly Owned			Brian Forshaw
Versant Power	Transmission	Lisa Martin	David Norman	
Verso Energy Services LLC	Generation	Glenn Poole		
Village of Hyde Park (VT) Electric Department	Publicly Owned		Dave Cavanaugh	
Vitol Inc.	Supplier	Joe Wadsworth		
Wakefield Municipal Gas & Light Department	Publicly Owned		Brian Thomson	
Wallingford DPU Electric Division	Publicly Owned		Dave Cavanaugh	
Wellesley Municipal Light Plant	Publicly Owned		Dave Cavanaugh	
West Boylston Municipal Lighting Plant	Publicly Owned		Brian Thomson	
Westfield Gas & Electric Department	Publicly Owned		Dave Cavanaugh	
Wheelabrator North Andover, Inc.	AR-RG		Bill Fowler	

**VOTES TAKEN AT  
DECEMBER 3, 2020 PARTICIPANTS COMMITTEE MEETING**

**TOTAL**

Sector/Group	Vote 1	Vote 2	Vote 3	Vote 4
GENERATION	12.50	8.33	4.17	0.00
TRANSMISSION	0.00	0.00	16.67	0.00
SUPPLIER	12.82	5.55	5.12	1.66
ALTERNATIVE RESOURCES	7.57	12.37	12.37	0.00
PUBLICLY OWNED ENTITY	0.00	16.67	16.67	16.67
END USER	0.00	16.67	16.67	0.00
PROVISIONAL MEMBERS	0.08	0.17	0.17	0.00
<b>% IN FAVOR</b>	<b>32.97</b>	<b>59.76</b>	<b>71.84</b>	<b>18.33</b>

**TRANSMISSION SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
Avangrid (CMP/UI)	O	A	F	O
Eversource Energy	O	A	F	A
National Grid	O	A	A	A
VELCO	O	A	F	A
Versant Power	O	A	F	O
IN FAVOR (F)	0	0	4	0
OPPOSED	5	0	0	2
TOTAL VOTES	5	0	4	2
ABSTENTIONS (A)	0	5	1	3

**GENERATION SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
CPV Towantic, LLC	F	O	O	O
Deepwater Wind Block Island	O	F	F	O
Dominion Energy Generation Mktg	F	O	O	O
FirstLight Power Management, LLC	F	O	O	O
Generation Group Member	O	F	F	O
Nautilus Power, LLC	F	O	O	O
NextEra Energy Resources, LLC	F	F	O	O
NRG Power Marketing, LLC	F	F	O	O
IN FAVOR (F)	6	4	2	0
OPPOSED (O)	2	4	6	8
TOTAL VOTES	8	8	8	8
ABSTENTIONS (A)	0	0	0	0

**SUPPLIER SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
American PowerNet Management, LP	O	F	F	O
BP Energy Company	A	A	A	A
Brookfield Renewable Trading & Mktg	F	--	O	O
Calpine Energy Services, LP	F	O	O	O
Castleton Comm. Merchant Trading	F	O	O	A
Consolidated Edison Energy, Inc.	F	A	A	A
Cross-Sound Cable Company	A	A	A	A
DC Energy, LLC	F	--	--	--
Direct Energy Business, LLC	A	O	O	A
DTE Energy Trading, Inc.	A	A	A	A
Dynegy Marketing and Trade, LLC	F	O	O	O
Emera Energy Companies	F	O	O	O
Exelon Generation Company	F	O	O	O
Freepoint Commodities, LLC	O	F	F	O
Galt Power, Inc.	A	A	A	A
H.Q. Energy Services (U.S.) Inc.	F	O	O	F
LIPA	A	A	A	A
Marble River, LLC	O	F	F	O
Mercuria Energy America, Inc	A	A	A	A
PSEG Energy Resources & Trade	F	O	O	O
Shell Energy North America (US) LP	A	F	F	A
Vitol Inc.	A	A	--	--
IN FAVOR (F)	10	4	4	1
OPPOSED	3	8	9	9
TOTAL VOTES	13	12	13	10
ABSTENTIONS (A)	9	8	7	10

**ALTERNATIVE RESOURCES SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
<b>Renewable Generation Sub-Sector</b>				
Central Rivers Power	F	O	O	O
ENGIE Energy Marketing NA, Inc.	O	F	F	A
Great River Hydro, LLC	F	O	O	O
Jericho Power LLC	F	O	O	O
Novatus Energy	O	F	F	O
Wheelabrator/Macquarie	F	O	O	O
Large RG Group Member	A	F	F	O
Small RG Group Member	A	F	F	O
<b>Distributed Gen. Sub-Sector</b>				
Borrego Solar Systems Inc.	O	F	F	O
CLEAResult Consulting, Inc.	A	F	F	O
Sunrun Inc.	F	F	A	A
<b>Load Response Sub-Sector</b>				
Enel X North America, Inc.	O	F	F	O
Maple Energy	O	F	F	O
Vermont Energy Investment Corp.	O	F	F	O
Small LR Group Member	O	F	F	O
IN FAVOR (F)	5	11	10	0
OPPOSED	7	4	4	13
TOTAL VOTES	12	15	14	13
ABSTENTIONS (A)	3	0	1	2



**VOTES TAKEN AT  
DECEMBER 3, 2020 PARTICIPANTS COMMITTEE MEETING**

**END USER SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
Acadia Center	O	F	F	O
Associated Industries of Mass.	O	F	F	O
Conn. Office of Consumer Counsel	O	F	F	O
Conservation Law Foundation	O	F	F	O
Environmental Defense Fund	O	F	F	O
Harvard Dedicated Energy Limited	O	F	F	O
High Liner Foods (USA) Inc.	O	F	F	O
Industrial Energy Consumer Group	O	F	F	O
Michael Kuser	A	A	A	A
Maine Public Advocate Office	O	F	F	O
Maine Skiing, Inc.	O	F	F	O
Mass. Attorney General's Office	O	F	F	O
Natural Resources Defense Council	O	F	F	O
NH Office of Consumer Advocate	O	F	F	O
PowerOptions, Inc.	O	F	F	O
The Energy Consortium	O	F	F	O
IN FAVOR (F)	0	17	17	0
OPPOSED	17	0	0	17
TOTAL VOTES	17	17	17	17
ABSTENTIONS (A)	1	1	1	1

**PUBLICLY OWNED ENTITY SECTOR**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
Ashburnham Municipal Light Plant	O	F	F	A
Belmont Municipal Light Dept.	O	F	F	F
Block Island Utility District	O	F	F	F
Boylston Municipal Light Dept.	O	F	F	A
Braintree Electric Light Dept.	O	F	F	F
Chester Municipal Light Dept.	O	F	F	F
Chicopee Municipal Lighting Plant	O	F	F	A
Concord Municipal Light Plant	O	F	F	F
Conn. Mun. Electric Energy Coop.	O	F	F	F
Danvers Electric Division	O	F	F	F
Georgetown Municipal Light Dept.	O	F	F	F
Groton Electric Light Dept.	O	F	F	A
Groveland Electric Light Dept.	O	F	F	F
Hingham Municipal Lighting Plant	O	F	F	F
Holden Municipal Light Dept.	O	F	F	A
Holyoke Gas & Electric Dept.	O	F	F	A
Hull Municipal Lighting Plant	O	F	F	A
Ipswich Municipal Light Dept.	O	F	F	A
Littleton (MA) Electric Light Dept.	O	F	F	F
Littleton (NH) Water & Light Dept.	O	F	F	F
Mansfield Municipal Electric Dept.	O	F	F	A
Marblehead Municipal Light Dept.	O	F	F	A

**PUBLICLY OWNED ENTITY SECTOR (cont.)**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
Mass. Mun. Wholesale Electric Co.	O	F	F	A
Mass. Bay Transportation Authority	O	F	F	F
Merrimac Municipal Light Dept.	O	F	F	F
Middleborough Gas and Elec. Dept.	O	F	F	F
Middleton Municipal Electric Dept.	O	F	F	F
New Hampshire Electric Cooperative	O	F	F	A
North Attleborough Electric Dept.	O	F	F	F
Norwood Municipal Light Dept.	O	F	F	F
Pascoag Utility District	O	F	F	F
Paxton Municipal Light Dept.	O	F	F	A
Peabody Municipal Light Plant	O	F	F	A
Princeton Municipal Light Dept.	O	F	F	A
Reading Municipal Light Dept.	O	F	F	F
Rowley Municipal Lighting Plant	O	F	F	F
Russell Municipal Light Dept.	O	F	F	A
Shrewsbury's Elec. & Cable Ops.	O	F	F	A
South Hadley Electric Light Dept.	O	F	F	A
Sterling Municipal Electric Light Dept.	O	F	F	A
Stowe (VT) Electric Dept.	O	F	F	F
Taunton Municipal Lighting Plant	O	F	F	F
Templeton Municipal Lighting Plant	O	F	F	A
Vermont Electric Cooperative	O	F	F	F
VT Public Power Supply Authority	O	F	F	F
Village of Hyde Park (VT) Elec. Dept.	O	F	F	F
Wakefield Mun. Gas and Light Dept.	O	F	F	A
Wallingford, Town of	O	F	F	F
Wellesley Municipal Light Plant	O	F	F	F
West Boylston Mun. Lighting Plant	O	F	F	A
Westfield Gas & Electric Light Dept.	O	F	F	F
IN FAVOR (F)	0	51	51	29
OPPOSED	51	0	0	0
TOTAL VOTES	51	51	51	29
ABSTENTIONS (A)	0	0	0	22

**PROVISIONAL MEMBERS**

Participant Name	Vote 1	Vote 2	Vote 3	Vote 4
Able Grid Infrastructure Holdings, LLC	O	F	F	O
Anbaric Development Partners, LLC	A	F	F	O
KCE CT 1 & 2	F	A	A	A
IN FAVOR (F)	1	2	2	0
OPPOSED	1	0	0	2
TOTAL VOTES	2	2	2	2
ABSTENTIONS (A)	1	1	1	1

**ESTIMATED 2021 NEPOOL BUDGET COMPARED TO  
2020 NEPOOL BUDGET AND 2020 PROJECTED ACTUAL EXPENSES**

<u>Line Items</u>	<u>2020 Approved Budget</u>	<u>2021 Proposed Budget</u>	<u>2020 Current Forecast</u>
NEPOOL Counsel Fees (1)	\$4,100,000	\$4,100,000	\$4,100,000
NEPOOL Counsel Disbursements (1)	\$ 40,000	\$ 20,000	\$ 20,000
Independent Financial Advisor Fees and Disbursements (2)	\$ 45,000	\$ 45,000	\$ 45,000
Committee Meeting Expenses (3)(4)	\$ 725,000	\$ 510,000	\$ 210,000
Generation Information System (5)	\$ 945,000	\$ 1,070,600	\$ 845,000
Credit Insurance Premium (3)	\$ 510,000	\$ 475,000	\$ 434,000
NEPOOL Audit Management Subcommittee (NAMS) Consultant (6)	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
<b>SUBTOTAL EXPENSES</b>	<b>\$6,365,000</b>	<b>\$6,220,600</b>	<b>\$5,654,000</b>
<b><u>Revenue</u></b>			
NEPOOL Membership Fees (3) (7)	(\$2,070,000)	(\$2,110,000)	(\$2,238,000)
Generation Information System (5) (8)	(\$ 945,000)	(\$1,070,600)	(\$ 845,000)
Credit Insurance Premium (3) (9)	<u>(\$ 510,000)</u>	<u>(\$ 475,000)</u>	<u>(\$ 434,000)</u>
<b>TOTAL REVENUE</b>	<b>(\$3,525,000)</b>	<b>(\$3,655,600)</b>	<b>(\$3,517,000)</b>
<b>TOTAL NEPOOL EXPENSES</b>	<b>\$2,840,000</b>	<b>\$2,565,000</b>	<b>\$2,137,000</b>

Notes

- (1) 2021 proposed estimate provided by Day Pitney LLP, NEPOOL counsel.
- (2) 2021 proposed estimate provided by Michael M. Mackles, NEPOOL's Independent Financial Advisor.
- (3) 2021 proposed estimate provided by ISO New England Inc. (ISO).
- (4) Committee meeting expense for 2020 includes amounts to be paid to consultants for assistance with Future Grid. The 2021 proposed budget assumes no in-person meetings for the first part of 2021.

- (5) Based on new fee arrangement in Extension of and First Amendment to Amended and Restated Generation Information System Administration Agreement, pursuant to which the fixed fee for 2021 is projected to be \$950,000, plus \$120,600 projected expense related to changes associated with Massachusetts Clean Peak Energy Standard, which will be charged in 2021 when changes are completed.
- (6) If NEPOOL determines that an audit should be performed in 2021, funding for that audit will be addressed separately.
- (7) The 2021 proposed estimate is based on the 2020 actual receipts through October 2020, plus a forecast for new members for the remainder of the year. The breakdown for the proposed budget is approximately: 392 members at \$5,000 each, 29 members at \$1,000 each, 16 members at \$500 each, 25 members at \$1,500 each, and 31 members of large end users and MPEU's. This estimate takes into account the terminations throughout the year.
- (8) GIS costs, other than those associated with accessing the GIS through the application programming interface (API) 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, 2002. GIS costs associated with accessing the GIS through the API are paid by the GIS account holders using that API.
- (9) Credit insurance premium is paid by Qualifying Market Participants according to methodology described in Section IX of the ISO Financial Assurance Policy. The 2021 premium is based on 2020 annual policy sales.