



David T. Doot
Secretary

September 29, 2022

VIA ELECTRONIC MAIL

TO: PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES

RE: Supplemental Notice of October 6, 2022 NEPOOL Participants Committee Meeting

Pursuant to Section 6.6 of the Second Restated New England Power Pool Agreement, supplemental notice is hereby given that the October meeting of the Participants Committee will be held **in person on Thursday, October 6, 2022, at 10:00 a.m. at the Renaissance - Providence Downtown Hotel, 5 Ave of the Arts, Providence, RI, in the Symphony Ballroom** for the purposes set forth on the attached agenda and posted with the meeting materials at nepool.com/meetings/.

For your information, the October 6 meeting will be recorded. 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 in attendance or participating, either in person or by phone, are required to 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.

For those who otherwise attend NEPOOL meetings but plan to participate in the October 6 meeting virtually, please use the following dial-in information: **866-803-2146; Passcode: 7169224**. To join using WebEx, click this [link](#) and enter the event password **nepool**.

In addition, please note two items requiring your attention at this time:

- **Wednesday, November 2 Sector Meetings with ISO Board Panels** – The next Sector meetings with the ISO Board are scheduled to be held in person on Wednesday, November 2 at the Renaissance - Providence. The ISO has requested that proposed agendas and supporting materials for those meetings be provided on or before **Friday, October 14**. Materials can be sent directly to Maria Gulluni at mgulluni@iso-ne.com and Pat Gerity at pmgerity@daypitney.com.
- **2023 NEPOOL Officers** – Each Sector needs to identify for us no later than **Monday, October 31** the voting member chosen by that Sector to serve as its 2023 Participants Committee officer. The Participants Committee will then select the Chair from among those Sector-selected officers, using the required voting process for that selection. We have included with this notice a memorandum that provides more information about the selection process.

Respectfully yours,

/s/
David T. Doot, Secretary

FINAL AGENDA

1. To approve the draft minutes of the September 1, 2022 Participants Committee teleconference meeting. Copies of the draft minutes, marked to show the changes from the version circulated with the initial notice, are included with this supplemental notice and posted with the meeting materials.
2. To adopt and approve the actions recommended by the Technical Committees set forth on the Consent Agenda included with this supplemental notice and posted with the meeting materials.
3. To receive an ISO Chief Executive Officer (CEO) report. The October CEO report will be circulated and posted in advance of the meeting. A letter to the ISO CEO and ISO Chief Operating Officer (COO) from the 'LSE Group' addressing the Mystic Cost-of-Service Agreement rates is included with this supplemental notice and posted with the meeting materials for your information.
4. To receive a report from the ISO Chief Operating Officer on the following:
 - a. Operations Report Highlights; and
 - b. Annual Work Plan.

The Operations Report highlights will be circulated and posted in advance of the meeting. Materials related to the Annual Work Plan are being circulated and posted with this supplemental notice

5. To consider, and take action, as appropriate, on the following proposed budgets:
 - a. 2023 ISO-NE Operating and Capital Budgets; and
 - b. 2023 NESCOE Budget.

Background materials and draft resolutions are included and posted with this supplemental notice.

6. To consider and take action, as appropriate, on the following for the 2026/2027 Capacity Commitment Period (FCA17):
 - a. Hydro-Quebec Interconnection Capability Credits (HQICCs); and
 - b. Installed Capacity Requirements (ICR) and ICR-Related Values.

Background materials and draft resolutions are included and posted with this supplemental notice.

[continued on next page]

7. To consider and take action, as appropriate, on the following changes to incorporate treatment of Storage as a Transmission-Only Asset (SATO):
 - a. Changes to Sections I and II of the Tariff, as recommended by the Transmission Committee at its Aug 16 & 17 meeting; and
 - b. Changes to Sections I.2.2 of the Tariff and Sections III.1.7.21, III.3.2.1(b)(iv), III.3.2.1(b)(vi), and III.3.2.2(a) of Market Rule 1, as recommended by the Markets Committee at its Sep 13-14 meeting.

This matter has been placed on the Discussion Agenda at the request of representatives of Calpine and Shell. Background materials and a draft resolution(s) are included and posted with this supplemental notice.

8. To consider, and take action, as appropriate, on a referral to the NEPOOL GIS Operating Rules Working Group of a request for a waiver of the NEPOOL Generation Information System (GIS) Operating Rules by NuPower Cherry Street. Background materials and a draft resolution are included and posted with this supplemental notice.
9. To receive a report on current contested matters before the FERC and the Federal Courts. The litigation report will be circulated and posted in advance of the meeting.
10. To receive reports from Committees, Subcommittees and other working groups:

| | |
|--------------------------|---------------------------------|
| • Markets Committee | • Budget & Finance Subcommittee |
| • Reliability Committee | • Membership Subcommittee |
| • Transmission Committee | • Joint Nominating Committee |
| | • Others |
11. Administrative matters.
12. To transact such other business as may properly come before the meeting.

MEMORANDUM

TO: NEPOOL Participants Committee Members and Alternates
FROM: Pat Gerity, NEPOOL Counsel
DATE: September 22, 2022
RE: 2023 Participants Committee Officer Elections

In order to ensure that the selection process requirements in the Participants Committee Bylaws for 2023's Participants Committee officers can be timely completed, we need each Sector to indicate, no later than **Monday, October 31, 2022**, who the Sector has selected to serve as the Sector's Participants Committee officer. A description of the qualifications, responsibilities, and expectations of the Sector officers selected has been included with this memorandum. We urge each of you to work within your Sectors to select your Sector's 2023 Participants Committee officer.

By way of reminder, the Bylaws require that one voting member from each Sector be selected by a majority of all the voting members in its Sector (i) to serve as a nominee for Chair of the Participants Committee and (ii) if not elected Chair, to serve as a Committee Vice-Chair. A secret written balloting process will then be conducted to elect the 2023 Chair from among the Participants Committee officers selected by each of the Sectors. To allow time for that balloting process ahead of the December 1 Annual Meeting, as required by the Bylaws, we need the officers to be identified by October 31, 2022.

If any Sector needs assistance in conducting the vote for its Sector officer, please let us know (preferably no later than October 20). We would be pleased to help however we can. Also, if you have any questions, please contact me at pmgerity@daypitney.com or (860) 275-0533.

Participants Committee Sector Officer
Qualifications, Responsibilities and Expectations

Qualifications: A Participants Committee Chair or Vice-Chair must be a voting member of the Participants Committee. Per the Participants Committee Bylaws, one voting member from each active Sector of the Participants Committee is to be selected to serve as the Vice-Chair of the Sector “by a majority of all the voting members in its Sector.” The Chair is selected from among the nominated Vice-Chairs using the balloting procedures in the Bylaws.

Responsibilities and Expectations of Participants Committee Sector Vice-Chairs:

1. Help to build and maintain a collegial and productive working relationship with other Committee officers and members, ISO management, and state officials participating in Committee activities.
2. Communicate routinely and effectively with other members of the Sector:
 - a. To help ensure that members have the information needed to support informed and active Committee participation;
 - b. To ensure that the officer has sufficient information to provide to the other officers, ISO management and staff, and state and federal officials a fair and objective report of Sector members’ positions and sensitivities on regional matters; and
 - c. To report objectively to Sector members information, questions, positions, perspectives, and sensitivities of or from the other Sectors, the ISO, and state officials that are provided to the Officer to be shared with the Sector.
3. Attend and lead or support planning for and participation in Participants Committee meetings, including (a) participation in pre-planning conference calls and in-person meetings to identify and confirm discussion and consent agenda topics and materials, meeting logistics and orderly flow of business at Committee meetings, and (b) serving as Chair if and as needed for a meeting or portions of a meeting at which the Chair is not able to preside.
4. Coordinate and organize Sector members when appropriate, including for meaningful participation by the Sector members in the semi-annual meetings with the ISO Board of Directors, state officials and FERC representatives.
5. Ensure that the Sector is fairly and objectively represented at other committee and working group meetings and meetings among Officers, ISO management and state officials, and that the Officer or representative is reasonably informed as to the perspectives and sensitivities of the Sector members.
6. With the other NPC Officers, review and comment on NEPOOL filings or pleadings, raising awareness of any Sector-specific sensitivities.
7. Serve, or designate an appropriate Sector member to serve, on the Joint Nominating Committee that recommends to the Participants Committee for endorsement a slate of candidates for membership on the ISO Board of Directors.

9/22/2022

PRELIMINARY

Pursuant to notice duly given, a teleconference meeting of the NEPOOL Participants Committee was held beginning at 10:00 a.m. on Thursday, September 1, 2022. 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.

Mr. David Cavanaugh, Chair, presided, and Mr. David Doot, Secretary, recorded.

APPROVAL OF AUGUST 4, 2022 MEETING MINUTES

Mr. Cavanaugh referred the Committee to the preliminary minutes of the August 4, 2022 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. Sam Mintz.

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 abstentions by Cross-Sound Cable and Mr. Mintz.

ISO CEO REPORT

Mr. Gordon van Welie, ISO Chief Executive Officer (CEO), [began his report by referring the Committee to the summaries of the ISO Board and Board Committee meetings that had occurred since the August 4, 2022 Participants Committee meeting, which had been circulated and posted in advance of the meeting, and invited any questions on those summaries. There](#)

were no questions or comments on those summaries. He then provided context and considerations that underlied the ISO's Problem Statement and Call to Action on LNG and Energy Adequacy (Problem Statement), which had been released and circulated in advance of the meeting, for the Federal Energy Regulatory Commission (FERC) New England Gas-Electric Forum on September 8, 2022.

First, Mr. van Welie noted that there were jurisdictional and regulatory issues that limit potential solutions to electric and gas system challenges in New England. Given those issues, Mr. van Welie stated that New England needed clear guidance from, and cooperation between, FERC and the state agencies, to solve the region's fuel security challenges. He noted that the ISO opposed FERC proceeding under a Section 206 order on this matter unless the FERC's guidance was very clear. He explained that an unclear Section 206 order would only impede communication among all parties -- particularly between the FERC and the state regulators -- on crafting a solution to address system challenges.

Then, Mr. van Welie noted differences between resource adequacy and energy adequacy. New England is long in capacity but short on energy. He opined that improving resource capacity accreditation, while a desired improvement, will-would not alone be sufficient to ensure energy adequacy. He said the ISO supported and fully endorsed the New England governors' proposal in their letter to Department of Energy Secretary Granholm for a regional energy reserve. He noted that European countries had done so in response to Europe's energy crisis, explicitly mandating energy reserves in the inputs to their electric systems or their gas delivery systems.

Next, Mr. van Welie expressed the view that there were flaws in some assumptions underpinning competitive wholesale electricity markets. Specifically, he explained his view that

the markets assume that supply-side frictions would be minimal, or at least manageable, and that investors would be able to develop new infrastructure in a timely fashion, ~~which~~ allowings for a smooth transition between retiring resources and new resources. In fact, however, at least in New England, there ~~had~~ s been significant resistance to building any new energy infrastructure while there ~~had~~ s been significant pressure to retire all of the region's fossil-fueled resources. Thus, retirements were occurring before new infrastructure ~~h~~ was been built to support/replace those retirements. For ~~the~~ ose reasons, the ISO maintained that it must preserve enough existing infrastructure to maintain reliability until the siting and permitting issues that impede the development of new infrastructure ~~had~~ ve been resolved.

Mr. van Welie opined that competitive markets also assumed that society would be tolerant of short-run volatility and energy shortages in part because there would be healthy long-term bilateral contracting between load and supply to hedge long-term risks and significant price responsive load in the market. In actuality, he believed that the marketplace and society generally was largely unprepared for extreme shortages, while policymakers and consumers expected bounds on the risks of outages and extreme price volatility. Those expectations called into question the one day in 10 years ~~ahead~~ reliability standard, developed decades earlier in the context of a vertically-integrated, state-regulated industry that assured fuel supplies, which could result in outages and volatility and did not fully account for the depth and duration of outages, price volatility or extreme low probability events. Mr. van Welie questioned whether a new or supplemented reliability standard was needed for an unbundled, federally-regulated power system that would support the clean energy transition and would cope with more extreme weather due to climate change as well as geopolitical risks to fuel supply chains. Adopting changes to that standard would take significant time and analysis, research, debate, and support

from state and federal officials. A decision on any changes to the reliability standard for New England must, in his view, be preceded by guidance from policymakers on how they want to manage the risks that have emerged and the regulatory means for that management.

The final flawed assumption, in Mr. van Welie's view, was that scarcity pricing in the energy and ancillary services markets would drive healthy bilateral contracting between load and supply, and thus, drive investment in sufficient fuel infrastructure. That simply had not been happening in New England.

He ended his summary of the Problem Statement noting that the high costs of imported energy, supply constraints caused by the Jones Act, and European demand for energy resulting from the war in Ukraine, all pointed to the need for the region to wean itself off its dependency on imported liquefied natural gas (LNG). Given the region's existing resource mix, the ISO calculated that New England required approximately 50 billion cubic feet (Bcf) to cover winter operations until planned investments in infrastructure were completed, which would take some time. Until then, reliability in New England would depend on the region retaining key energy facilities and stabilizing the fuel supply chain.

Committee members were then invited to comment and ask questions. Ahead of those comments and questions, the Chairman summarized generally the current and expected NEPOOL future grid efforts and remarked that dedicated discussions would be needed to reach a clearer and more common understanding on a problem statement and the underlying issues causing the identified problem(s). A number of members questioned why the Everett LNG Facility (Everett) was highlighted by the ISO in its Problem Statement without recognition of the contributions to LNG supply from the other two regional LNG terminals -- Northeast Gateway

and Saint John. A member observed that LNG imports from those facilities accounted for 83% of the LNG storage capacity and 74% of the daily send-out capabilities in the region. In response, Mr. van Welie indicated that the ISO's concern was with the potential loss of Everett when the Mystic Cost-of-Service Agreement ends in 2024. The ISO had concluded that the region must preserve Everett to ensure adequate gas supply until new energy sources are in place to maintain reliability.

Mr. van Welie was advised in comments that that there was still an opportunity using the Excelerate Energy Floating Storage Regasification Units (FSRU), to source LNG from the United States (US), but only if there were a waiver of the Jones Act provisions prohibiting such deliveries. LNG providers viewed the challenges not as shipping issues but rather pricing challenges. The US produces a lot of LNG and New England could access reliable LNG from the Atlantic Basin LNG for the right price and terms.

A number of representatives of wholesale suppliers sought greater understanding and clarity around the ISO's questioning of whether the competitive markets ~~could~~^{can} be adjusted to deliver fuel security for the region or whether the ISO had concluded that an out-of-market solution ~~is~~^{was} needed. Mr. van Welie responded that the focus of his consideration was not whether energy adequacy could be addressed theoretically through wholesale market incentives and structure but rather whether the FERC and the ~~st~~^USates could support market changes to achieve such an outcome. He concluded that the first priority needed to be to stabilize the regional energy supply. Only then did he think adjustments to the markets could be implemented to achieve longer-term sustainability. Concern was expressed that an effort to stabilize one aspect of the regional energy supply ~~would~~^{could} risks de-stabilizing other aspects of that supply.

Commenters also urged the ISO to share data supporting its conclusion in order to continue the dialogue on potential market solutions. Some member representatives reminded the ISO that achieving reliability through the markets was a long-standing NEPOOL priority.

Other members sought from Mr. van Welie clarity on a proposal for regional energy reserve in the short-, medium-, and long-term, and whether the ISO had considered potential alternative solutions to its assessment of the problem. Mr. van Welie noted the complexities of the energy adequacy issues facing the region. In defining a feasible path forward for New England, the Problem Statement focused on solutions that those who submitted that Statement believed could be approved by the FERC and supported by the [sS](#)tates. He concluded his remarks reiterating the importance of continued dialogue and collaboration to address energy reliability issues.

The Chairman noted the very high level of interest in the topic and thanked Mr. van Welie and the members for the discussion. He explained that further dialogue would continue both at the September 8 FERC Winter Forum and in subsequent NEPOOL committee meetings.

ISO COO REPORT

Dr. Vamsi Chadalavada, ISO Chief Operating Officer (COO), began by referring the Committee to the August COO report, which had been circulated and posted in advance of the meeting. Dr. Chadalavada noted that the data in the report was through August 24, 2022, unless otherwise noted. The report highlighted: (i) Energy Market value for August 2022 was \$1.1 billion, down \$184 million from July 2022 and up \$418 million from August 2021; (ii) August 2022 average natural gas prices were 17% higher than July average prices; (iii) average Real-Time Hub Locational Marginal Prices (LMPs) for August (\$97.33/MWh) were 7.3% higher than

July averages; (iv) average August 2022 natural gas prices and Real-Time Hub LMPs were up 109% and 99%, respectively, from August 2021 average prices; (v) average Day-Ahead cleared physical energy during peak hours as percent of forecasted load was 102.8% during August (up from the 99.1% reported for July), with the minimum value for August of 97.7% on August 6; and (vi) Daily Net Commitment Period Compensation (NCPC) payments for August totaled \$5.4 million, which were down \$3.7 million from July 2022 and up \$2 million from August 2021. August NCPC payments, were 0.5% of total Energy Market value and were comprised of: (a) \$4.9 million in first contingency payments (down \$3.3 million from July 2022, and three-quarters of which were for the August 4-9 period); (b) \$0 in second contingency payments; and (c) \$402,000 in distribution payments (down \$192,000 from July 2022). Dr. Chadalavada committed, once the full set of August data was available post-Labor Day, to have circulated a brief update on the total costs for the month and any other notable operational data.

In response to questions and requests both ahead of and during the meeting, Dr. Chadalavada reported that, for 2022, the system peak through the date of the meeting, as recorded through revenue quality meters, was 24,775 MW, and occurred on August 4 at hour ending 18:00. He confirmed that the peak load number did not account for settlement-only generators, so that the peak load for FCM purposes, also set at the same day and hour, would be lower. He committed to include in his post-Labor Day update the peak load information for FCM purposes. Dr. Chadalavada did not expect the August 4 peak to be exceeded during the remainder of the year.

Discussing upcoming regional transmission outages, Dr. Chadalavada noted that, from September 19-30, the Hydro-Quebec/NEPOOL Phase II tie (Phase II) would be out for its annual

fall maintenance, reducing the total transfer capability for that tie (otherwise 2,000 MW) to 0 MW for that period.

Members, noting that billing for the costs of the Mystic Cost-of-Service Agreement had recently begun, expressed appreciation for the worksheets and information provided thus far with respect to those charges, but requested that the ISO provide as much additional information and visibility as possible into the inputs and components driving the monthly costs of the Agreement. The members suggested that the additional information could help mitigate the uncertainty and resulting risk premiums likely to follow in the absence of such information. Dr. Chadalavada committed to look into and report back on what additional information might be permissible and possible to be provided.

NESCOE BUDGET FRAMEWORK FOR 2023-2027

Mr. Tom Kaslow, Budget & Finance Subcommittee (B&F) Chair, referred the Committee to the materials circulated in advance of the meeting concerning NESCOE's fourth five-year budget framework covering NESCOE operations for years 16-20 (the 2023-2027 period) (the ~~Fourth~~ Budget Framework). He noted that the Budget Framework was required by the November 21, 2007 Memorandum of Understanding (MOU) among the ISO, NEPOOL and NESCOE. He reported that the ~~Fourth~~ Budget Framework was considered at the B&F's July 22 and August 11, 2022 meetings, and no objections or concerns were raised with respect to the Framework.

The following motion was then duly made, seconded, and unanimously approved, with an abstention noted by Mr. Mintz:

RESOLVED, that the Participants Committee supports NESCOE's fourth five-year budget framework, for years 16 through 20 of its

operations (2023-2027), as circulated for and presented at this meeting.

2023 ISO AND NESCOE BUDGETS

Mr. Kaslow then referred the Committee to the materials circulated and posted in advance of the meeting related to the proposed 2023 ISO Operating and Capital Budgets. He reported that the 2023 ISO Budgets had been reviewed and considered at the B&F's August 11 meeting and no objections or concerns had been raised with respect to the 2023 ISO Budgets. Mr. Cavanaugh added that Mr. Robert Ludlow, ISO Vice President and Chief Financial & Compliance Officer, was prepared to receive any comments or answer any questions on the 2023 ISO Budgets or on the Budgets presentation included with the meeting materials. Those materials presented a refined, "bottom-up" detailed budget and resulted in a slight increase from the "top-down" preliminary budget presented to Participants and State Officials in June. Action on the 2023 ISO Budgets was scheduled for the Committee's October 6 meeting. There were no questions or comments on the Budgets.

Turning to the 2023 NESCOE Budget, Mr. Cavanaugh referred the Committee to the NESCOE Budget materials posted in advance of the meeting. He noted that Ms. Heather Hunt, NESCOE Executive Director, was available for questions or comments. There were no questions or comments. He asked that members reach out to Ms. Hunt directly prior to the October 6 vote if any questions or comments arose.

LITIGATION REPORT

Mr. Doot referred the Committee to the August 31 Litigation Report that had been circulated and posted before the meeting. He highlighted the following litigation-related developments included in the August 31 Report:

(i) The continuing submission of pleadings with respect to New England's pending *Order 2222* compliance filing.

(ii) The decision by the Maine Supreme Judicial Court related to the New England Clean Energy Connect (NECEC) transmission project, which concluded that elements of recent Maine legislation, which had effectively halted construction of the NECEC project, were unconstitutional to the extent the legislation required retroactive application to the Project (if NECEC had acquired vested rights to proceed with Project construction). A number of issues were remanded to and would be addressed by a lower court, particularly the issue of whether and to what extent NECEC's rights to proceed with the construction of the Project had vested.

(iii) The numerous proceedings pending before the FERC and appeals pending before the U.S. Court of Appeals for the D.C. Circuit (DC Circuit) related to the Mystic Cost-of-Service Agreement, particularly a recent DC Circuit decision remanding to the FERC for further consideration cost allocation, clawback, and revenue crediting issues.

(iv) The ISO's response to the FERC's FTR Collateral Show Cause Order, which was due October 26, 2022, and would be reviewed with B&F Subcommittee on September 22.

(v) Comments on the FERC's proposed changes to ISO/RTO credit information sharing discretion, which would be reviewed with the Markets Committee (MC) at the MC's September 13-14 meeting.

(vi) The request for rehearing by the Northern Maine Independent System Administrator (NMISA) of the FERC's order denying NMISA's request for a reciprocal discount for Through and Out charges for transactions between the New England and Northern Maine regions, with FERC action on that request required by September 23 or the NMISA request would be deemed denied by operation of law.

COMMITTEE REPORTS

Reliability Committee (RC). Mr. Robert Stein, the RC Vice-Chair, reported that there were two RC meetings scheduled in September: a teleconference meeting on September 7 to introduce the HQICCs and ICR and ICR Related-Values for the 2026-27 Capacity Commitment Period (FCA17); and an in-person meeting on September 20 at the Marriott Courtyard in Marlborough, to act on the ISO proposed FCA17 HQICCs and ICR and ICR-Related Values.

Markets Committee. Ms. Mariah Winkler, the MC Chair, reported that the MC would meet in person on September 13-14 at the DoubleTree Hotel in Westborough. She indicated that key topics would include the following: voting on Tariff changes to incorporate the treatment of Storage as a Transmission-Only Asset (SATOAs); continued discussion on Resource Capacity Accreditation (RCA); presentation and discussion of ISO perspectives on the performance of capacity resources and the Pay-for-Performance (PFP) design under current system conditions; and a presentation and discussion concerning the FERC NOPR on the sharing of credit information among ISO/RTOs and potential NEPOOL comments on the same. She encouraged those who had not yet registered on-line but were planning to attend in person to do so as soon as possible.

Transmission Committee (TC). Mr. José Rotger, the TC Vice-Chair, reported that the next TC meeting would be September 28. He highlighted planned discussion of the Interconnection NOPR and possible comments by NEPOOL and the ISO on that NOPR.

B&F Subcommittee. Mr. Thomas Kaslow, Subcommittee Chair, reported that the next regularly-scheduled B&F Subcommittee meeting would be held on October 11. Further, as mentioned earlier in the meeting, the B&F Subcommittee was also scheduled to hold a special,

single-topic meeting on September 22 to consider the ISO's intended response to the FERC's *FTR Collateral Show Cause Order*.

Membership Subcommittee. Ms. Sarah Bresolin, Subcommittee Chair, reported that the next Membership Subcommittee meeting was scheduled for September 12 and encouraged all those interested to join.

ADMINISTRATIVE MATTERS

Mr. Doot noted that the next Participants Committee would be in Providence, RI. He encouraged members seeking accommodations for the night before that meeting to contact Mr. Patrick Gerity for more information. Looking further ahead, he said that the November meeting would be held on *Wednesday*, November 2 and would include the second of the semi-annual opportunities for modified Sector meetings with the ISO Board. Materials for those Sector meetings would be due in early October, and he encouraged all to consider topics for discussion and to work with their respective Vice-Chair in preparation of materials for those meetings. He also noted that the 2022 Annual Meeting, to be held on Thursday, December 1, would be at the Colonnade Hotel in Boston.

Mr. Cavanaugh reminded members of the FERC's New England Winter Gas-Electric Forum in Burlington, VT the following week. He again thanked members for their engagement and feedback on the Problem Statement and looked forward to the further work to come on that topic.

There being no further business, the meeting adjourned at 12:10 p.m.

Respectfully submitted,

David Doot, Secretary

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES
PARTICIPATING IN SEPTEMBER 1, 2022 TELECONFERENCE MEETING**

| PARTICIPANT NAME | SECTOR/ GROUP | MEMBER NAME | ALTERNATE NAME | PROXY |
|---|-----------------------|------------------|----------------------|---------------------|
| Acadia Center | End User | Melissa Birchard | | |
| Accelerate Renewables, LLC | Supplier | Liz Delaney | | |
| Advanced Energy Economy (AEE) | Associate Non-Voting | Caitlin Marquis | | |
| American Petroleum Institute | Associate Non-Voting | | | Mike Giamo |
| AR Small Load Response (LR) Group Member | AR-LR | Brad Swalwell | | |
| AR Small Renewable Generation (RG) Group Memb | AR-RG | Alex Worsley | | |
| Ashburnham Municipal Light Plant | Publicly Owned Entity | | Matthew Ide | |
| Associated Industries of Massachusetts (AIM) | End User | | | Mary Smith |
| AVANGRID: CMP/UI | Transmission | Alan Trotta | Jason Rauch | Zach Teti |
| Bath Iron Works Corporation | End User | | | Bill Short |
| Belmont Municipal Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Block Island Utility District | Publicly Owned Entity | Dave Cavanaugh | | |
| Boylston Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| BP Energy Company | Supplier | | | José Rotger |
| Braintree Electric Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Brookfield Renewable Trading and Marketing | Supplier | Aleks Mitreski | | |
| Calpine Energy Services, LP | Supplier | Brett Kruse | | |
| Castleton Commodities Merchant Trading | Supplier | | | Bob Stein |
| Central Rivers Power | AR-RG | | Dan Allegretti | |
| Chester Municipal Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Chicopee Municipal Lighting Plant | Publicly Owned Entity | | Matthew Ide | |
| 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 | | |
| Connecticut Office of Consumer Counsel | End User | Claire Coleman | | Victor Owusu-Nantwi |
| Conservation Law Foundation (CLF) | End User | | Priya Gandbnir | |
| Constellation Energy Generation | Supplier | Steve Kirk | | |
| CPV Towantic, LLC | Generation | Joel Gordon | | |
| Cross-Sound Cable Company (CSC) | Supplier | | José Rotger | |
| Danvers Electric Division | Publicly Owned Entity | | Dave Cavanaugh | |
| DC Energy, LLC | Supplier | Bruce Bleiweis | | |
| Dominion Energy Generation Marketing, Inc. | Generation | Wes Walker | Weezie Nuara | |
| DTE Energy Trading, Inc. | Supplier | | | José Rotger |
| Durgin and Crowell Lumber Co. | End User | | | Bill Short |
| Dynegy Marketing and Trade, LLC | Supplier | | Andy Weinstein | |
| Elektrisola, Inc. | End User | | | Bill Short |
| ENGIE Energy Marketing NA, Inc. | AR-RG | Sarah Bresolin | | |
| Eversource Energy | Transmission | James Daly | Dave Burnham | Vandan Divatia |
| Excelerate Energy LP | Associate Non-Voting | Gary Ritter | | |
| FirstLight Power Management, LLC | Generation | Tom Kaslow | | |
| Galt Power, Inc. | Supplier | José Rotger | | |
| Garland Manufacturing Company | End User | | | Bill Short |
| Generation Group Member | Generation | | Abby Krich | Alex Worsley |
| Georgetown Municipal Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Granite Shore Power Companies | Generation | | | Bob Stein |
| Groton Electric Light Department | Publicly Owned Entity | | Matthew Ide | |
| Groveland Electric Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| H.Q. Energy Services (U.S.) Inc. (HQUS) | Supplier | Louis Guilbault | Bob Stein | |
| Hammond Lumber Company | End User | | | Bill Short |
| Harvard Dedicated Energy Limited | End User | | | Jason Frost |
| High Liner Foods (USA) Incorporated | End User | | William P. Short III | |

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES
PARTICIPATING IN SEPTEMBER 1, 2022 TELECONFERENCE MEETING**

| PARTICIPANT NAME | SECTOR/ GROUP | MEMBER NAME | ALTERNATE NAME | PROXY |
|--|-----------------------|------------------|----------------|--------------------|
| Hingham Municipal Lighting Plant | Publicly Owned Entity | | Dave Cavanaugh | |
| Holden Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| Holyoke Gas & Electric Department | Publicly Owned Entity | | Matthew Ide | |
| Hull Municipal Lighting Plant | Publicly Owned Entity | | Matthew Ide | |
| Icetec Energy Services, Inc. | AR-LR | Doug Hurley | | |
| Ipswich Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| Jericho Power LLC (Jericho) | AR-RG | Ben Griffiths | Nancy Chafetz | |
| Jupiter Power | Provisional Member | | | Ron Carrier |
| Littleton (MA) Electric Light and Water Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Littleton (NH) Water & Light Department | Publicly Owned Entity | | Craig Kieny | |
| Long Island Lighting Company (LIPA) | Supplier | | Bill Kilgoar | |
| Maine Power LLC | Supplier | Jeff Jones | | |
| Maine Public Advocate's Office | End User | Drew Landry | | |
| Mansfield Municipal Electric Department | Publicly Owned Entity | | Matthew Ide | |
| Maple Energy LLC | AR-LR | | | Doug Hurley |
| Marblehead Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| Mass. Attorney General's Office (MA AG) | End User | Tina Belew | Jamie Donovan | |
| Mass. Bay Transportation Authority | Publicly Owned Entity | | Dave Cavanaugh | |
| Mass. Dept. Capital Asset Management | End User | | Paul Lopes | Nancy Chafetz |
| Mass. Municipal Wholesale Electric Company | Publicly Owned Entity | Matthew Ide | | |
| 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 | |
| Mintz, Sam | End User | Sam Mintz | | |
| Moore Company | End User | | | Bill Short |
| Narragansett Elec. Co. (d/b/a Rhode Island Energy) | Transmission | Brian Thomson | | Lindsay Orphanides |
| National Grid | Transmission | Tim Brennan | Tim Martin | |
| Nautilus Power, LLC | Generation | Dan Pierpont | | |
| New England Power Generators Assoc. (NEPGA) | Associate Non-Voting | Bruce Anderson | Dan Dolan | Molly Connors |
| New Hampshire Electric Cooperative | Publicly Owned Entity | Steve Kaminski | | Brian Forshaw |
| New Hampshire Office of Consumer Advocate | End User | | Jason Frost | |
| NextEra Energy Resources, LLC | Generation | Michelle Gardner | | |
| North Attleborough Electric Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Norwood Municipal Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| NRG Power Marketing LLC | Supplier | | Pete Fuller | |
| Nylon Corporation of America | End User | | | Bill Short |
| Pascoag Utility District | Publicly Owned Entity | | Dave Cavanaugh | |
| Paxton Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| Peabody Municipal Light Plant | Publicly Owned Entity | | Matthew Ide | |
| Princeton Municipal Light Department | Publicly Owned Entity | | Matthew Ide | |
| Reading Municipal Light Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Rowley Municipal Lighting Plant | Publicly Owned Entity | | Dave Cavanaugh | |
| Russell Municipal Light Dept | Publicly Owned Entity | | Matthew Ide | |
| Saint Anselm College | End User | | | Bill Short |
| Shrewsbury Electric & Cable Operations | Publicly Owned Entity | | Matthew Ide | |
| South Hadley Electric Light Department | Publicly Owned Entity | | Matthew Ide | |
| Sterling Municipal Electric Light Department | Publicly Owned Entity | | Matthew Ide | |
| Stowe Electric Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Sunrun Inc. | AR-DG | | | Peter Fuller |
| Taunton Municipal Lighting Plant | Publicly Owned Entity | Devon Tremont | Dave Cavanaugh | |

**PARTICIPANTS COMMITTEE MEMBERS AND ALTERNATES
PARTICIPATING IN SEPTEMBER 1, 2022 TELECONFERENCE MEETING**

| PARTICIPANT NAME | SECTOR/ GROUP | MEMBER NAME | ALTERNATE NAME | PROXY |
|---|-----------------------|----------------|-----------------|---------------|
| Templeton Municipal Lighting Plant | Publicly Owned Entity | | Matthew Ide | |
| Tenaska Power Services Co. | Supplier | | Eric Stallings | |
| The Energy Consortium | End User | | Mary Smith | |
| Union of Concerned Scientists | End User | | Francis Pullaro | |
| Vermont Electric Cooperative | Publicly Owned Entity | Craig Kieny | | |
| Vermont Electric Power Company (VELCO) | Transmission | Frank Ettori | Karin Stamy | |
| Vermont Energy Investment Corp. (VEIC) | AR-LR | | Jason Frost | |
| Vermont Public Power Supply Authority | Publicly Owned Entity | | | Brian Forshaw |
| Versant Power | Transmission | Lisa Martin | David Norman | |
| Village of Hyde Park (VT) Electric Department | Publicly Owned Entity | Dave Cavanaugh | | |
| Wakefield Municipal Gas and Light Department | Publicly Owned Entity | | Matthew Ide | |
| 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 | | Matthew Ide | |
| Westfield Gas & Electric Department | Publicly Owned Entity | | Dave Cavanaugh | |
| Wheelabrator North Andover Inc. | AR-RG | | | Jim Ginnetti |
| Z-TECH, LLC | End User | | | Bill Short |

CONSENT AGENDA

Markets Committee (MC)

From the previously-circulated notice of actions of the MC's September 13-14, 2022 meeting, dated September 15, 2022.¹

1. Changes to Tariff §§ III.13.7.5.4.5 & III.13.1.1.2.3 (CTRs Calculation Clarification)

Support the revisions to Market Rule 1 Sections III.13.7.5.4.5 and III.13.1.1.2.3 of Market Rule 1 to further clarify the settlement calculation and reflect de-listed capacity for specifically allocated Capacity Transfer Rights (CTRs) for Pool-Planned Units, as recommended by the MC at its September 13-14, 2022 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 unanimously approved.

2. Changes to Tariff § III.13.8 (Additional FCA18 Schedule Modifications)

Support the additional revisions to Market Rule 1 Section III.13.8 to modify the FCA18 schedule to maintain the FCA18 start date given the changes made to the schedule for FCA17, as recommended by the MC at its September 13-14, 2022 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 unanimously approved.

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

Summary of ISO New England Board and Committee Meetings

October 6, 2022 Participants Committee Meeting

Since the last update, the Compensation and Human Resources Committee, the Markets Committee, the Nominating and Governance Committee, and the System Planning and Reliability Committee met on September 14. The Board of Directors met on September 15. All of the meetings were held in Holyoke.

The Compensation and Human Resources Committee discussed the employee health and benefit plan renewals for 2023. Regarding the 2023 compensation budget, the Committee reviewed national compensation surveys of projected 2023 merit and promotional increase budgets, including data specific to the utility industry, and data from other system operators. The Committee also considered the Company's increasing vacancy rate and difficulty filling open positions. For the 2023 operating budget, the Committee approved a 4.0% merit increase and a 1.75% promotional/equity increase. Next, the Committee received an update on workforce demographics and talent market dynamics, and discussed workplace programs and development initiatives for employees. The Committee then reviewed an updated list of the risks that fall within the Committee's purview. The Committee also discussed modifying its charter to reflect the Committee's role in reviewing compensation for members of the Board of Directors, and recommended a revised charter for the Board's review in November.

The Markets Committee focused on market monitoring issues. The two market monitors provided their assessments of market performance during the spring. The Committee also conducted its annual review of the External Market Monitor's business continuity and succession plans. The Internal Market Monitor discussed the CPower enforcement case, and the process for referrals to FERC. Following an executive session, the System Planning and Reliability Committee joined the meeting to consider the key risks within the scope of both Committees' oversight. The Committees discussed risks that are a function of market activity, technological change, and state policies.

The Nominating and Governance Committee discussed the launch of the Joint Nominating Committee process for 2023, and reviewed Board needs and the requisite skills in connection with the Company's board succession process. Next, the Committee conducted its annual assessment of the risks within the Committee's purview. The Committee received updates on states' activities, and reviewed plans for the first annual open board meeting in November. As part of its annual corporate governance review, the Committee discussed plans for a facilitated evaluation

of the Board and the committees. The Committee also received an update on the political environment, including state and federal topics, and discussed significant energy legislation and policies considered by federal and state policymakers this year.

The System Planning and Reliability Committee was provided with a status update of Regional System Plan projects. The Committee then received updates on the 2050 Transmission Study, the development of large renewable projects, and the reserve margin. The Committee also discussed an upcoming FERC technical conference on transmission planning and cost management, and the Company's position on an independent transmission monitor. The Committee held a brief executive session, and then, as noted above, joined the Markets Committee meeting to consider the key risks within the scope of both Committees' oversight.

The Board of Directors began its annual meeting with an executive session to discuss the Board's oversight of the Company's compliance structure. Following the executive session, the Board discussed strategic planning topics, including resource and energy adequacy. Next, the Board received a report from the CEO, including an update on corporate goal achievement and a summary of the recent forum held by FERC. In addition, the Board reviewed plans for the upcoming open board meeting in November. Next, the Board discussed the proposed 2023 operating and capital budgets, including the states' comments on the budgets, and the remaining stakeholder process, following which the Board will vote on the budgets. The Board then received reports from the standing committees. Regarding annual meeting matters, the Board elected Ms. LaFleur as Chair of the Board of Directors, and adopted the committee assignments recommended by the Nominating and Governance Committee, as follows:

- Ms. Flax and Messrs. Corneli and Curran shall serve on the **Audit and Finance Committee**, with Ms. Flax to serve as Chair;
- Mses. Anders and LaFleur and Messrs. Denis and Williams shall serve on the **Compensation and Human Resources Committee**, with Mr. Denis to serve as Chair;
- Messrs. Colangelo, Corneli, Curran, Vannoy and Williams shall serve on the **Information Technology and Cyber Security Committee**, with Mr. Vannoy to serve as Chair;
- Mses. Anders, Flax and LaFleur and Messrs. Corneli, Curran, Denis and Williams shall serve on the **Joint Nominating Committee**, with Mr. Denis to serve as Chair;

- Ms. Flax and Messrs. Curran, Corneli and Vannoy shall serve on the **Markets Committee**, with Mr. Curran to serve as Chair;
- Mses. Anders and LaFleur and Messrs. Colangelo and Vannoy shall serve on the **Nominating and Governance Committee**, with Mr. Colangelo to serve as Chair;
- Ms. Anders and Messrs. Colangelo, Denis and Williams shall serve on the **System Planning and Reliability Committee**, with Ms. Anders to serve as Chair.

The Board also elected the Company's officers for the upcoming year, reviewed assignments of directors as liaisons to individual states, and thanked retiring directors Vickie VanZandt and Barney Rush for their service on the Board.

September 29, 2022

Gordon van Welie, President and Chief Executive Officer
Vamsi Chadalavada, Executive Vice President and Chief Operating Officer
ISO New England
One Sullivan Road
Holyoke, MA 01040

Dear Mr. van Welie and Mr. Chadalavada,

RE: Joint Information Request Relating to the Mystic Cost-of-Service Agreement

As a group of load-serving entities (“LSE Group”), we have significant concerns relating to the administration of the fuel security cost-of-service agreement for the Mystic Generation Station (Mystic COS Agreement) and its arrangements with the Everett Marine Terminal (EMT) and what that means for consumers this winter and for the duration of the agreement through 2024. The costs of this agreement, like past winter reliability programs, are allocated to the market through real-time load obligations (RTLO). The size of this agreement, however, dwarfs any past winter reliability program and the variable fuel supply costs are difficult to predict, if not impossible. To be clear, the LSE Group does not take issue here with ISO-NE’s filing of or administration of the Mystic COS Agreement to ensure reliable operation of the grid this winter and next winter. Our goal is to concomitantly make this winter as economically efficient as possible for consumers by providing information to the market that is managing load obligations.

The Mystic COS Agreement is significant in size, difficult to manage, and virtually impossible to hedge. That was a true statement when this was first presented to NEPOOL and is even more so today given volatility in the global LNG and gas markets. Managing load this winter requires the forecasting of multiple volatile market costs, such as LNG costs and shipping, all the varied third-party sales and profits from the EMT, as well as the market costs earned by Mystic and its self-scheduling to burn off excess LNG. That does not include additional forecasting on capacity payments and/or risks of payments or penalties under PFP as modified by the agreement. Competitive LSEs provide valuable hedging services, but they cannot provide this value on the cost of the Mystic COS Agreement given the difficulty of predicting these variables.

Despite objections by suppliers and other stakeholders, including NESCOE, Maine and New Hampshire, the FERC approved continued allocation to RTLO rather than regional network load in an order issued in December 2018. FERC agreed with ISO-NE that the goal of a fuel security agreement is like that of past winter programs and therefore it should have a similar allocation of costs. The Mystic COS Agreement is vastly different, however, from other winter programs with capped costs. Past winter reliability program costs have ranged from approximately \$30M to \$70M per year. In 2018, stakeholders argued that the Mystic COS Agreement costs could be more than \$400M per year. Yet, for the single month of July, the Mystic COS Agreement costs were \$48 million, approximately 4 times higher than the forecasted costs for that month. Given this disparity, we have grave concerns regarding the winter months, when gas prices will be at their highest, and the costs that we could face under the Agreement. No one in 2018 could have predicted how much more volatile and unmanageable hedging these costs would become considering world events. When the program and its mechanics were contemplated, the gas market was in the \$3-\$4/MMBtu range with daily volatility +/- \$0.10 for Henry Hub while LNG prices were \$5-\$10/MMBtu. During this time, fuel cost estimates and scenarios were pinned on reasonable

price moves and the Algonquin city-gate and LNG relationships at the time. The region is now facing a gas market that is \$7-\$9/MMBtu with daily volatility +/- \$0.90 for Henry Hub while LNG prices are \$20-\$75/MMBtu. The global LNG crisis driven by the war in Ukraine has created a situation in the LNG and gas markets that was not contemplated.

Given present market conditions and bills received by suppliers to date - \$13M for June 2022 and \$48M for July 2022 market-wide - costs could balloon to levels not contemplated in 2018. Although estimates at present for LNG fall around \$45/MMBtu in New England and \$75/MMBtu globally, it is not entirely inconceivable that prices could spike higher given the instability in the global LNG market. Just to put this into context, if the price reached \$120/MMBtu, the implied Mystic market offer could be greater than \$900/MWh. Given the need to secure cargos in advance, there will be enormous price movement risk due both to global conditions and weather. In addition, the market could clear lower due to relatively less expensive fuel oil on the margin, absent a material event, including the weather. If at the time of delivery, there was downward pressure on global LNG price, Mystic's "least" cost option could be to self-schedule and burn the fuel at the LMP clearing price. All market losses here flow to RTLO. Given that Mystic can run at about 1MM MWh a month, it is possible that a \$1B charge to load could occur over the 3 months of winter. These scenarios and the magnitude of this risk certainly were not contemplated at the agreement's inception.

The LSE Group is continuing to explore its options regarding how to mitigate the impacts of the Mystic COS Agreement. **To help manage these risks and minimize the impacts on consumers, the LSE Group respectfully requests additional information relating to the Mystic COS Agreement.** The LSE Group understands that ISO-NE will be addressing this topic at the NEPOOL Participants Committee in October and is planning to present on this at the NEPOOL Markets Committee, also in October. To the extent there are confidentiality or other concerns, the LSE Group is prepared to work with ISO-NE counsel, the EMM/IMM, and/or FERC counsel as appropriate to develop a workable solution. At a minimum, information shared with the market will help to minimize any risk premiums as suppliers process the realities of this agreement. Given the amount of default service winter load pending procurement in New England, any reduction of premiums will directly result in savings to consumers.

First, it would be beneficial for ISO-NE to complete the cost estimation spreadsheet posted on its website for the June and July 2022 settlements and share such results with the market. LSEs use that spreadsheet to estimate costs going forward. The ability of the market to see costs presented in that document and in that format will be of great value in predicting future costs. In addition to the data on the spreadsheet, any insight ISO-NE can share related to key drivers of cost, including related to the scheduling over the summer would be helpful, e.g., whether the LNG was scheduled to anticipate summer needs or as a reaction to the weather and/or system conditions.

Second, the LSE Group would like to request a cost estimate of the Mystic COS Agreement from ISO-NE. It would be extremely valuable for an entity like ISO-NE to post an estimate or estimates publicly for the market. We recognize that to date the fuel supply plan has not been made publicly available, which can make compiling an estimate difficult. However, proxy amounts or high/low/medium scenarios can be used to provide a range of probable outcomes. Further, to the extent ISO-NE can shed light on the current rules around the fuel rates paid for by Mystic and/or when such rates are fixed, that would be valuable, as well as whether there are any third-party sale expectations.

In addition to the two data requests above, the LSE Group has compiled additional points for which clarification from ISO-NE would be helpful to the competitive market. They are as follows:

1. If the plant enters a forced outage and a tanker is scheduled to arrive, we assume 3rd party sales (potentially at a loss) or diversion are the only options that can be exercised of which costs will be passed along to the system. We also assume capacity revenue would be lost. Please confirm.
2. Supplemental payment could be interpreted as double dipping. We assume the monthly fuel costs are net of any fuel costs already recovered via LMP. Please confirm.
3. Please confirm that ISO-NE has not directed Mystic to procure LNG that is not intended to be burned by Mystic for purposes of operating the generation facility.

In sum, the LSE Group recognizes the challenges ISO-NE has faced that lead to the Mystic COS Agreement and the hard work that ISO-NE is doing to prepare for this winter. The primary goal here is not to thwart those efforts but instead to work together to mitigate the costs associated with the Mystic COS Agreement as much as possible. We look forward to having a robust discussion on this topic at future NEPOOL meetings.

Sincerely,

Brookfield Renewable Trading and Marketing

ENGIE Energy Marketing NA

NextEra Energy Marketing, LLC

Shell Energy North America (US), L.P

Vistra Corp.

Vitol Inc.

NEPOOL Participants Committee Report

October 2022



Vamsi Chadalavada

EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER



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Regular Operations Report - Highlights



Highlights

Data is through September 28th unless otherwise noted.

- Day-Ahead (DA), Real-Time (RT) Prices and Transactions
 - Update: August 2022 Energy Market value totaled \$1.4B
 - September Energy market value over the period was \$662M, down \$731M from August 2022 and up \$151M from September 2021
 - September natural gas prices over the period were 17% lower than August average values
 - Average RT Hub Locational Marginal Prices (\$62.61/MWh) over the period were 35% lower than August averages
 - DA Hub: \$68.50/MWh (9.4% premium over RT)
 - Average September 2022 natural gas prices and RT Hub LMPs over the period were up 56% and 34%, respectively, from September 2021 average
 - Average DA cleared physical energy during the peak hours as percent of forecasted load was 99.9% during September, down from 102.2% during August*
 - The minimum value for the month was 90.4% on Friday, September 2nd

*DA Cleared Physical Energy is the sum of Generation and Net Imports cleared in the DA Energy Market

Underlying natural gas data furnished by:



Highlights, cont.

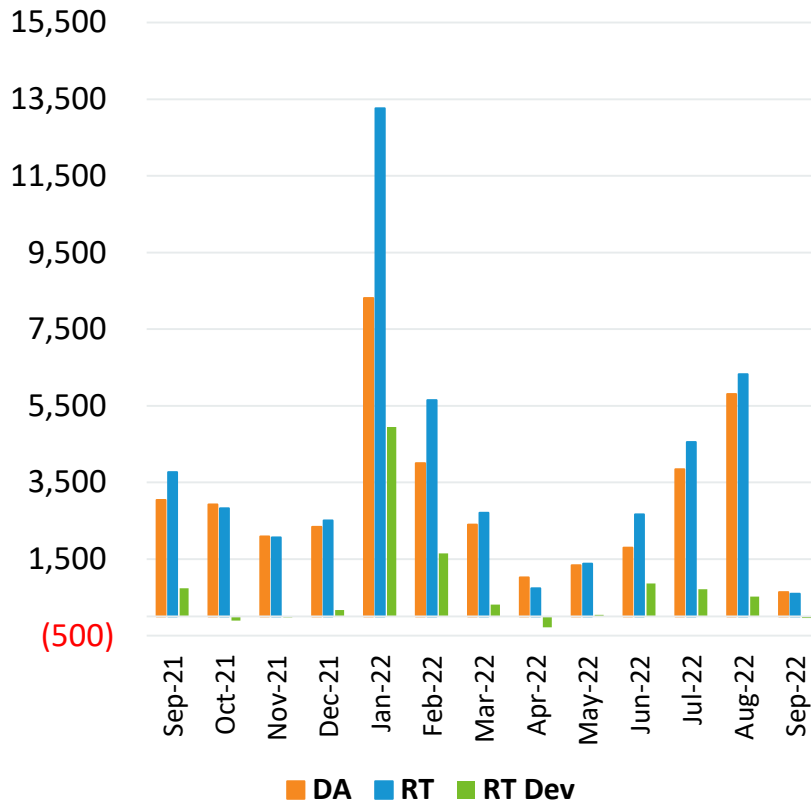
- Daily Net Commitment Period Compensation (NCPC)
 - September 2022 NCPC payments totaled \$2M over the period, down \$4.5M from August 2022 and up \$0.6M from September 2021
 - First Contingency payments totaled \$1.9M, down \$4.1M from August
 - \$1.3M paid to internal resources, down \$4.2M from August
 - » \$322K charged to DALO, \$508K to RT Deviations, \$511K to RTLO*
 - \$520K paid to resources at external locations, up \$118K from August
 - » \$458K charged to DALO at external locations, \$62K to RT Deviations
 - Second Contingency payments totaled \$120K, up \$116K from August
 - Distribution payments totaled \$11K, down \$491K from August
 - Voltage payments were zero
 - NCPC payments over the period as percent of Energy Market value were 0.3%

*** NCPC types reflected in the First Contingency Amount: Dispatch Lost Opportunity Cost (DLOC) - \$309K; Rapid Response Pricing (RRP) Opportunity Cost - \$200K; Posturing - \$0K; Generator Performance Auditing (GPA) - \$3K**

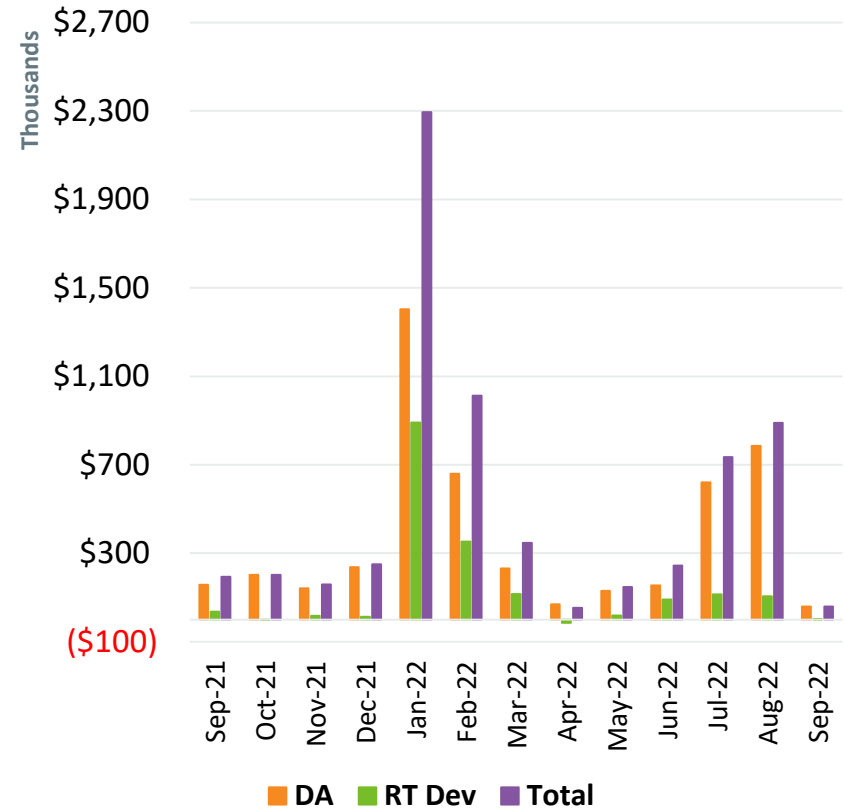


Price Responsive Demand (PRD) Energy Market Activity by Month

DA, RT, and RT Dev MWh



Market Value



Note: DA and RT (deviation) MWh are settlement obligations and reflect appropriate gross-ups for distribution losses.



Highlights

- ISO is working on solution development for the 2050 Transmission Study and expects to begin initial discussions with the PAC in Q4 2022
- The proposed Installed Capacity Requirement (ICR) and related values for Forward Capacity Auction #17 (FCA 17) were approved by the RC on September 20
- The next Load Forecast Committee meeting is scheduled for November 7 and will include discussions of electrification forecast updates
- Qualified Transmission Project Sponsor (QTPS)
 - 25 companies have achieved QTPS status



Forward Capacity Market (FCM) Highlights

- CCP 13 (2022-2023)
 - Third and final annual reconfiguration auction (ARA3) was held on March 1-3, and results were posted on March 30
- CCP 14 (2023-2024)
 - Second annual reconfiguration auction (ARA2) was held on August 1-3, and results were posted on August 31
- CCP 15 (2024-2025)
 - First annual reconfiguration auction (ARA1) was held on June 1-3, and results were posted on June 28
- CCP 16 (2025-2026)
 - Auction results were filed with FERC on March 21 and on July 18, FERC issued an order accepting the results effective July 19

FCM Highlights, cont.

- CCP 17 (2026-2027)
 - ISO submitted the “MOPR Removal” filing to FERC on March 31, which includes a “Transition Mechanism” for FCA 17 and FCA 18
 - FERC issued an order accepting ISO’s filing on May 27
 - FCA 17 will model the following zones:
 - Export-constrained zones: Northern New England and Maine nested inside Northern New England
 - Rest-of-Pool
 - New Capacity Qualification Package (NCQP) Submission Window closed on July 27, and review of the NCQPs is ongoing
 - ICR and related values assumptions were approved by the RC on September 20



Highlights

- The lowest 50/50 and 90/10 Fall Operable Capacity Margins are projected for week beginning October 29, 2022.
- The lowest 50/50 and 90/10 Preliminary Winter Operable Capacity Margins are projected for week beginning January 7, 2023.



SYSTEM OPERATIONS



System Operations

| | | | | |
|--------------------------------|--------|--|----------|---|
| <u>Weather Patterns</u> | Boston | Temperature: Below Normal (-0.4°F) Max: 84°F, Min: 48°F Precipitation: 2.60" – Below Normal Normal: 3.56" | Hartford | Temperature: Above Normal (0.3°F) Max: 86°F, Min: 40°F Precipitation: 6.08" - Above Normal Normal: 4.39" |
|--------------------------------|--------|--|----------|---|

| | | | |
|--------------------------|-----------|--------------------|----------------|
| <u>Peak Load:</u> | 17,663 MW | September 12, 2022 | 20:00 (ending) |
|--------------------------|-----------|--------------------|----------------|

Emergency Procedure Events (OP-4, M/LCC 2, Minimum Generation Emergency)

| Procedure | Declared | Cancelled | Note |
|-------------------------|----------|-----------|------|
| None for September 2022 | | | |



System Operations

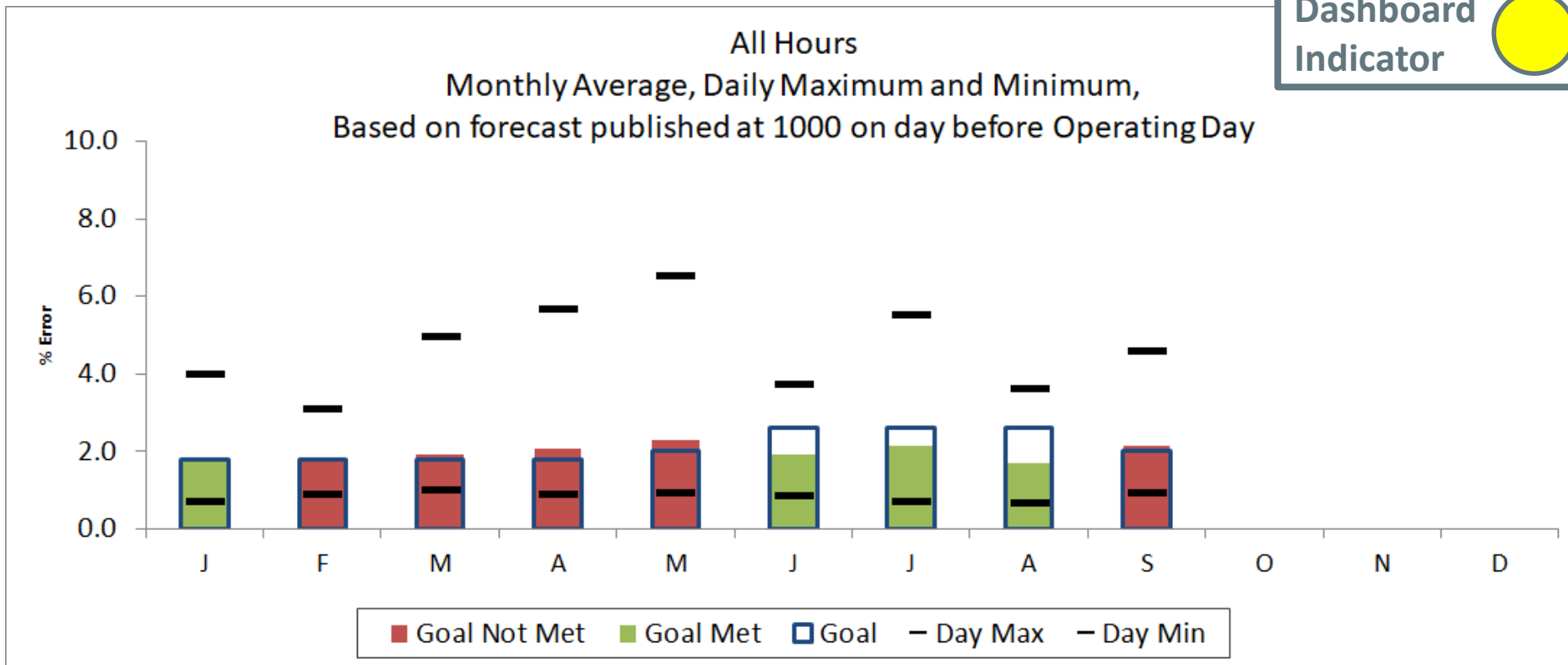
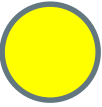
NPCC Simultaneous Activation of Reserve Events

| Date | Area | MW Lost |
|-------------------------|------|---------|
| None for September 2022 | | |



2022 System Operations - Load Forecast Accuracy

Dashboard
Indicator



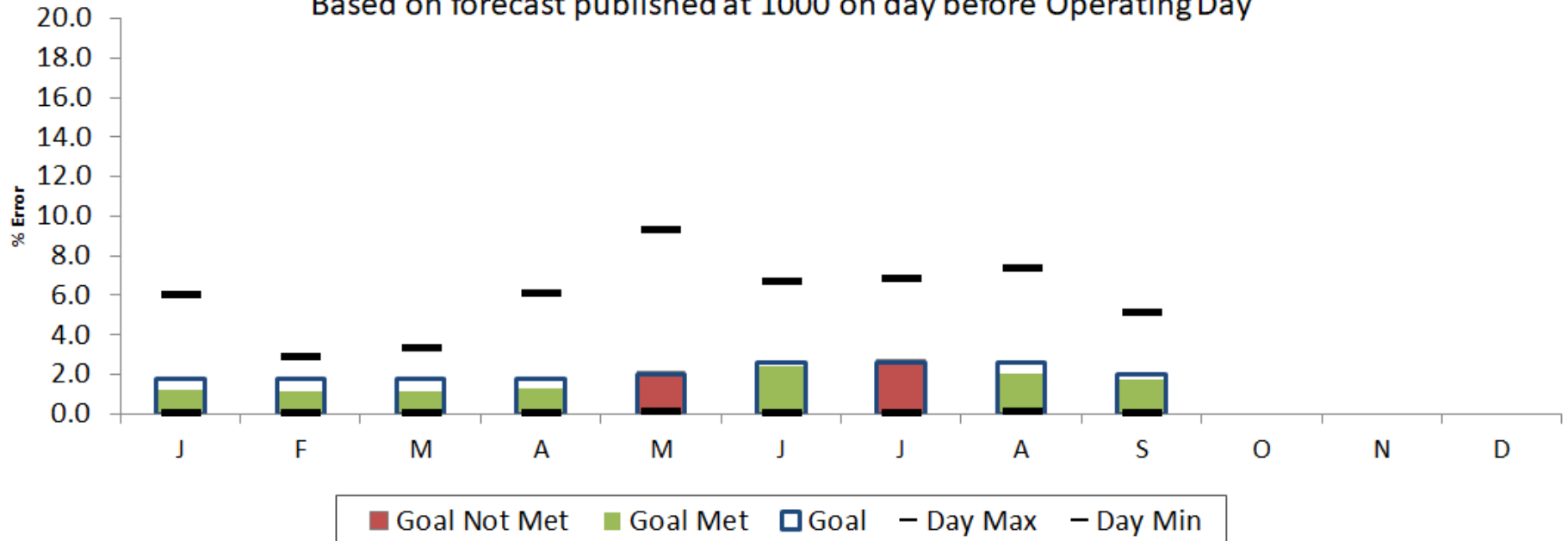
| Month | J | F | M | A | M | J | J | A | S | O | N | D | |
|---------|------|------|------|------|------|------|------|------|------|---|---|---|------|
| Day Max | 3.97 | 3.07 | 4.92 | 5.66 | 6.52 | 3.71 | 5.48 | 3.61 | 4.56 | | | | 6.52 |
| Day Min | 0.69 | 0.87 | 0.97 | 0.85 | 0.91 | 0.83 | 0.69 | 0.66 | 0.90 | | | | 0.66 |
| MAPE | 1.79 | 1.81 | 1.93 | 2.05 | 2.30 | 1.92 | 2.13 | 1.70 | 2.13 | | | | 1.97 |
| Goal | 1.80 | 1.80 | 1.80 | 1.80 | 2.00 | 2.60 | 2.60 | 2.60 | 2.00 | | | | |

2022 System Operations - Load Forecast Accuracy cont.

Dashboard
Indicator



Peak Hours
Monthly Average, Daily Maximum and Minimum,
Based on forecast published at 1000 on day before Operating Day

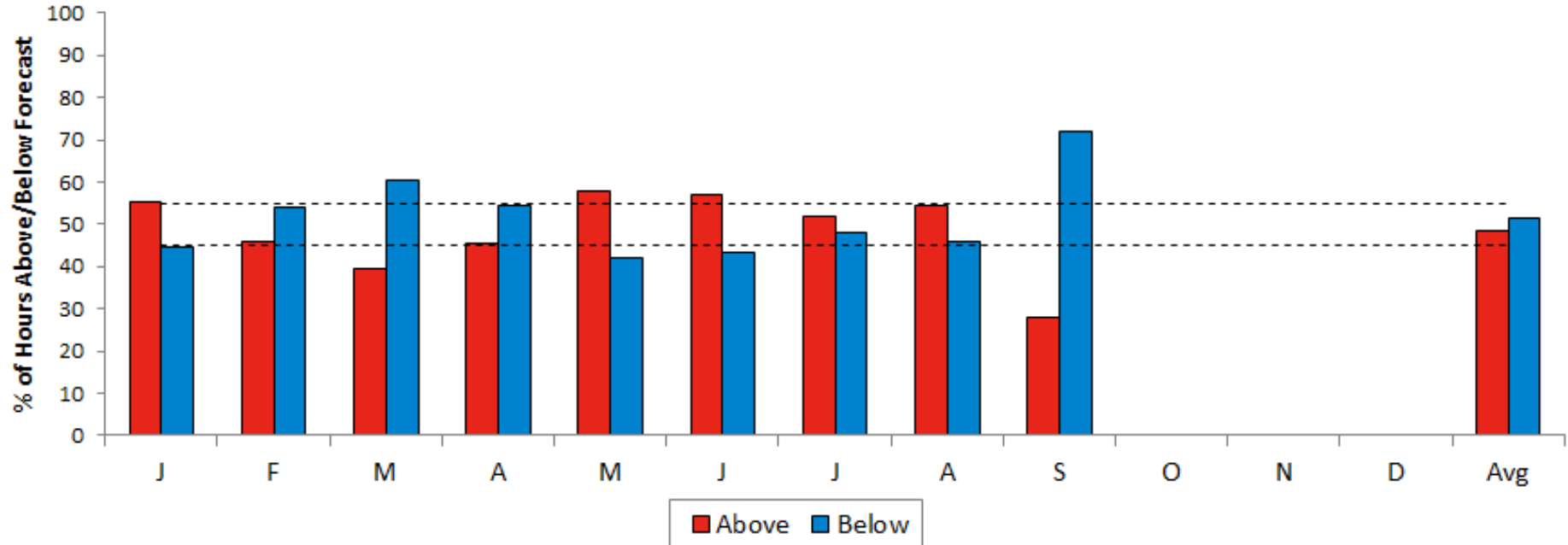


| Month | J | F | M | A | M | J | J | A | S | O | N | D | |
|---------|------|------|------|------|------|------|------|------|------|---|---|---|------|
| Day Max | 6.01 | 2.85 | 3.32 | 6.08 | 9.27 | 6.70 | 6.85 | 7.31 | 5.12 | | | | 9.27 |
| Day Min | 0.02 | 0.03 | 0.04 | 0.00 | 0.06 | 0.01 | 0.02 | 0.08 | 0.01 | | | | 0.00 |
| MAPE | 1.25 | 1.11 | 1.13 | 1.29 | 2.14 | 2.43 | 2.73 | 2.06 | 1.71 | | | | 1.77 |
| Goal | 1.80 | 1.80 | 1.80 | 1.80 | 2.00 | 2.60 | 2.60 | 2.60 | 2.00 | | | | |

2022 System Operations - Load Forecast Accuracy cont.

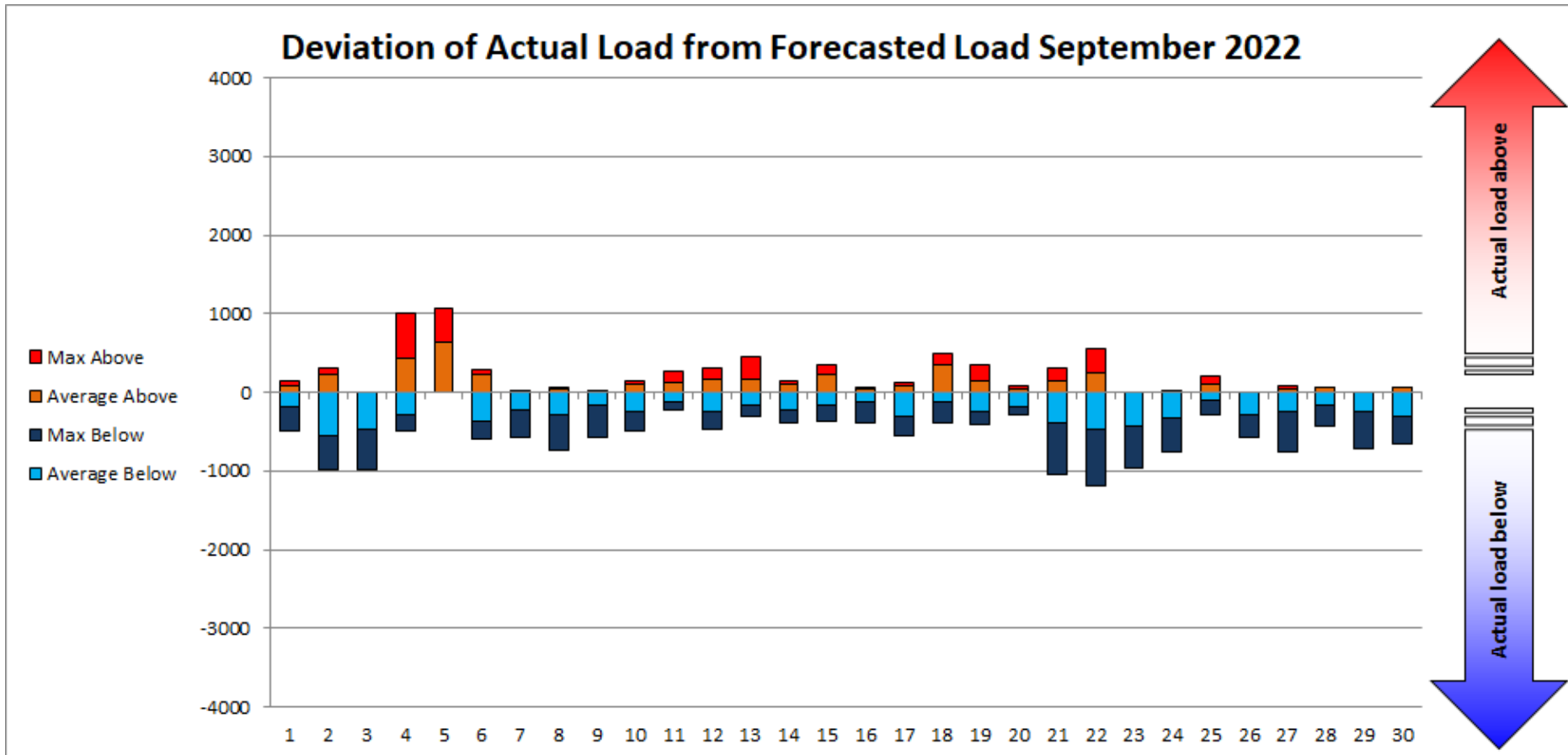
Percent of Hours Actual Load
Above vs. Below Forecast
Based on LF published by 1000, day before Operating Day

Target = 50%
Plus/Minus = 5%



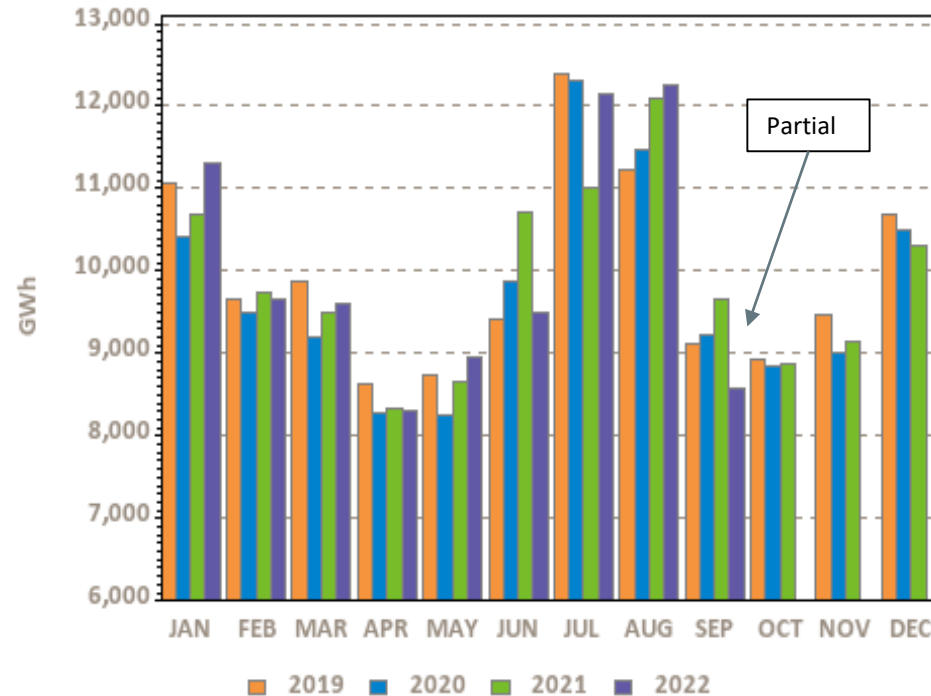
| | J | F | M | A | M | J | J | A | S | O | N | D | Avg |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---|---|---|------|
| Above % | 55.2 | 46 | 39.7 | 45.6 | 57.8 | 56.8 | 51.9 | 54.3 | 27.9 | | | | 48 |
| Below % | 44.8 | 54 | 60.3 | 54.4 | 42.2 | 43.2 | 48.1 | 45.7 | 72.1 | | | | 52 |
| Avg Above | 219.5 | 245.7 | 175.9 | 180 | 217.2 | 209.6 | 268.3 | 208.5 | 128.1 | | | | 268 |
| Avg Below | -223.1 | -207.6 | -240.0 | -191.5 | -192.2 | -215.9 | -295.8 | -281.9 | -255.3 | | | | -296 |
| Avg All | 22 | 6 | -78 | -18 | 30 | 23 | 5 | -26 | -134 | | | | -19 |

2022 System Operations - Load Forecast Accuracy cont.



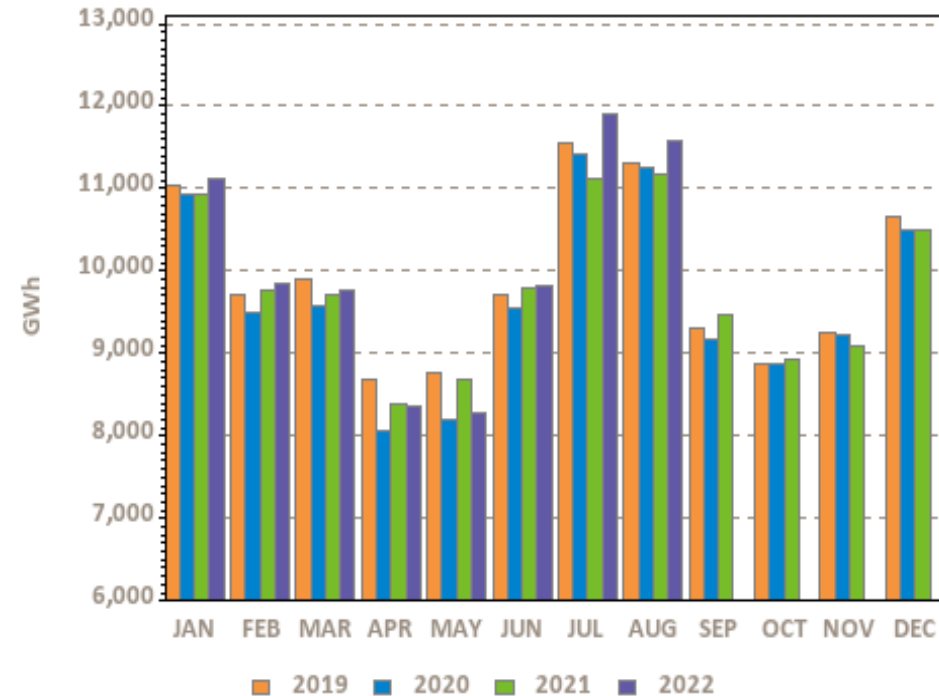
Monthly Recorded Net Energy for Load (NEL) and Weather Normalized NEL

Net Energy for Load (NEL)



Ann Tot (TWh): 119.2 116.9 118.8 90.3

Weather Normalized NEL

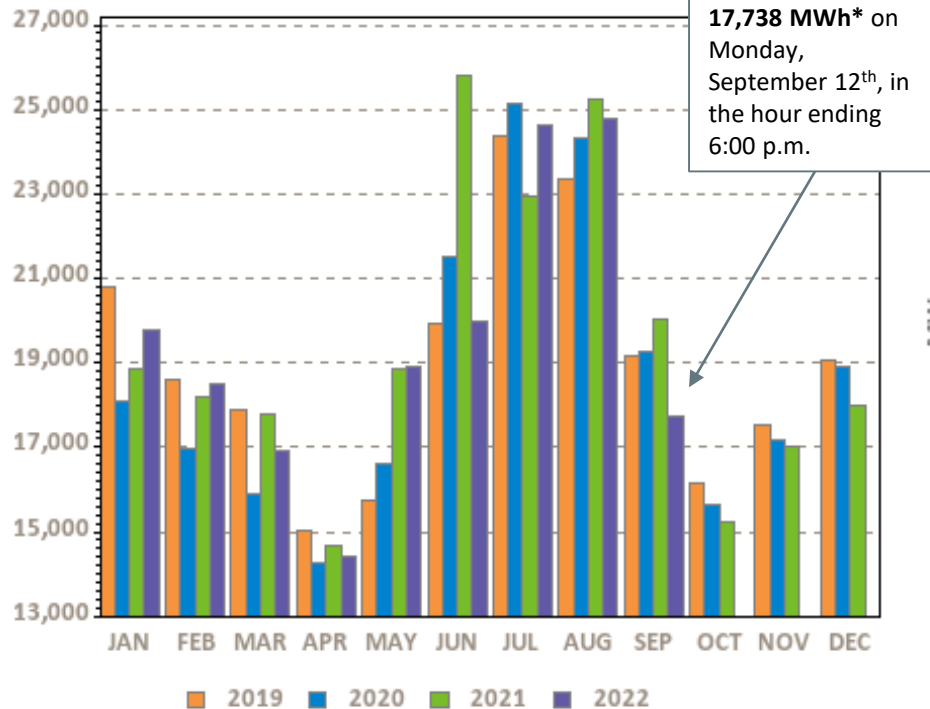


Ann Tot (TWh): 118.8 116.3 117.6 80.7

NEPOOL NEL is the total net revenue quality metered energy required to serve load and is analogous to 'RT system load.' NEL is calculated as: Generation – pumping load + net interchange where imports are positively signed. Current month's data may be preliminary. Weather normalized NEL is typically reported on a one-month lag.

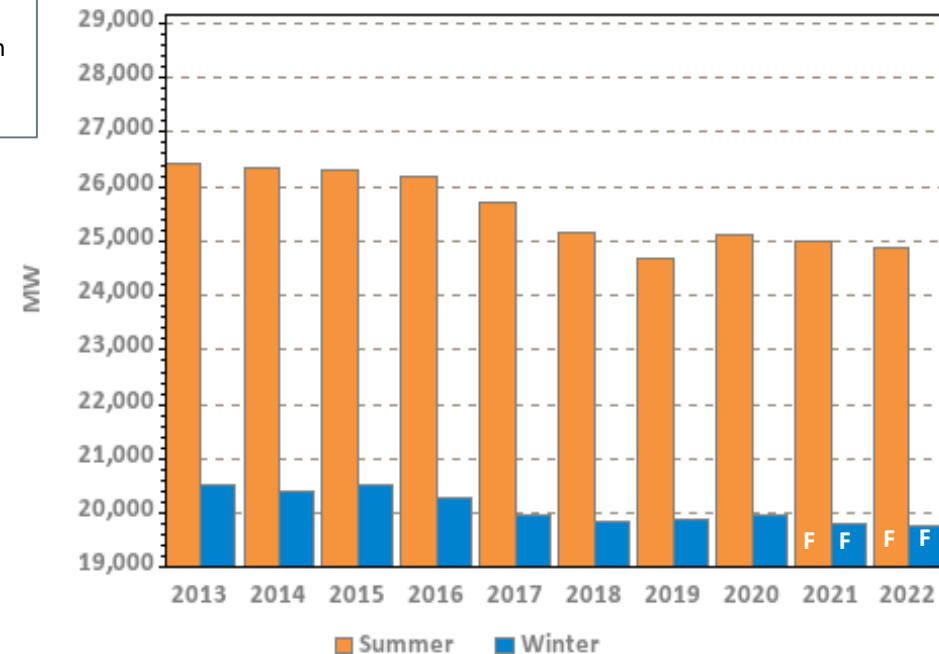
Monthly Peak Loads and Weather Normalized Seasonal Peak History

System Peak Load



*Revenue quality metered value

Weather Normalized Seasonal Peaks

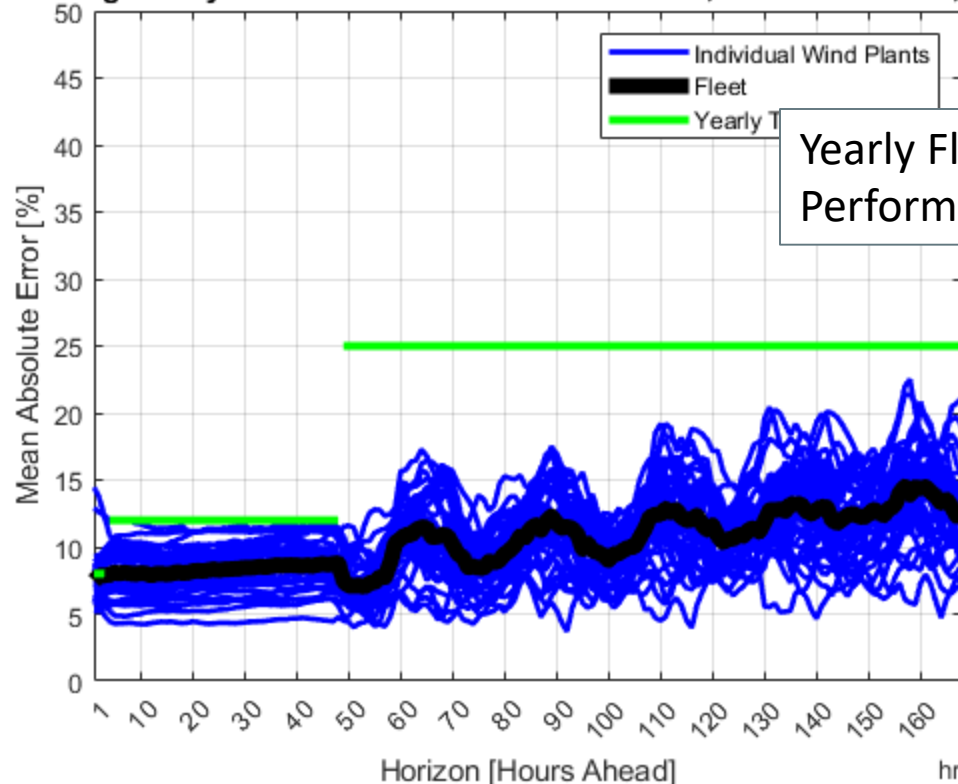


Winter beginning in year displayed

F – designates forecasted values, which are typically updated in April/May of the following year; represents “net forecast” (i.e., the gross forecast net of passive demand response and behind-the-meter solar demand)

Wind Power Forecast Error Statistics: Medium and Long Term Forecasts MAE

Rolling 30-day MAE for ISO Wind Power Forecast, as of October 02, 2022



Dashboard Indicator

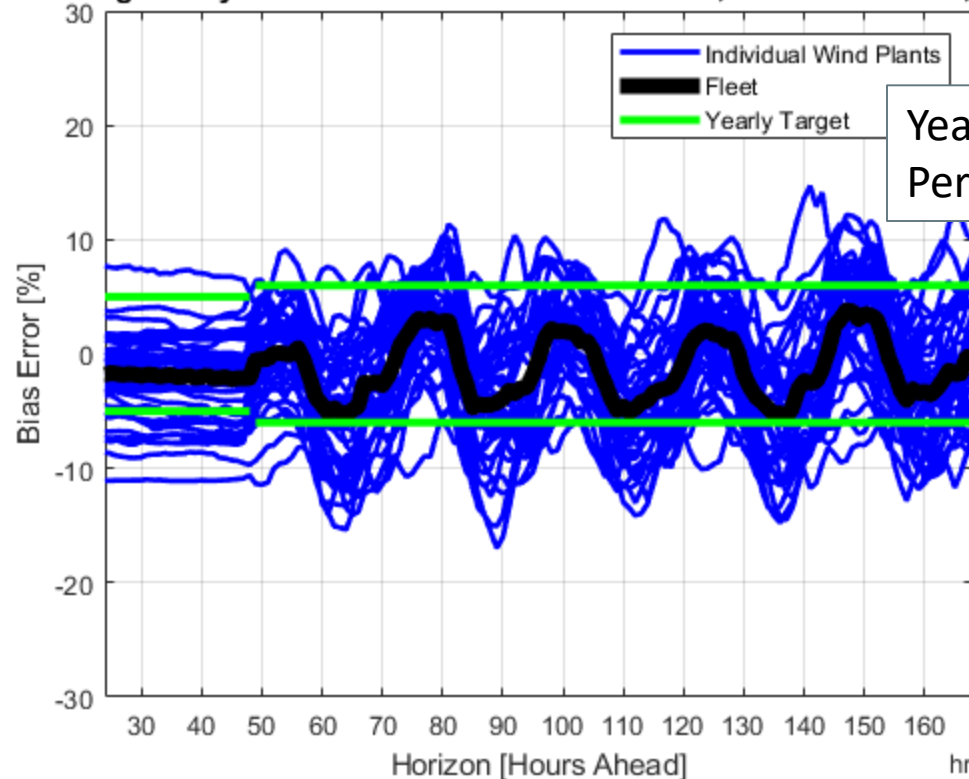


Yearly Fleet
Performance targets

Ideally, MAE and Bias would be both equal to zero. As is typical, MAE increases with the forecast horizon. MAE and Bias for the fleet of wind power resources are less due to offsetting errors. Across all time frames, the ISO-NE/DNV forecast is very good compared to industry standards, and monthly MAE is within the yearly performance targets.

Wind Power Forecast Error Statistics: Medium and Long Term Forecasts Bias

Rolling 30-day Bias for ISO Wind Power Forecast, as of October 02, 2022



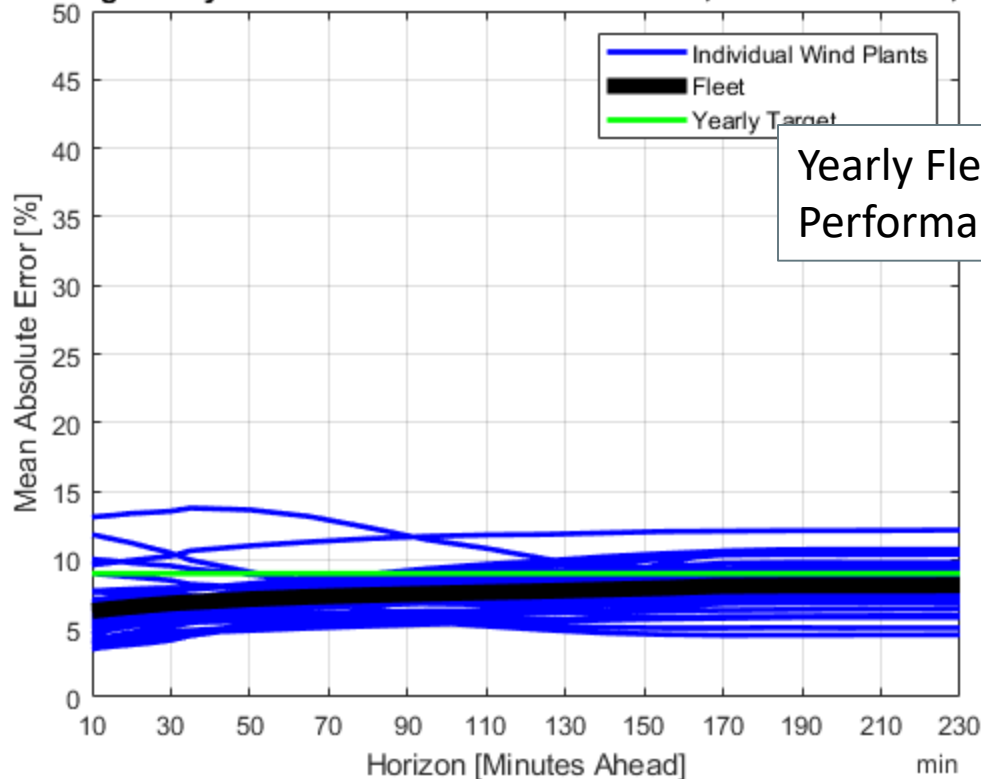
Dashboard Indicator ●

Yearly Fleet
Performance targets


Ideally, MAE and Bias would be both equal to zero. Positive bias means less windpower was actually available compared to forecast. Negative bias means more windpower was actually available compared to forecast. Across all time frames, the ISO-NE/DNV forecast compares well with industry standards, and monthly Bias is within yearly performance targets.

Wind Power Forecast Error Statistics: Short Term Forecast MAE

Rolling 30-day MAE for ISO Wind Power Forecast, as of October 02, 2022

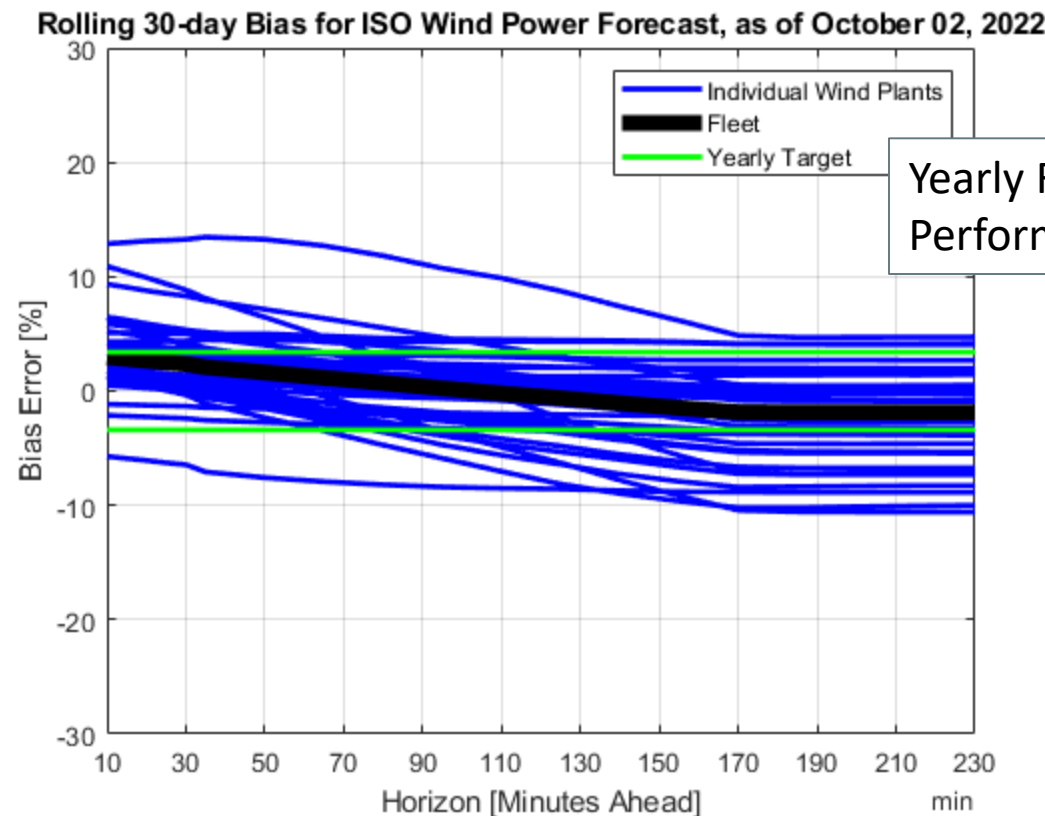


Dashboard Indicator 

Yearly Fleet
Performance targets 

Ideally, MAE and Bias would be both equal to zero. As is typical, MAE increases with the forecast horizon. MAE and Bias for the fleet of wind power resources are less due to offsetting errors. Across all time frames, the ISO-NE/DNV forecast is very good compared to industry standards, and monthly MAE is within the yearly performance targets.

Wind Power Forecast Error Statistics: Short Term Forecast Bias



Dashboard Indicator 

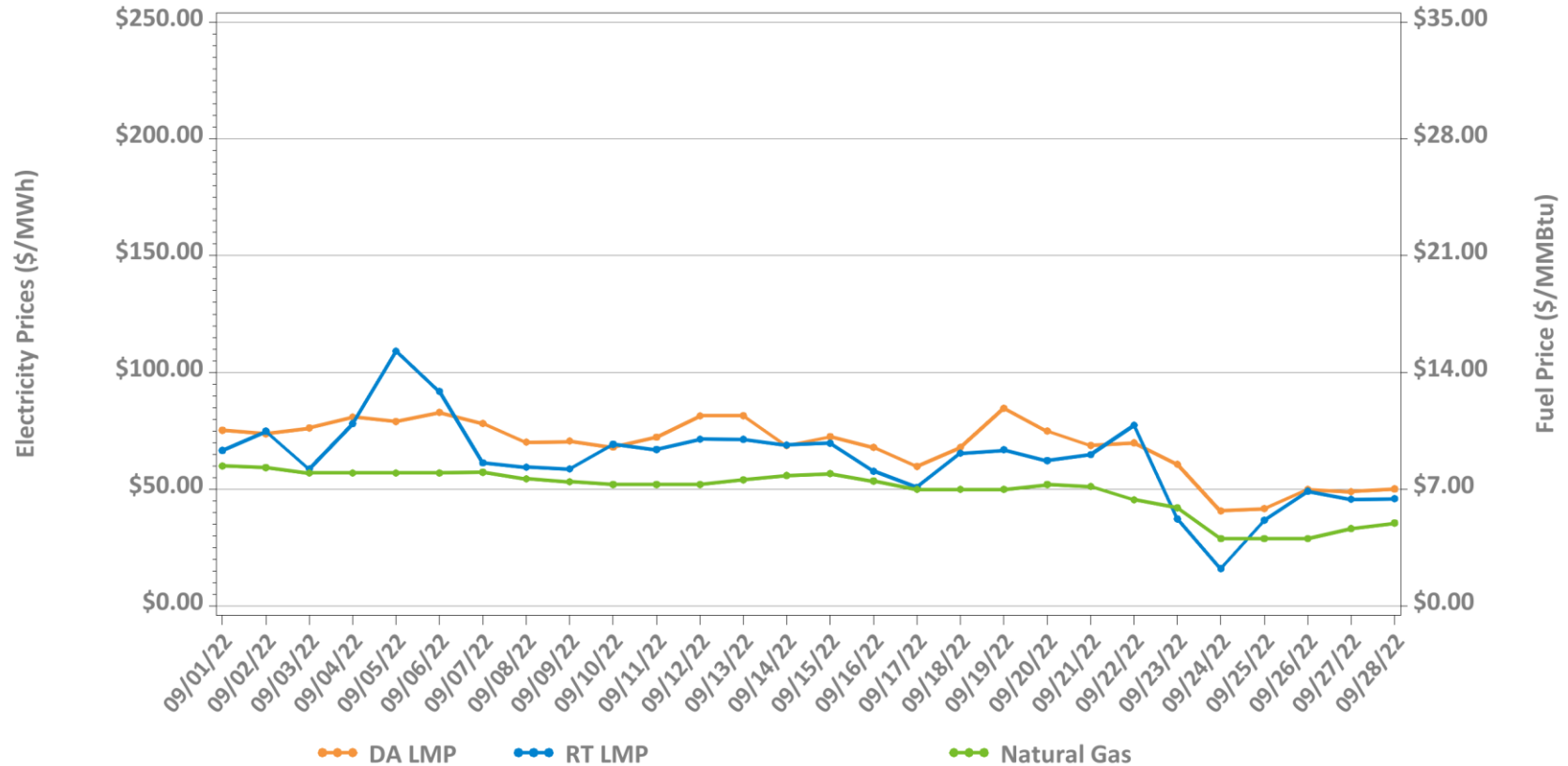
Yearly Fleet
Performance targets 

Ideally, MAE and Bias would be both equal to zero. Positive bias means less windpower was actually available compared to forecast. Negative bias means more windpower was actually available compared to forecast. Across all time frames, the ISO-NE/DNV forecast compares well with industry standards, and monthly Bias is within yearly performance.

MARKET OPERATIONS



Daily Average DA and RT ISO-NE Hub Prices and Input Fuel Prices: September 1-28, 2022

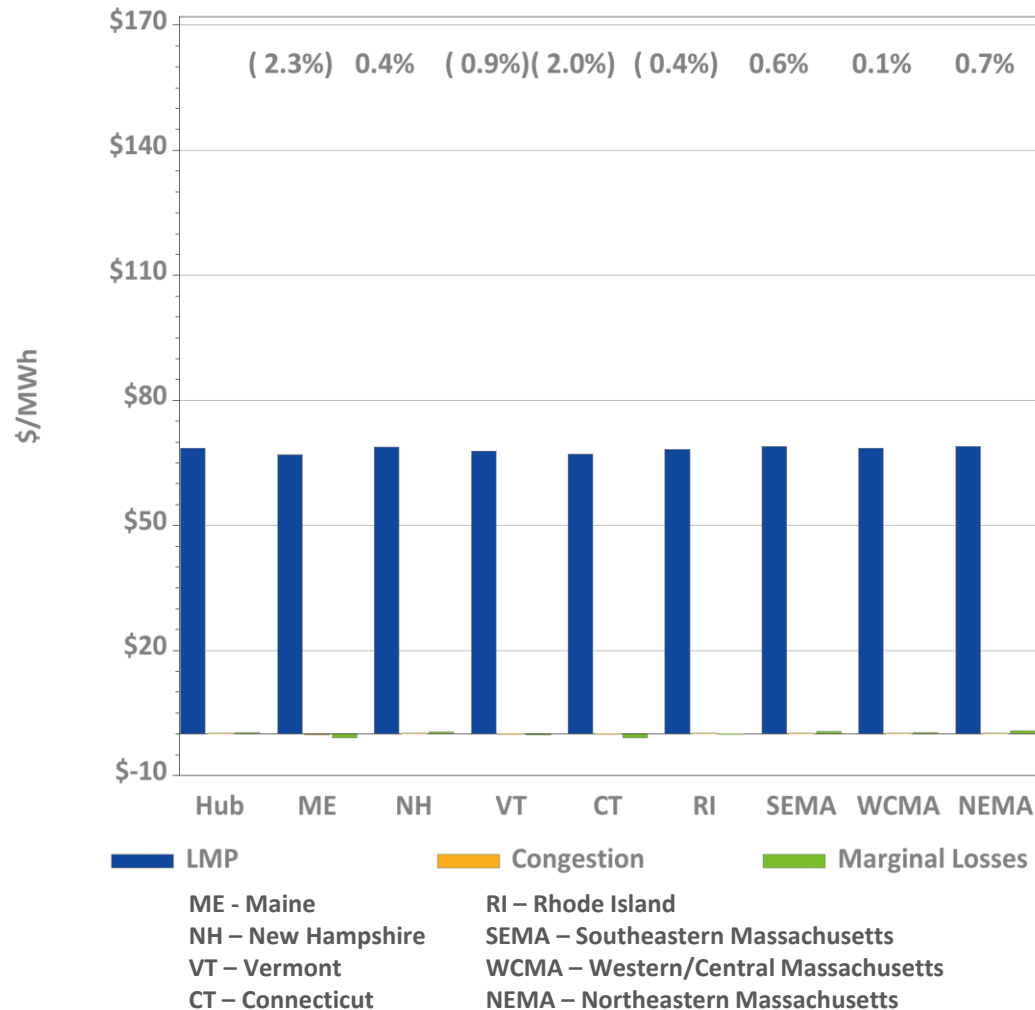


Underlying natural gas data furnished by:

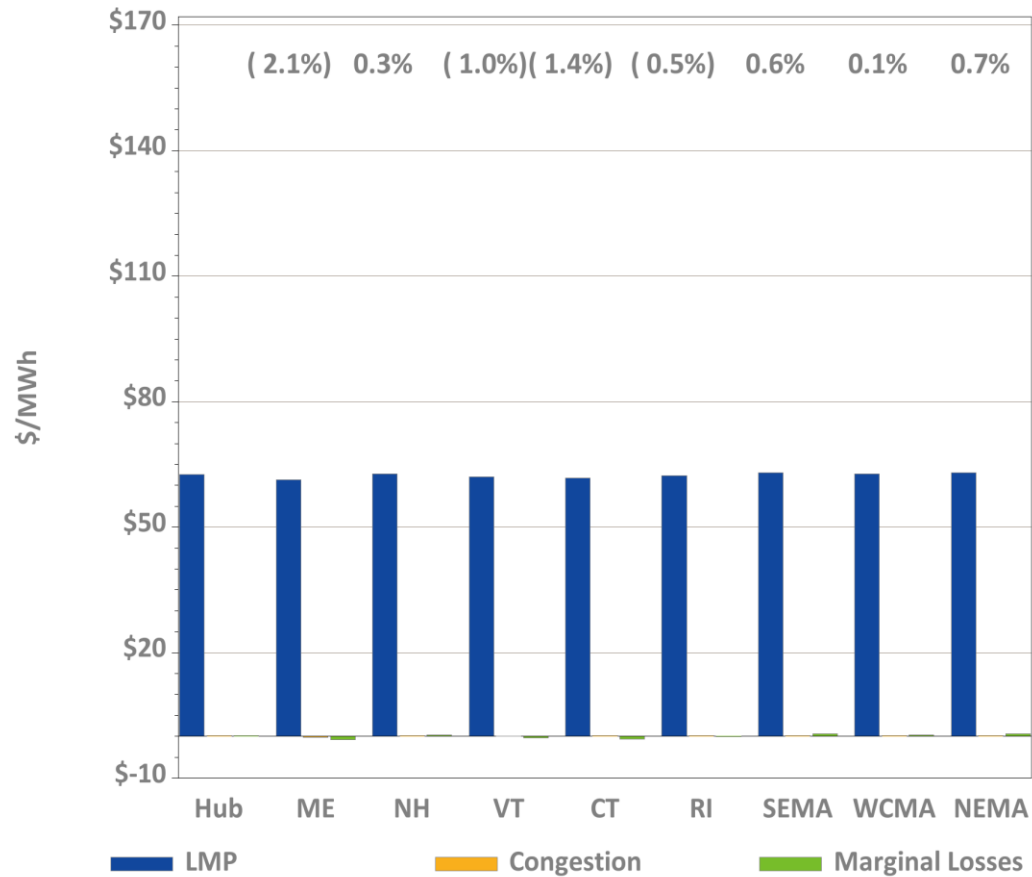


Average price difference over this period (DA-RT): \$5.89
Average price difference over this period ABS(DA-RT): \$9.40
Average percentage difference over this period ABS(DA-RT)/RT Average LMP: 15%
Gas price is average of Massachusetts delivery points

DA LMPs Average by Zone & Hub, September 2022



RT LMPs Average by Zone & Hub, September 2022



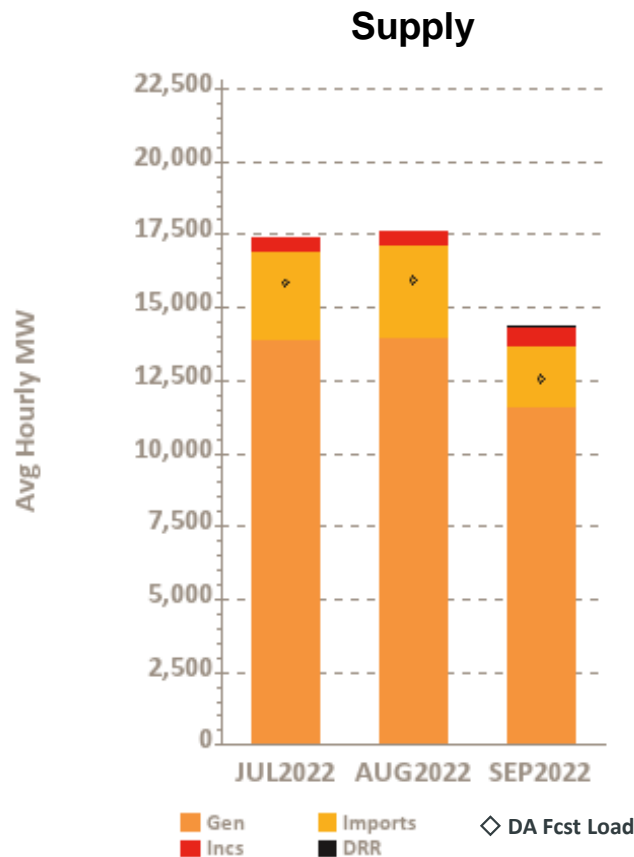
Definitions

| Day-Ahead Concept | Definition |
|---|---|
| Day-Ahead Load Obligation (DALO) | The sum of day-ahead cleared load (including asset load, pump load, exports, and virtual purchases and excluding modeled transmission losses) |
| Day-Ahead Cleared Physical Energy | The sum of day-ahead cleared generation and cleared net imports |

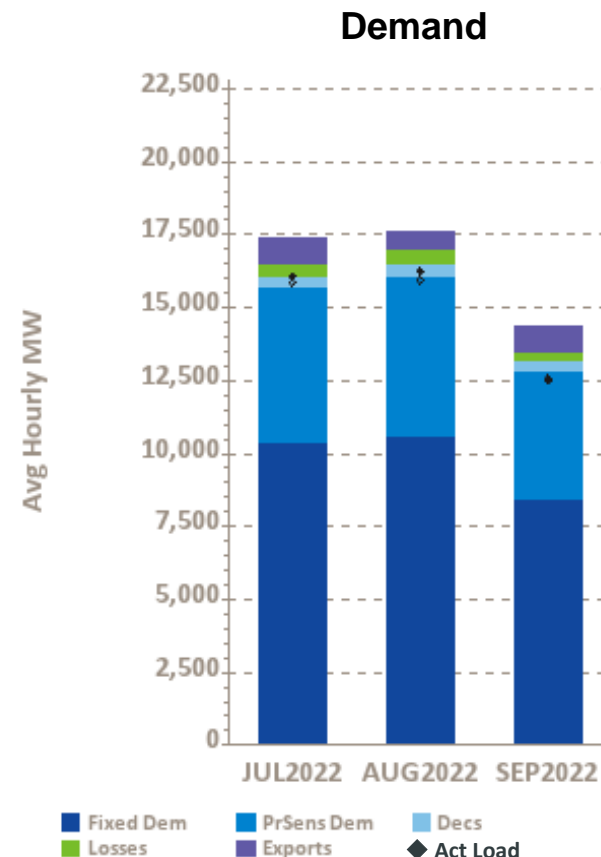


Components of Cleared DA Supply and Demand

– Last Three Months



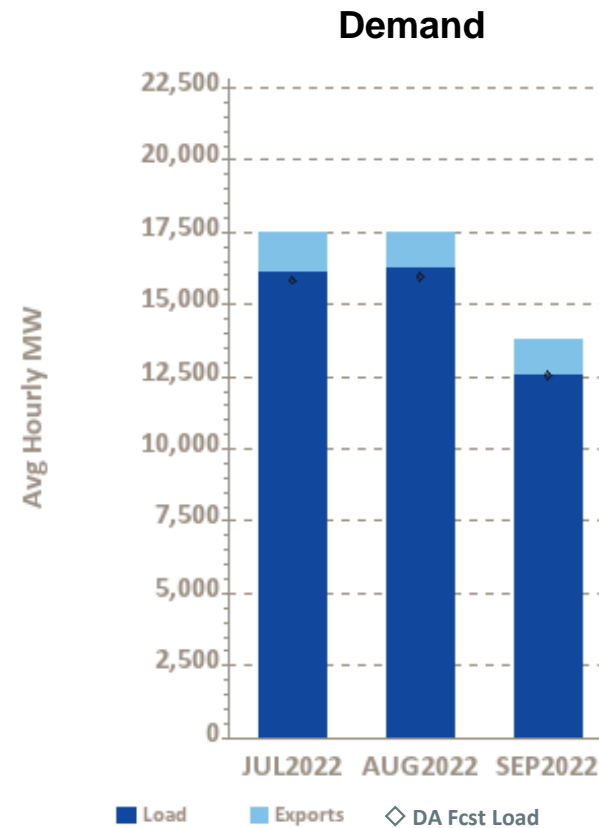
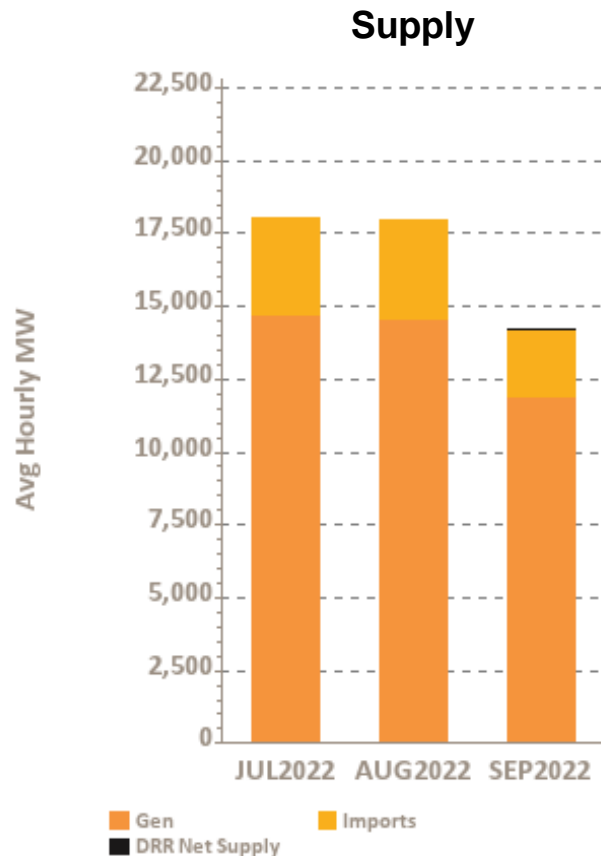
Gen – Generation
 Incs – Increment Offers
 DA Fcst Load – Day-Ahead Forecast Load
 DRR – Demand Response Resource



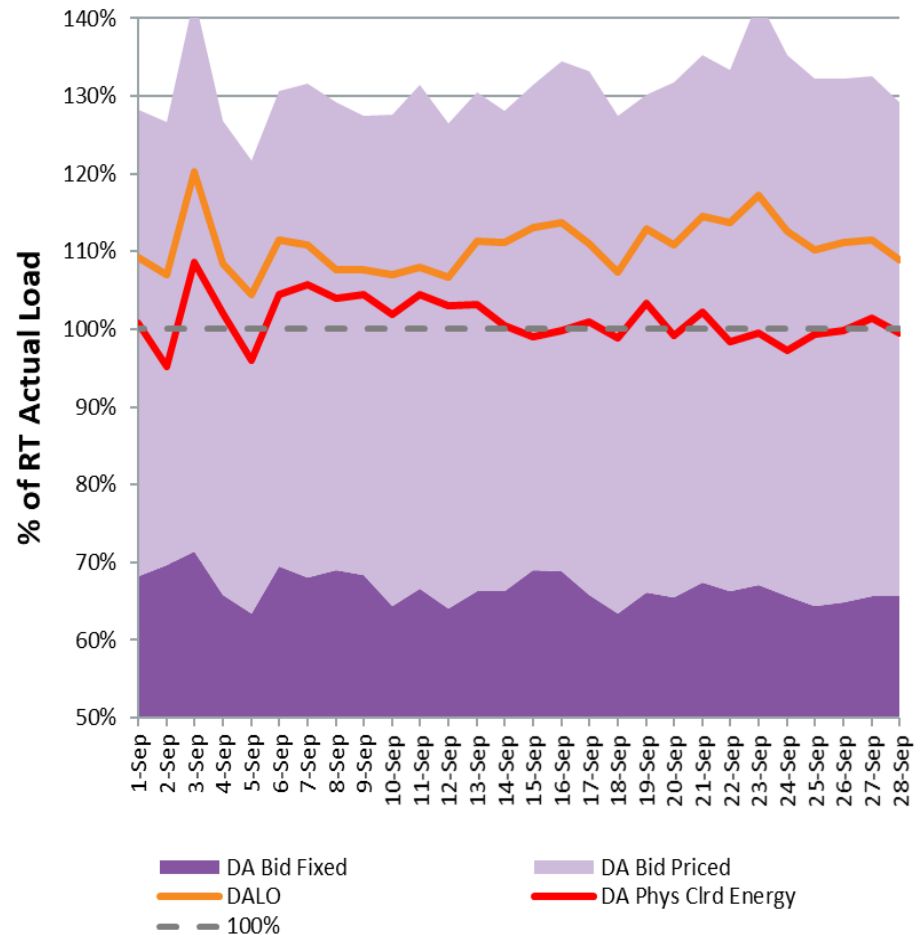
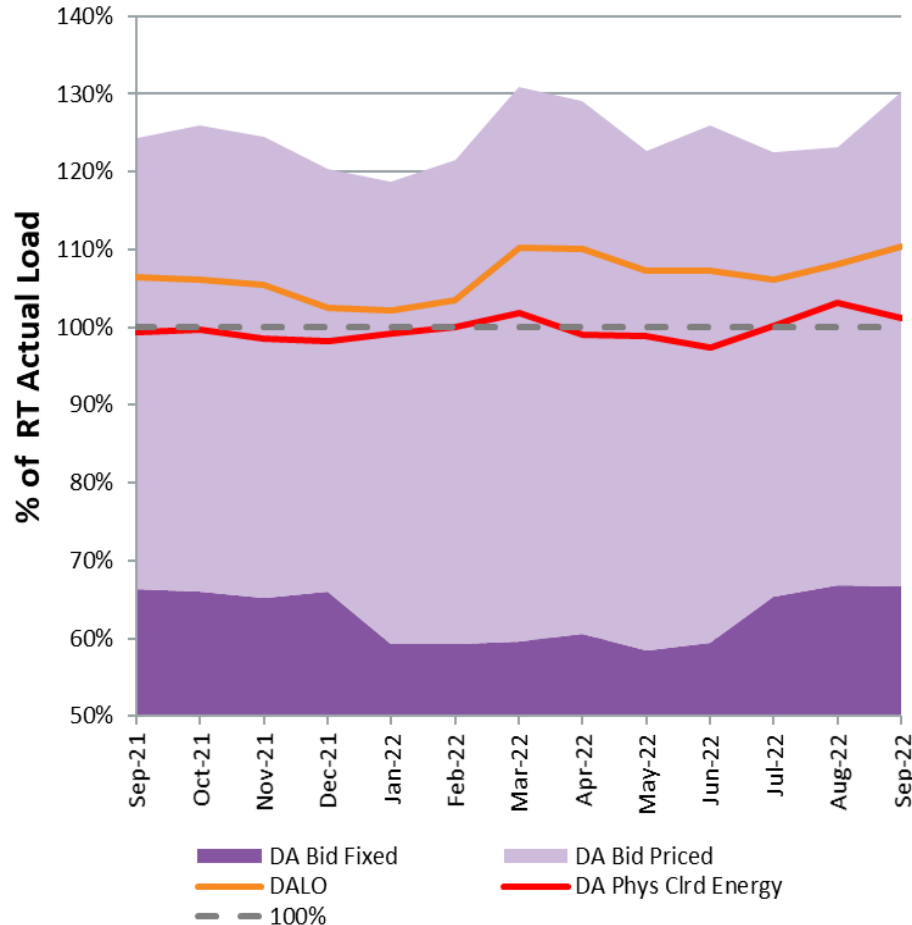
Fixed Dem – Fixed Demand
 PrSens Dem – Price Sensitive Demand
 Decs – Decrement Bids
 Act Load – Actual Load



Components of RT Supply and Demand – Last Three Months



DAM Volumes as % of RT Actual Load (Forecasted Peak Hour)

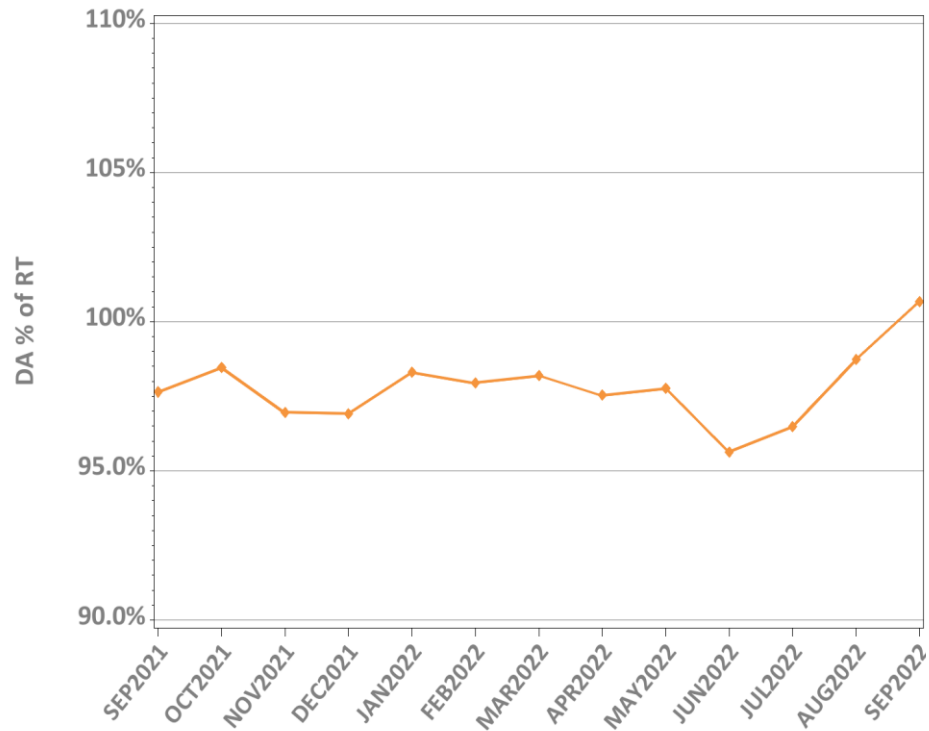


Note: Forecasted peak hour for each day is reflected in the above values. Shown for each day (chart on right) and then averaged for each month (chart on left). 'DA Bid' categories reflect load assets only (Virtual and export bids not reflected.)

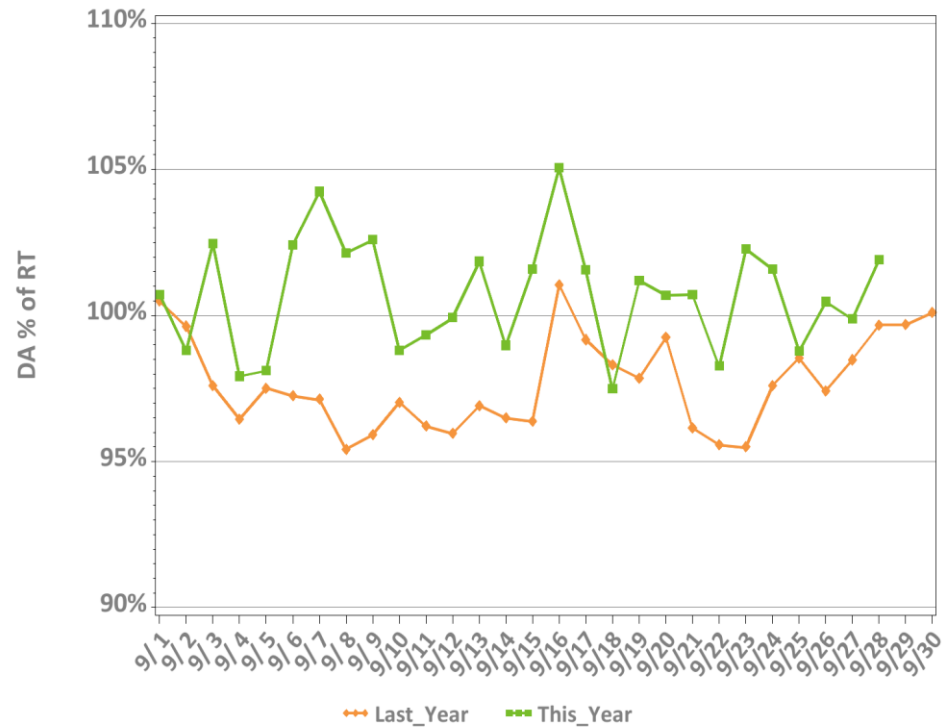


DA vs. RT Load Obligation: September, This Year vs. Last Year

Monthly, Last 13 Months



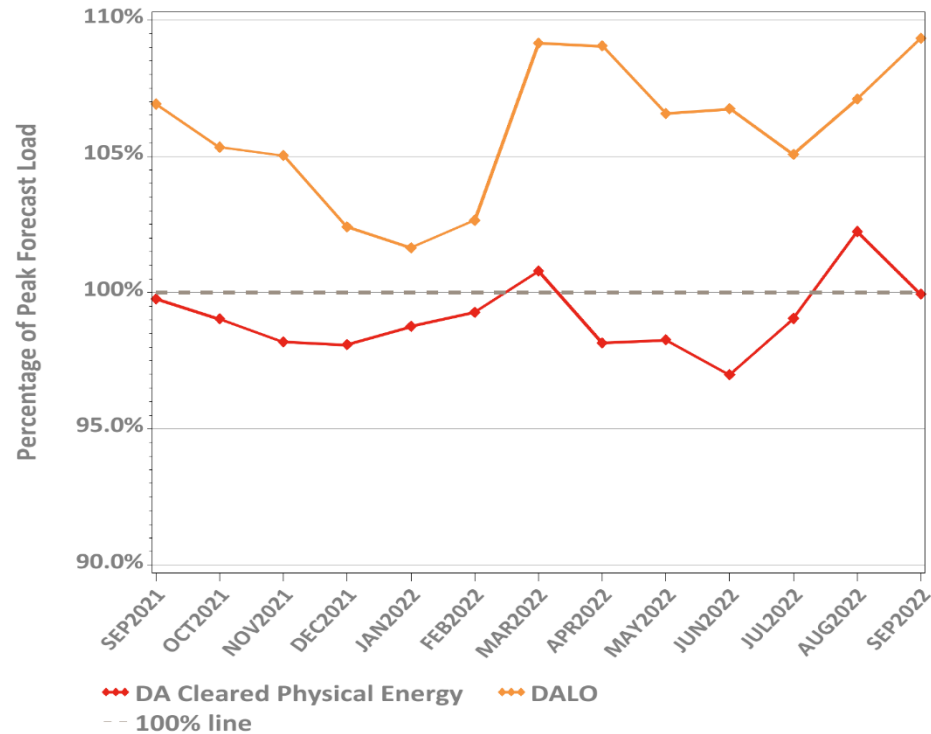
Daily, This Year vs. Last Year



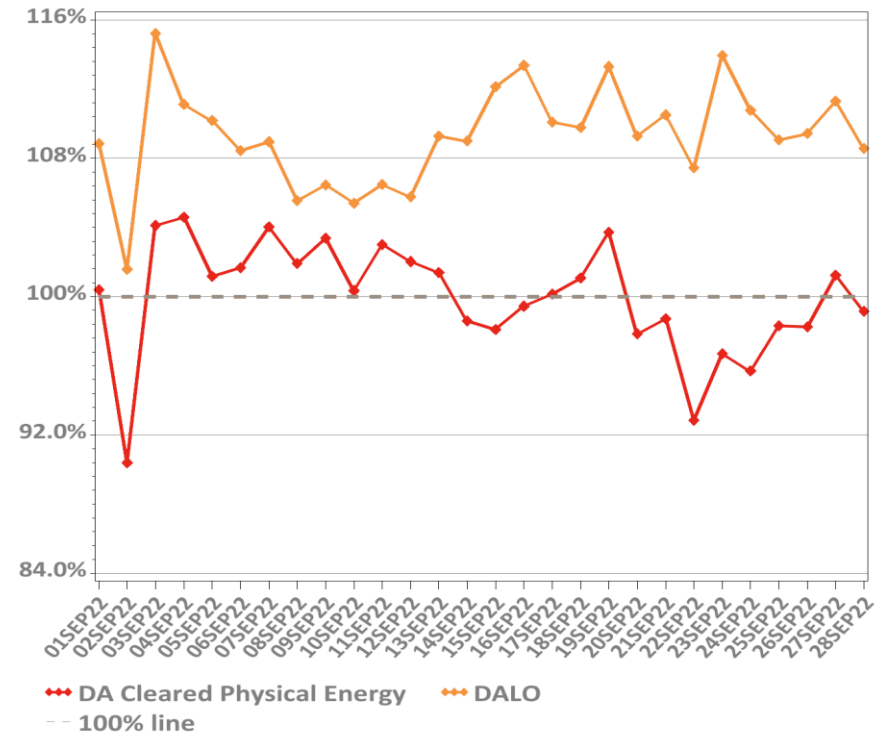
*Hourly average values

DA Volumes as % of Forecast in Peak Hour

Monthly, Last 13 Months

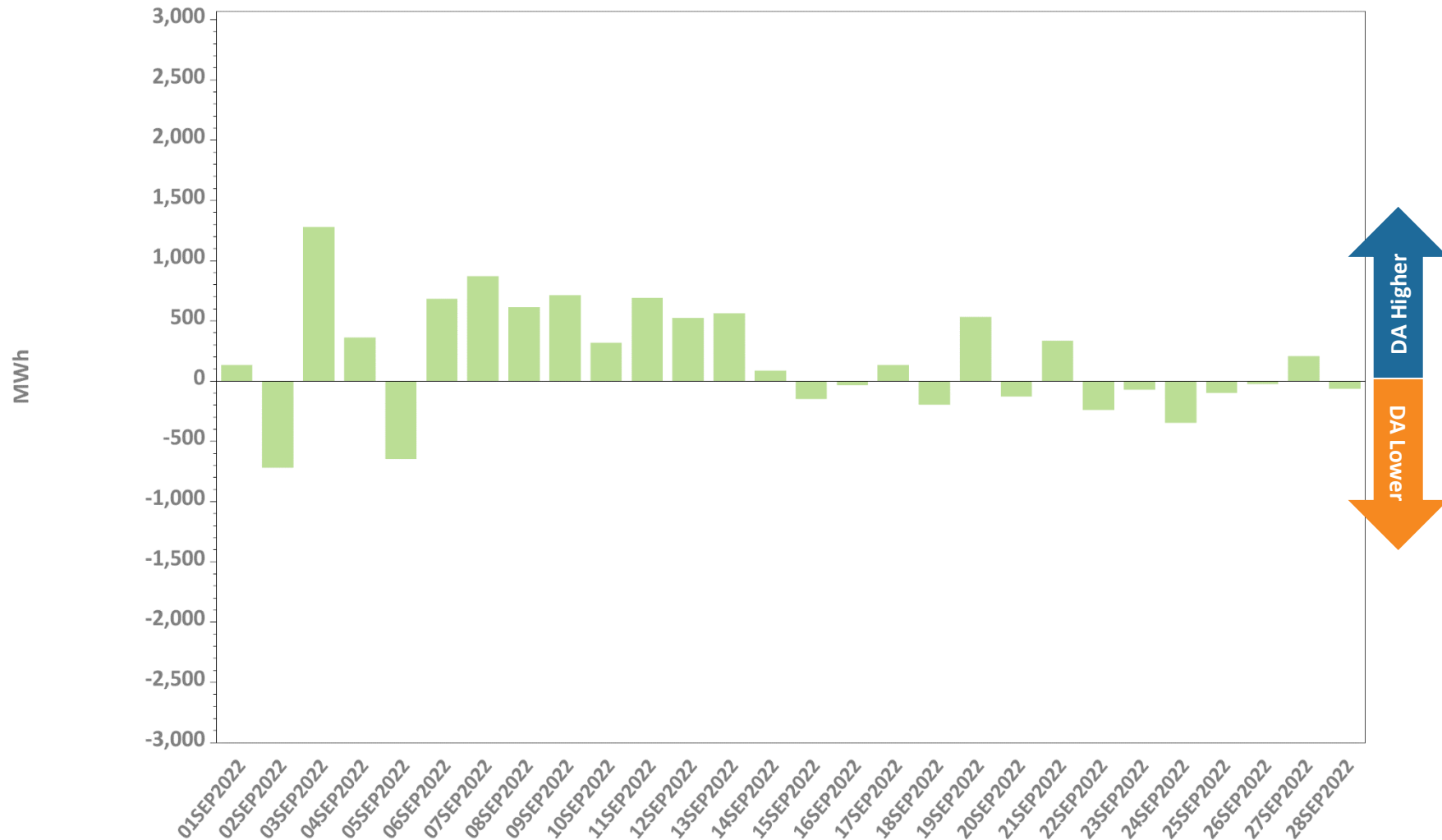


Daily: This Month



Note: There were **no** system-level manual supplemental commitments for capacity required during the Reserve Adequacy Assessment (RAA) period during the month.

DA Cleared Physical Energy Difference from RT System Load at Forecasted Peak Hour*

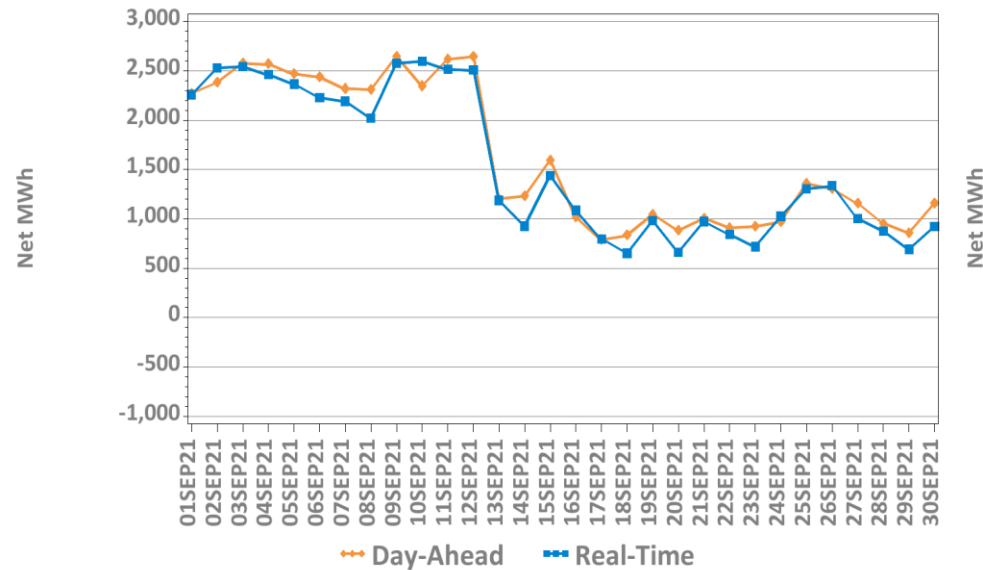


*Negative values indicate DA Cleared Physical Energy value below its RT counterpart. Forecast peak hour reflected.

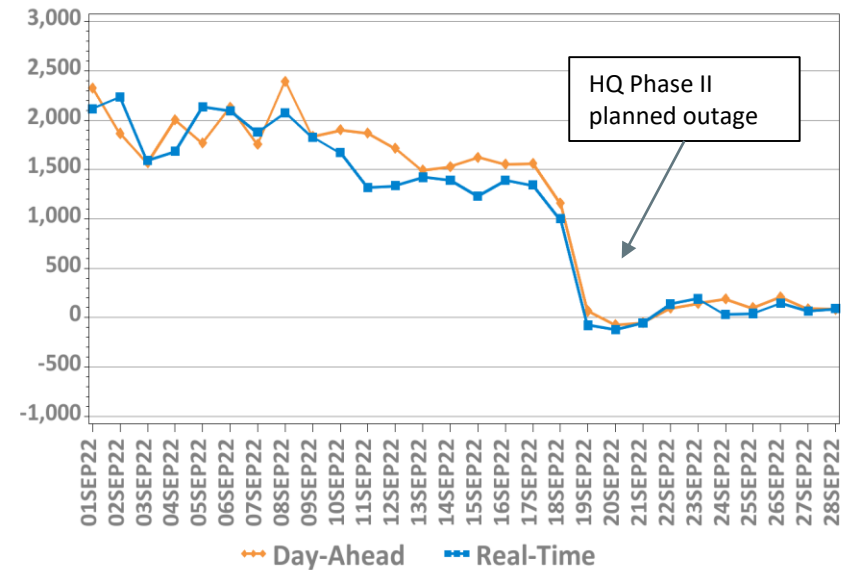
DA vs. RT Net Interchange

September 2021 vs. September 2022

Hourly Average by Day, Last Year

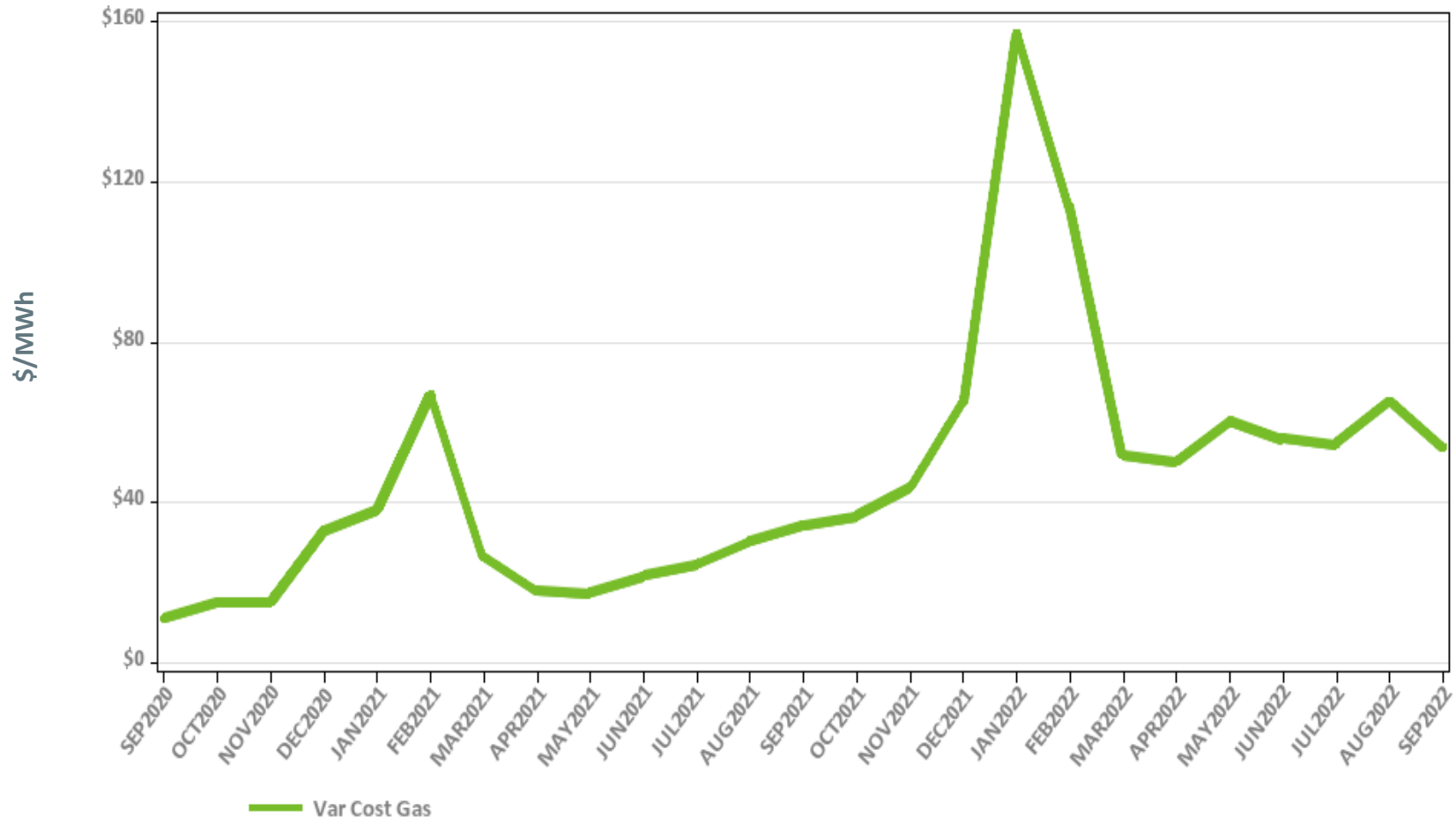


Hourly Average by Day, This Year



Net Interchange is the sum of daily imports minus the sum of daily exports
Positive values are net imports

Variable Production Cost of Natural Gas: Monthly

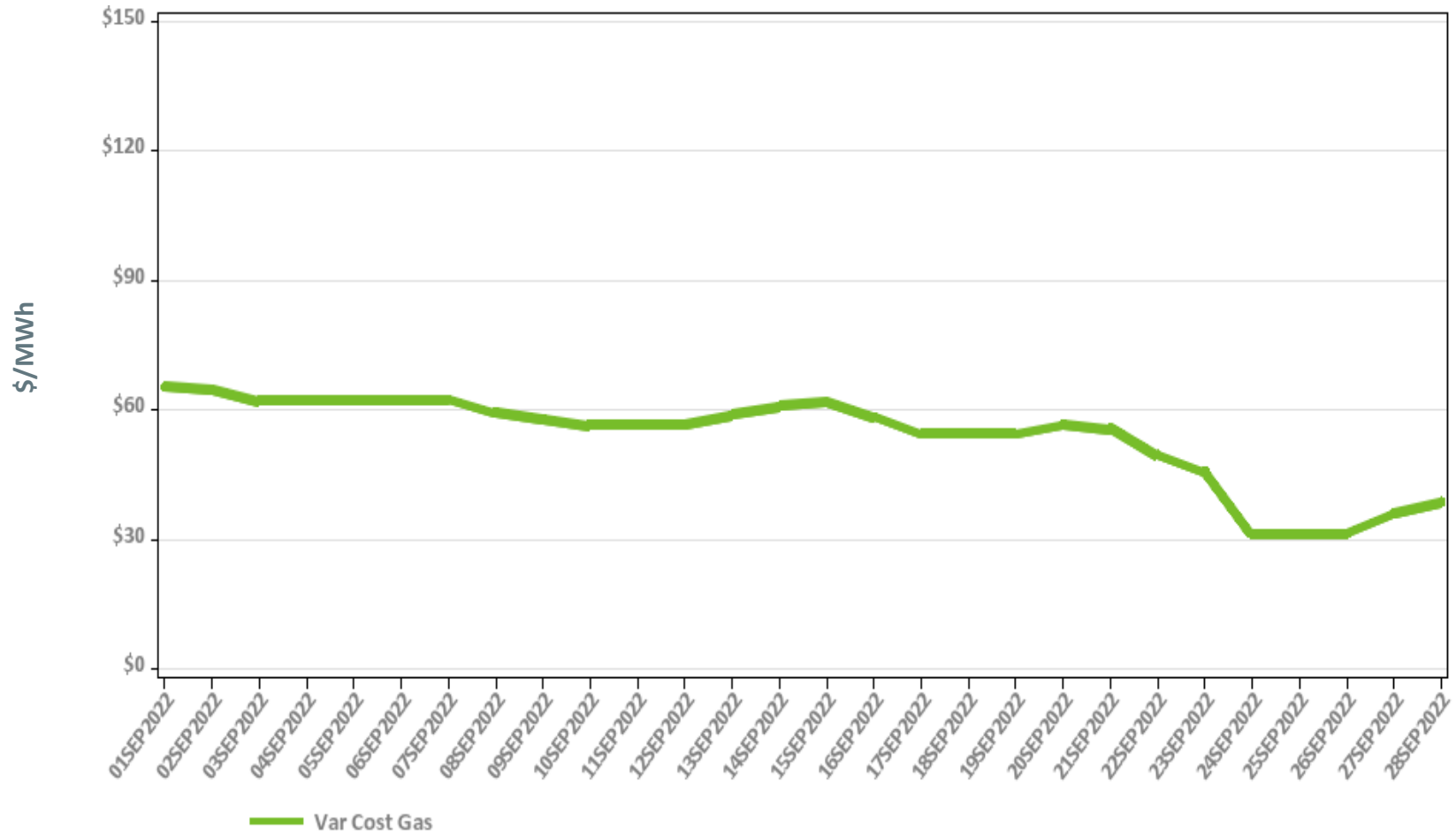


Note: Assumes proxy heat rate of 7,800,000 Btu/MWh for natural gas units.

Underlying natural gas data furnished by:



Variable Production Cost of Natural Gas: Daily



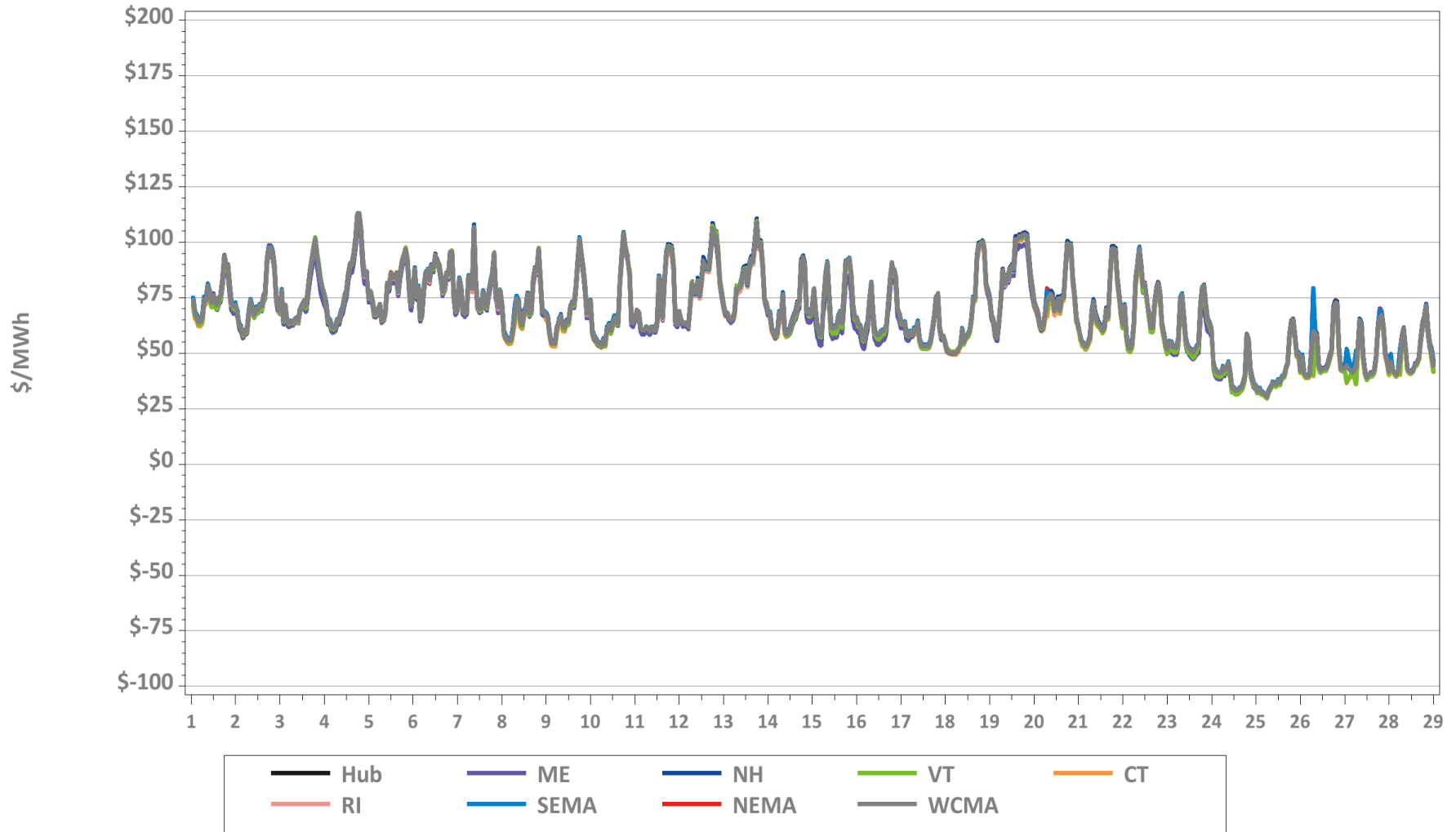
Note: Assumes proxy heat rate of 7,800,000 Btu/MWh for natural gas units.

Underlying natural gas data furnished by:



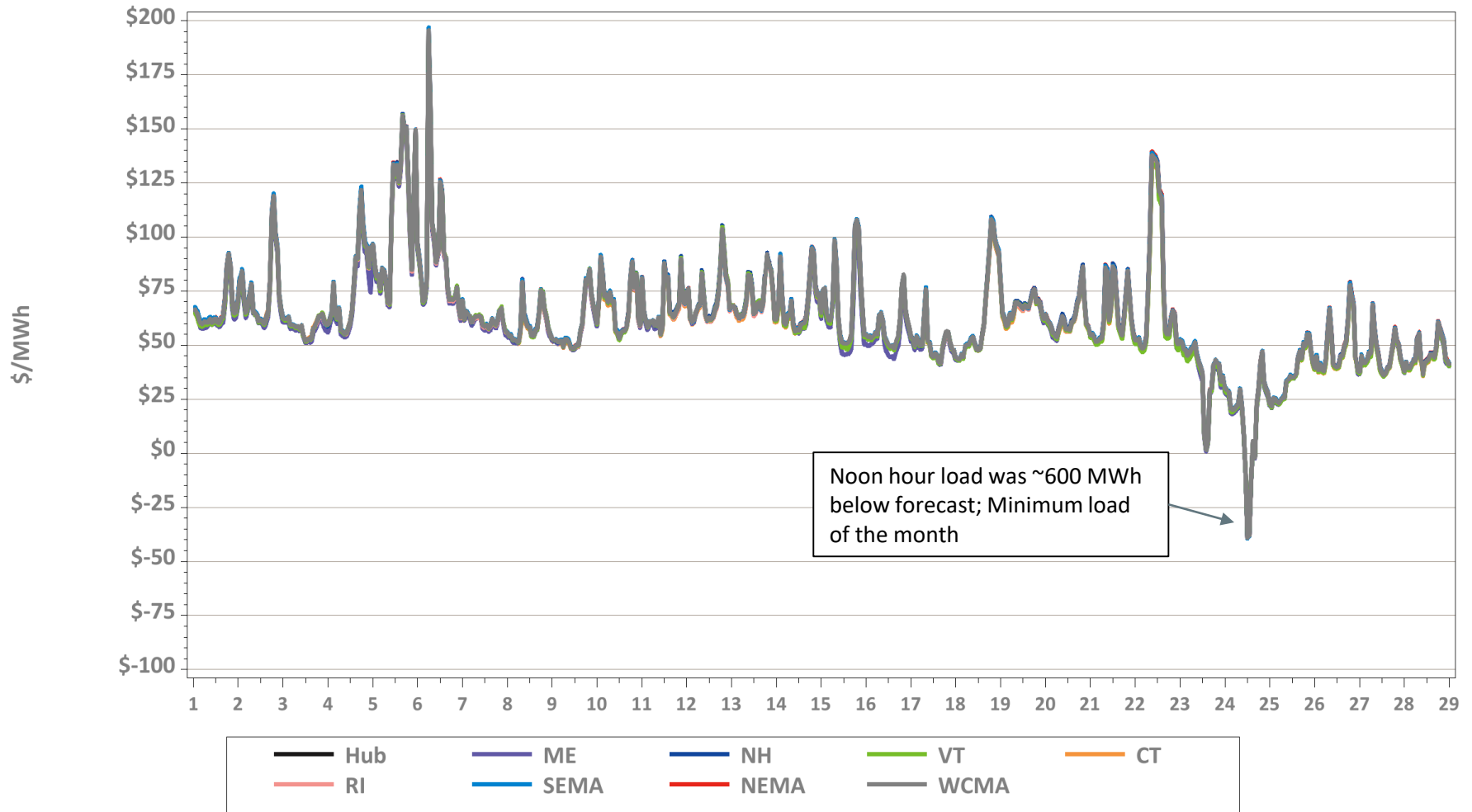
Hourly DA LMPs, September 1-28, 2022

Hourly Day-Ahead LMPs



Hourly RT LMPs, September 1-28, 2022

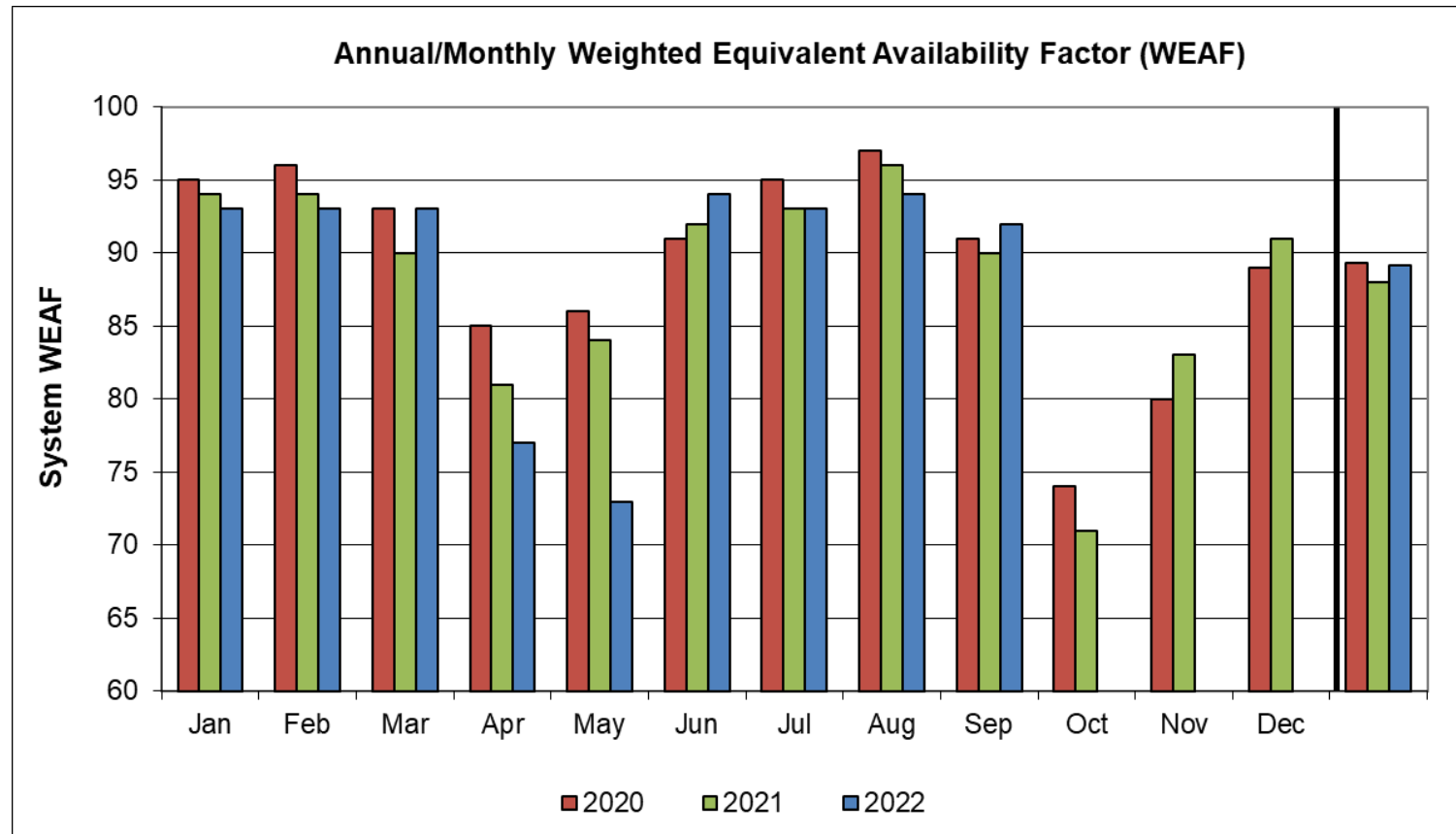
Hourly Real-Time LMPs



* Telemetered load is referenced



System Unit Availability



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2022 | 93 | 93 | 93 | 77 | 73 | 94 | 93 | 94 | 92 | | | | 89 |
| 2021 | 94 | 94 | 90 | 81 | 84 | 92 | 93 | 96 | 90 | 71 | 83 | 91 | 88 |
| 2020 | 95 | 96 | 93 | 85 | 86 | 91 | 95 | 97 | 91 | 74 | 80 | 89 | 89 |

Data as of 9/27/2022

BACK-UP DETAIL



DEMAND RESPONSE



Capacity Supply Obligation (CSO) MW by Demand Resource Type for October 2022

| Load Zone | ADCR* | On Peak | Seasonal Peak | Total |
|--------------|--------------|----------------|---------------|----------------|
| ME | 90.9 | 213.3 | 0.0 | 304.2 |
| NH | 42.2 | 169.4 | 0.0 | 211.6 |
| VT | 38.7 | 133.1 | 0.0 | 171.8 |
| CT | 147.1 | 226.9 | 614.4 | 988.3 |
| RI | 36.6 | 346.2 | 0.0 | 382.8 |
| SEMA | 45.1 | 532.8 | 0.0 | 577.9 |
| WCMA | 81.2 | 562.2 | 35.2 | 678.6 |
| NEMA | 70.4 | 879.8 | 0.0 | 950.1 |
| Total | 552.2 | 3,063.6 | 649.5 | 4,265.3 |

* Active Demand Capacity Resources

NOTE: CSO values include T&D loss factor (8%).

NEW GENERATION



New Generation Update

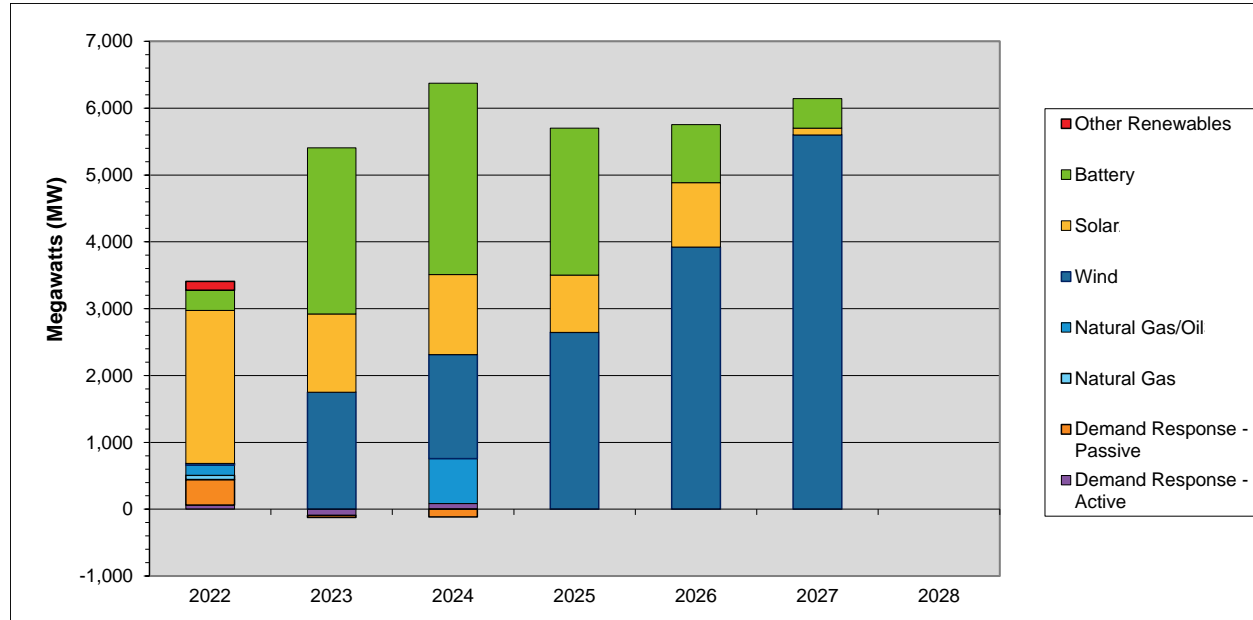
Based on Queue as of 09/30/22

- Twelve projects totaling 843 MW were added to the interconnection queue since the last update
 - Eight battery projects, three solar with battery projects and one wind project with in-service dates of 2022 to 2029
- Sixteen projects were withdrawn
- In total, 349 generation projects are currently being tracked by the ISO, totaling approximately 33,924 MW



Actual and Projected Annual Capacity Additions

By Supply Fuel Type and Demand Resource Type



| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total MW | % of Total ¹ |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|---------------|-------------------------|
| Other Renewables | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 0.4 |
| Battery | 305 | 2,486 | 2,863 | 2,196 | 866 | 442 | 0 | 9,158 | 28.1 |
| Solar ² | 2,289 | 1,169 | 1,195 | 859 | 964 | 102 | 0 | 6,578 | 20.2 |
| Wind | 24 | 1,752 | 1,556 | 2,645 | 3,923 | 5,599 | 0 | 15,499 | 47.6 |
| Natural Gas/Oil ³ | 151 | 0 | 672 | 0 | 0 | 0 | 0 | 823 | 2.5 |
| Natural Gas | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0.2 |
| Demand Response - Passive | 380 | -28 | -114 | 0 | 0 | 0 | 0 | 238 | 0.7 |
| Demand Response - Active | 62 | -94 | 86 | 0 | 0 | 0 | 0 | 54 | 0.2 |
| Totals | 3,407 | 5,285 | 6,258 | 5,700 | 5,753 | 6,143 | 0 | 32,546 | 100.0 |

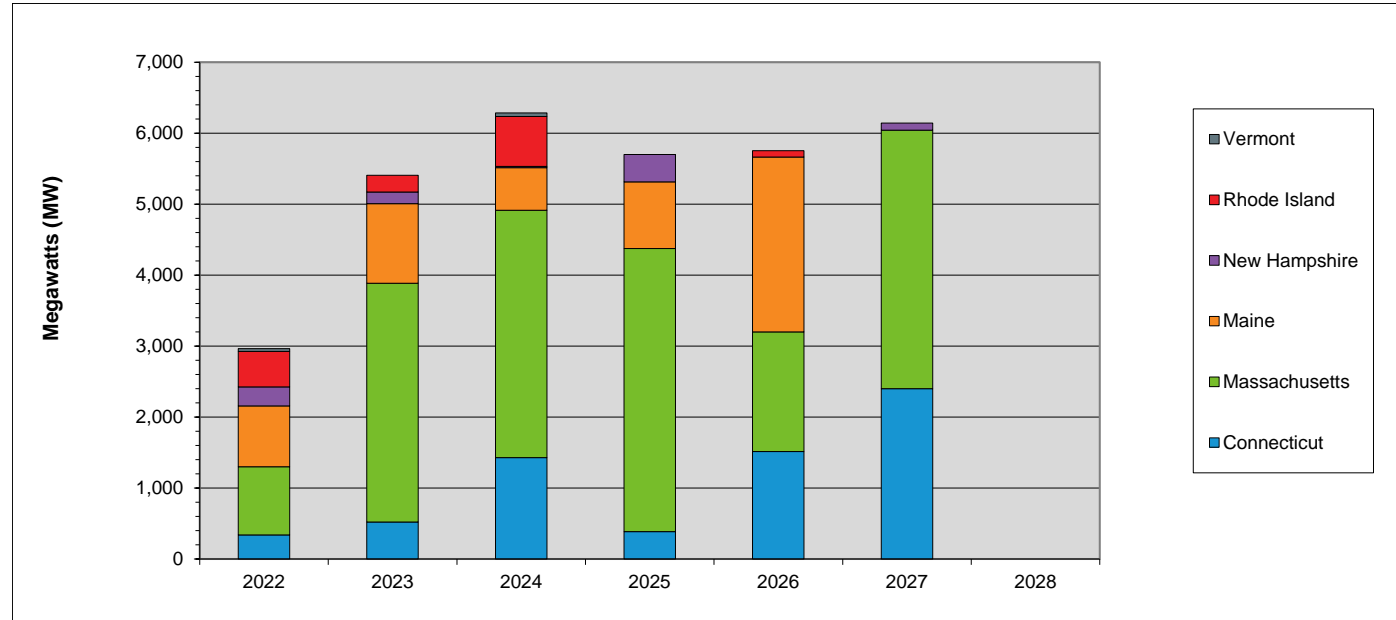
¹ Sum may not equal 100% due to rounding

² This category includes both solar-only, and co-located solar and battery projects

³ The projects in this category are dual fuel, with either gas or oil as the primary fuel

- DR reflects changes from the initial FCM Capacity Supply Obligations in 2010-11

Actual and Projected Annual Generator Capacity Additions By State



| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total MW | % of Total ¹ |
|---------------|-------|-------|-------|-------|-------|-------|------|----------|-------------------------|
| Vermont | 40 | 0 | 50 | 0 | 0 | 0 | 0 | 90 | 0.3 |
| Rhode Island | 502 | 236 | 704 | 0 | 91 | 0 | 0 | 1,533 | 4.8 |
| New Hampshire | 266 | 164 | 20 | 385 | 0 | 102 | 0 | 937 | 2.9 |
| Maine | 858 | 1,123 | 597 | 942 | 2,461 | 0 | 0 | 5,981 | 18.5 |
| Massachusetts | 961 | 3,364 | 3,486 | 3,989 | 1,686 | 3,641 | 0 | 17,127 | 53.1 |
| Connecticut | 338 | 520 | 1,429 | 384 | 1,515 | 2,400 | 0 | 6,586 | 20.4 |
| Totals | 2,965 | 5,407 | 6,286 | 5,700 | 5,753 | 6,143 | 0 | 32,254 | 100.0 |

¹ Sum may not equal 100% due to rounding

New Generation Projection

By Fuel Type

| Unit Type | Total | | Green | | Yellow | |
|--------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) |
| Biomass/Wood Waste | 0 | 0 | 0 | 0 | 0 | 0 |
| Battery Storage | 66 | 9,158 | 0 | 0 | 66 | 9,158 |
| Fuel Cell | 2 | 30 | 0 | 0 | 2 | 30 |
| Hydro | 3 | 99 | 2 | 71 | 1 | 28 |
| Natural Gas | 7 | 67 | 0 | 0 | 7 | 67 |
| Natural Gas/Oil | 5 | 823 | 1 | 62 | 4 | 761 |
| Nuclear | 0 | 0 | 0 | 0 | 0 | 0 |
| Solar | 240 | 6,578 | 16 | 210 | 224 | 6,368 |
| Wind | 26 | 17,169 | 1 | 20 | 25 | 17,149 |
| Total | 349 | 33,924 | 20 | 363 | 329 | 33,561 |

- Projects in the Natural Gas/Oil category may have either gas or oil as the primary fuel
- Green denotes projects with a high probability of going into service
- Yellow denotes projects with a lower probability of going into service or new applications

New Generation Projection

By Operating Type

| Operating Type | Total | | Green | | Yellow | |
|----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) |
| Baseload | 5 | 70 | 1 | 5 | 4 | 65 |
| Intermediate | 7 | 804 | 0 | 0 | 7 | 804 |
| Peaker | 311 | 15,881 | 18 | 338 | 293 | 15,543 |
| Wind Turbine | 26 | 17,169 | 1 | 20 | 25 | 17,149 |
| Total | 349 | 33,924 | 20 | 363 | 329 | 33,561 |

- Green denotes projects with a high probability of going into service
- Yellow denotes projects with a lower probability of going into service or new applications

New Generation Projection

By Operating Type and Fuel Type

| Unit Type | Total | | Baseload | | Intermediate | | Peaker | | Wind Turbine | |
|--------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) | No. of Projects | Capacity (MW) |
| Biomass/Wood Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Battery Storage | 66 | 9,158 | 0 | 0 | 0 | 0 | 66 | 9,158 | 0 | 0 |
| Fuel Cell | 2 | 30 | 2 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydro | 3 | 99 | 2 | 33 | 0 | 0 | 1 | 66 | 0 | 0 |
| Natural Gas | 7 | 67 | 1 | 7 | 3 | 43 | 3 | 17 | 0 | 0 |
| Natural Gas/Oil | 5 | 823 | 0 | 0 | 4 | 761 | 1 | 62 | 0 | 0 |
| Nuclear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Solar | 240 | 6,578 | 0 | 0 | 0 | 0 | 240 | 6,578 | 0 | 0 |
| Wind | 26 | 17,169 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 17,169 |
| Total | 349 | 33,924 | 5 | 70 | 7 | 804 | 311 | 15,881 | 26 | 17,169 |

- Projects in the Natural Gas/Oil category may have either gas or oil as the primary fuel

FORWARD CAPACITY MARKET



Capacity Supply Obligation FCA 13

| Resource Type | Resource Type | FCA | ARA 1 | | ARA 2 | | ARA 3 | |
|-----------------|------------------|------------|------------|----------|------------|---------|------------|----------|
| | | CSO | CSO | Change | CSO | Change | CSO | Change |
| | | MW | MW | MW | MW | MW | MW | MW |
| Demand | Active Demand | 685.554 | 683.116 | -2.438 | 658.659 | -24.457 | 609.826 | -48.833 |
| | Passive Demand | 3,354.69 | 3,407.507 | 52.817 | 3,450.899 | 43.392 | 3,512.604 | 61.705 |
| Demand Total | | 4,040.244 | 4,090.623 | 50.38 | 4,109.558 | 18.935 | 4,122.43 | 12.872 |
| Generator | Non-Intermittent | 28,586.498 | 27,868.341 | -718.157 | 28,105.411 | 237.07 | 27,426.242 | -679.169 |
| | Intermittent | 1,024.792 | 901.672 | -123.12 | 896.285 | -5.387 | 778.962 | -117.323 |
| Generator Total | | 2,9611.29 | 28,770.013 | -841.28 | 29,001.696 | 231.683 | 28,205.204 | -796.492 |
| Import Total | | 1,187.69 | 1,292.41 | 104.72 | 1,292.41 | 0 | 1,115.22 | -177.19 |
| Grand Total* | | 34,839.224 | 34,153.046 | -686.18 | 34,403.664 | 250.618 | 33,442.854 | -960.81 |
| Net ICR (NICR) | | 33,750 | 32,465 | -1,285 | 32,765 | 300 | 31,590 | -1,175 |

* Grand Total reflects both CSO Grand Total and the net total of the Change Column

Note: A resource's CSO may change for a variety of reasons outside ISO-NE administered trading windows. Reasons for CSO changes beyond bilaterals and reconfiguration auction may include terminations or recent declaration of commercial operation. Details of the changes that occurred due to non-annual event purposes are contained in the 2015-2020 CCP Monthly Capacity Supply Obligation Changes report on the ISO New England website.

ARA – Annual Reconfiguration Auction
CSO – Capacity Supply Obligation

FCA – Forward Capacity Auction
ICR – Installed Capacity Requirement

ISO-NE PUBLIC

Capacity Supply Obligation FCA 14

| Resource Type | Resource Type | FCA | ARA 1 | | ARA 2 | | ARA 3 | |
|-----------------|------------------|------------|------------|---------|-------|--------|-------|--------|
| | | CSO | CSO | Change | CSO | Change | CSO | Change |
| | | MW | MW | MW | MW | MW | MW | MW |
| Demand | Active Demand | 592.043 | 688.07 | 96.027 | | | | |
| | Passive Demand | 3,327.071 | 3,327.932 | 0.861 | | | | |
| Demand Total | | 3,919.114 | 4,016.002 | 96.888 | | | | |
| Generator | Non-Intermittent | 27,816.902 | 28,275.143 | 458.241 | | | | |
| | Intermittent | 1,160.916 | 1,128.446 | -32.47 | | | | |
| Generator Total | | 28,977.818 | 29,403.589 | 425.771 | | | | |
| Import Total | | 1,058.72 | 1,058.72 | 0 | | | | |
| Grand Total* | | 33,955.652 | 34,478.311 | 522.661 | | | | |
| Net ICR (NICR) | | 32,490 | 32,980 | 490 | | | | |

* Grand Total reflects both CSO Grand Total and the net total of the Change Column

Note: A resource's CSO may change for a variety of reasons outside ISO-NE administered trading windows. Reasons for CSO changes beyond bilaterals and reconfiguration auction may include terminations or recent declaration of commercial operation. Details of the changes that occurred due to non-annual event purposes are contained in the 2015-2020 CCP Monthly Capacity Supply Obligation Changes report on the ISO New England website.

Capacity Supply Obligation FCA 15

| Resource Type | Resource Type | FCA | ARA 1 | | ARA 2 | | ARA 3 | |
|-----------------|------------------|------------|------------|----------|-------|--------|-------|--------|
| | | CSO | CSO | Change | CSO | Change | CSO | Change |
| | | MW | MW | MW | MW | MW | MW | MW |
| Demand | Active Demand | 677.673 | 673.401 | -4.272 | | | | |
| | Passive Demand | 3,212.865 | 3,211.403 | -1.462 | | | | |
| Demand Total | | 3,890.538 | 3,884.804 | -5.734 | | | | |
| Generator | Non-Intermittent | 28,154.203 | 27,714.778 | -439.425 | | | | |
| | Intermittent | 1,089.265 | 1,073.794 | -15.471 | | | | |
| Generator Total | | 29,243.468 | 28,788.572 | -454.896 | | | | |
| Import Total | | 1,487.059 | 1297.132 | -189.927 | | | | |
| Grand Total* | | 34,621.065 | 33,970.508 | -650.557 | | | | |
| Net ICR (NICR) | | 33,270 | 31,775 | -1,495 | | | | |

* Grand Total reflects both CSO Grand Total and the net total of the Change Column

Note: A resource's CSO may change for a variety of reasons outside ISO-NE administered trading windows. Reasons for CSO changes beyond bilaterals and reconfiguration auction may include terminations or recent declaration of commercial operation. Details of the changes that occurred due to non-annual event purposes are contained in the 2015-2020 CCP Monthly Capacity Supply Obligation Changes report on the ISO New England website.

Capacity Supply Obligation FCA 16

| Resource Type | Resource Type | FCA | ARA 1 | | ARA 2 | | ARA 3 | |
|-----------------|------------------|------------|-------|--------|-------|--------|-------|--------|
| | | CSO | CSO | Change | CSO | Change | CSO | Change |
| | | MW | MW | MW | MW | MW | MW | MW |
| Demand | Active Demand | 765.35 | | | | | | |
| | Passive Demand | 2,557.256 | | | | | | |
| Demand Total | | 3,322.606 | | | | | | |
| Generator | Non-Intermittent | 26,805.003 | | | | | | |
| | Intermittent | 1,178.933 | | | | | | |
| Generator Total | | 27,983.936 | | | | | | |
| Import Total | | 1,503.842 | | | | | | |
| Grand Total* | | 32,810.384 | | | | | | |
| Net ICR (NICR) | | 31,645 | | | | | | |

* Grand Total reflects both CSO Grand Total and the net total of the Change Column

Note: A resource's CSO may change for a variety of reasons outside ISO-NE administered trading windows. Reasons for CSO changes beyond bilaterals and reconfiguration auction may include terminations or recent declaration of commercial operation. Details of the changes that occurred due to non-annual event purposes are contained in the 2015-2020 CCP Monthly Capacity Supply Obligation Changes report on the ISO New England website.

Active/Passive Demand Response

CSO Totals by Commitment Period

| Commitment Period | Active/Passive | Existing | New | Grand Total |
|-------------------|--------------------|------------------|----------------|------------------|
| 2019-20 | Active | 357.221 | 20.304 | 377.525 |
| | Passive | 2,018.20 | 350.43 | 2,368.63 |
| | Grand Total | 2,375.422 | 370.734 | 2,746.156 |
| 2020-21 | Active | 334.634 | 85.294 | 419.928 |
| | Passive | 2,236.73 | 554.292 | 2,791.02 |
| | Grand Total | 2,571.361 | 639.586 | 3,210.947 |
| 2021-22 | Active | 480.941 | 143.504 | 624.445 |
| | Passive | 2,604.79 | 370.568 | 2,975.36 |
| | Grand Total | 3,085.734 | 514.072 | 3,599.806 |
| 2022-23 | Active | 598.376 | 87.178 | 685.554 |
| | Passive | 2,788.33 | 566.363 | 3,354.69 |
| | Grand Total | 3,386.703 | 653.541 | 4,040.244 |
| 2023-24 | Active | 560.55 | 31.493 | 592.043 |
| | Passive | 3,035.51 | 291.565 | 3,327.07 |
| | Grand Total | 3,596.056 | 323.058 | 3,919.114 |
| 2024-25 | Active | 674.153 | 3.520 | 677.673 |
| | Passive | 3,046.064 | 166.801 | 3,212.865 |
| | Grand Total | 3,720.217 | 170.321 | 3,890.538 |
| 2025-26 | Active | 664.01 | 101.34 | 765.35 |
| | Passive | 2,428.638 | 128.618 | 2557.256 |
| | Grand Total | 3,092.648 | 229.958 | 3,322.606 |

RELIABILITY COSTS – NET COMMITMENT PERIOD COMPENSATION (NCPC) OPERATING COSTS



What are Daily NCPC Payments?

- Payments made to resources whose commitment and dispatch by ISO-NE resulted in a shortfall between the resource's offered value in the Energy and Regulation Markets and the revenue earned from output during the day
- Typically, this is the result of some out-of-merit operation of resources occurring in order to protect the overall resource adequacy and transmission security of specific locations or of the entire control area
- NCPC payments are intended to make a resource that follows the ISO's operating instructions "no worse off" financially than the best alternative generation schedule



Definitions

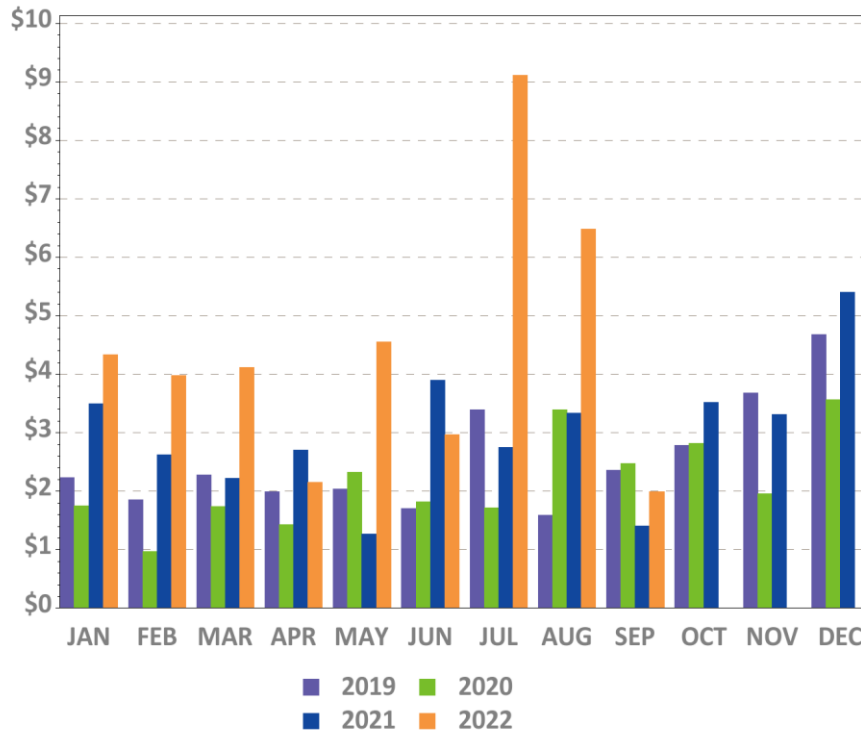
| | |
|---|---|
| 1 st Contingency NCPC Payments | Reliability costs paid to eligible resources that are providing first contingency (1stC) protection (including low voltage, system operating reserve, and load serving) either system-wide or locally |
| 2 nd Contingency NCPC Payments | Reliability costs paid to resources providing capacity in constrained areas to respond to a local second contingency. They are committed based on 2 nd Contingency (2ndC) protocols, and are also known as Local Second Contingency Protection Resources (LSCPR) |
| Voltage NCPC Payments | Reliability costs paid to resources operated by ISO-NE to provide voltage support or control in specific locations |
| Distribution NCPC Payments | Reliability costs paid to units dispatched at the request of local transmission providers for purpose of managing constraints on the low voltage (distribution) system. These requirements are not modeled in the DA Market software |
| OATT | Open Access Transmission Tariff |

Charge Allocation Key

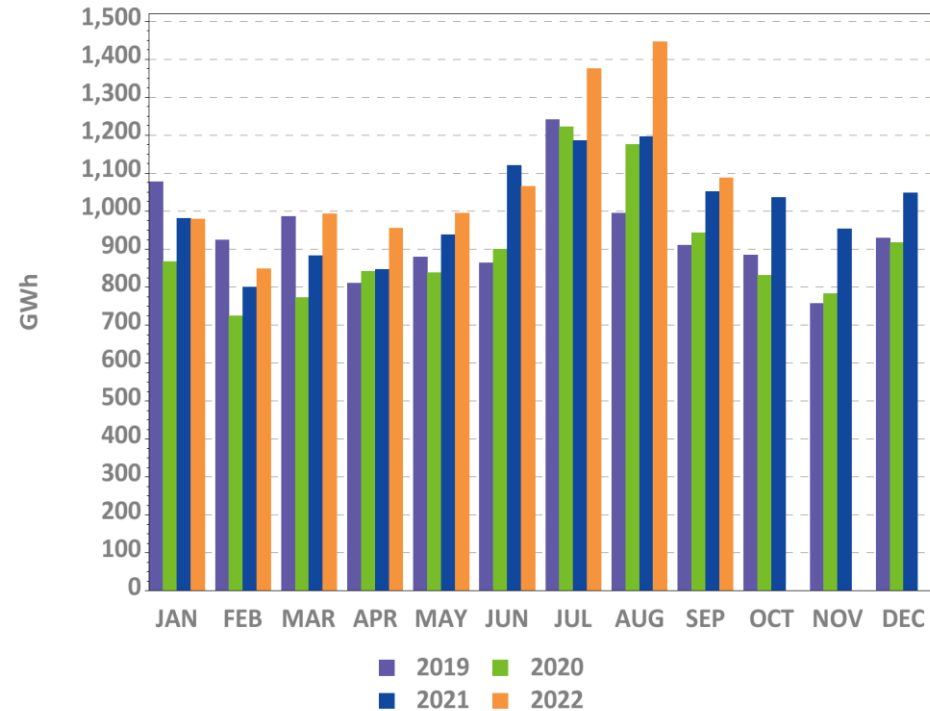
| Allocation Category | Market / OATT | Allocation |
|---|---------------|---|
| System 1 st Contingency | Market | DA 1 st C (excluding at external nodes) is allocated to system DALO. RT 1 st C (at all locations) is allocated to System 'Daily Deviations'. Daily Deviations = sum of(generator deviations, load deviations, generation obligation deviations at external nodes, increment offer deviations) |
| External DA 1 st Contingency | Market | DA 1 st C at external nodes (from imports, exports, Incs and Decs) are allocated to activity at the specific external node or interface involved |
| Zonal 2 nd Contingency | Market | DA and RT 2 nd C NCPC are allocated to load obligation in the Reliability Region (zone) served |
| System Low Voltage | OATT | (Low) Voltage Support NCPC is allocated to system Regional Network Load and Open Access Same-Time Information Service (OASIS) reservations |
| Zonal High Voltage | OATT | High Voltage Control NCPC is allocated to zonal Regional Network Load |
| Distribution - PTO | OATT | Distribution NCPC is allocated to the specific Participant Transmission Owner (PTO) requesting the service |
| System – Other | Market | Includes GPA, Economic Generator/DARD Posturing, Dispatch Lost Opportunity Cost (DLOC), and Rapid Response Pricing (RRP) Opportunity Cost NCPC (allocated to RTLO); and Min Generation Emergency NCPC (allocated to RTGO). |

Year-Over-Year Total NCPC Dollars and Energy

NCPC Dollars



NCPC Energy*

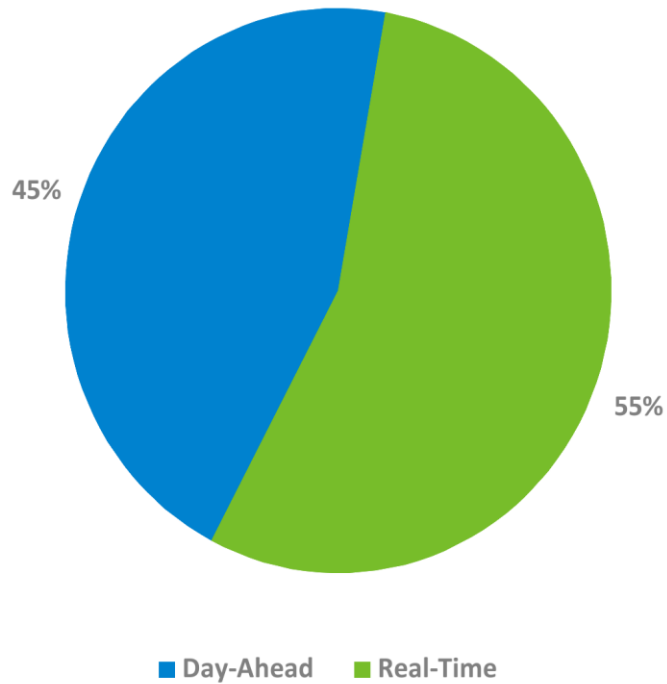


* NCPC Energy GWh reflect the DA and/or RT economic minimum loadings of all units receiving DA or RT NCPC credits (except for DLOC, RRP, or posturing NCPC), assessed during hours in which they are NCPC-eligible. Scheduled MW for external transactions receiving NCPC are also reflected. All NCPC components (1st Contingency, 2nd Contingency, Voltage, and RT Distribution) are reflected.

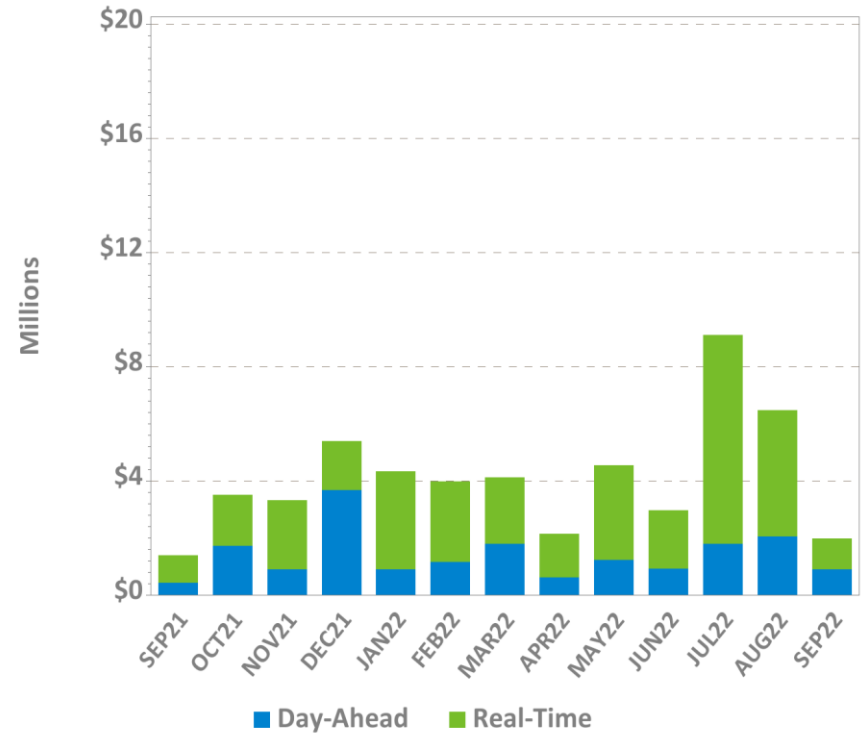


DA and RT NCPC Charges

Sep-22 Total = \$2M

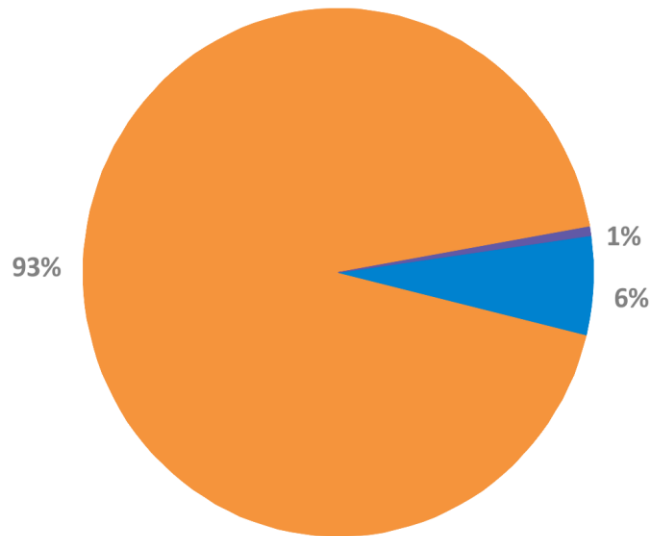


Last 13 Months



NCPC Charges by Type

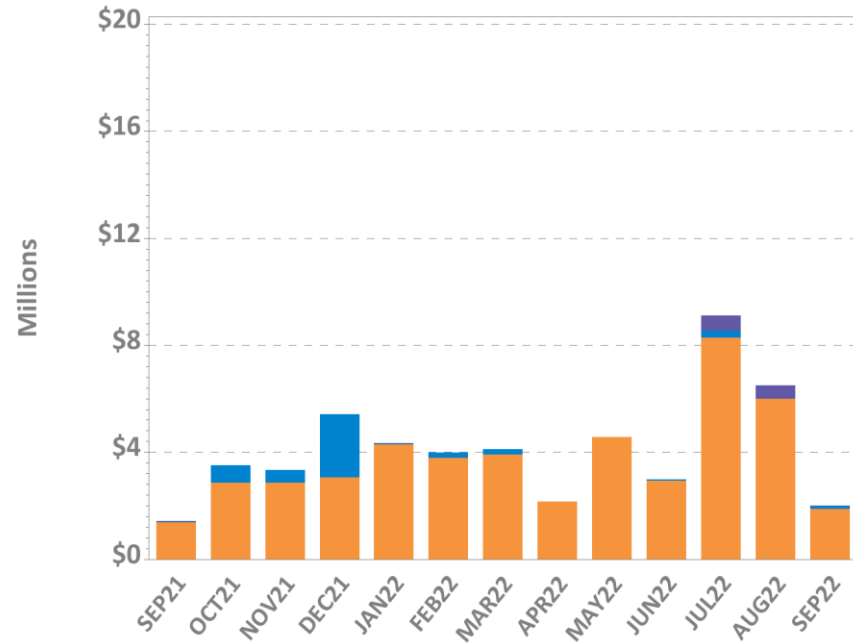
Sep-22 Total = \$2M



1st C 2nd C
Distrib

1st C – First Contingency
2nd C – Second Contingency
Distrib – Distribution
Voltage – Voltage

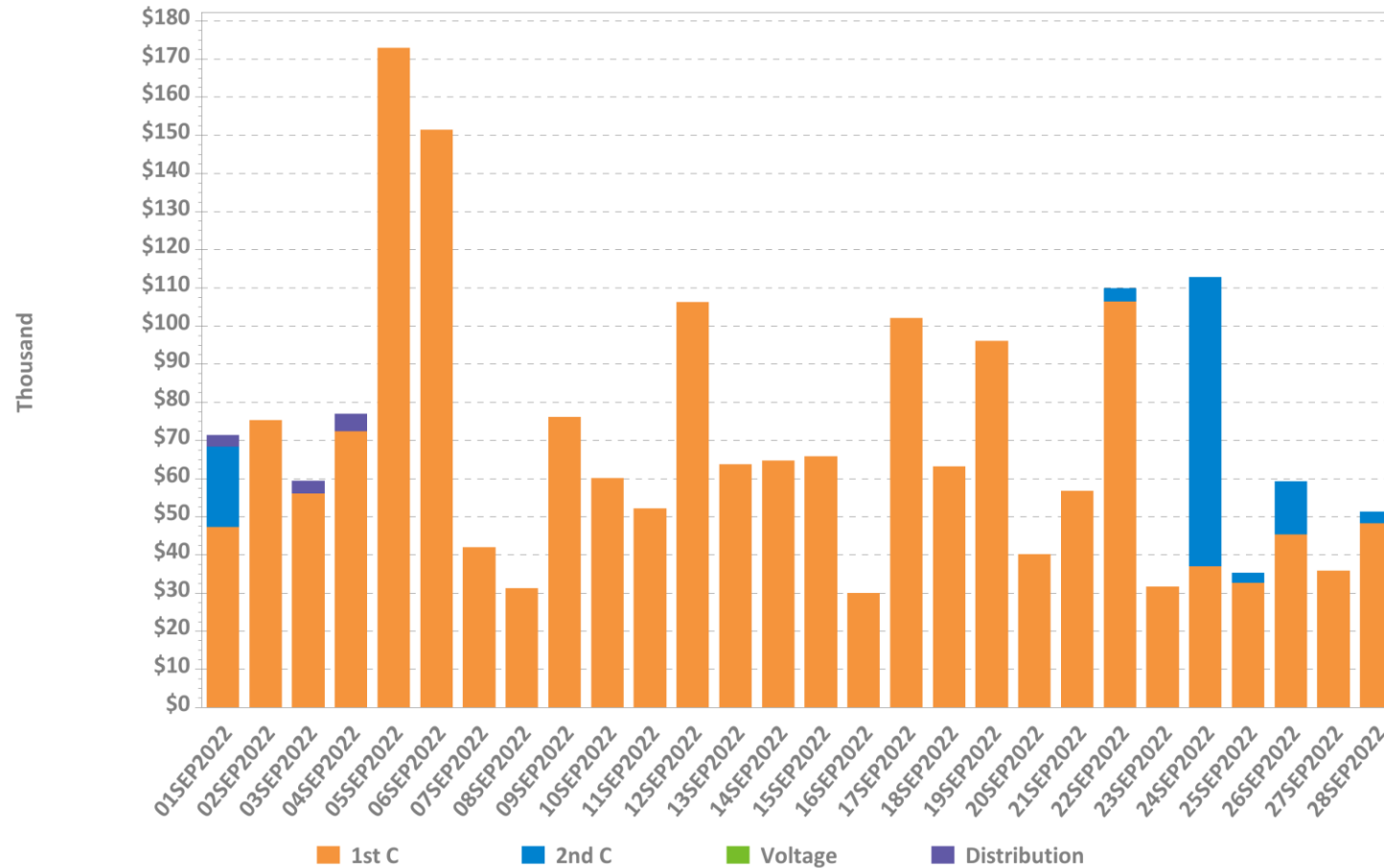
Last 13 Months



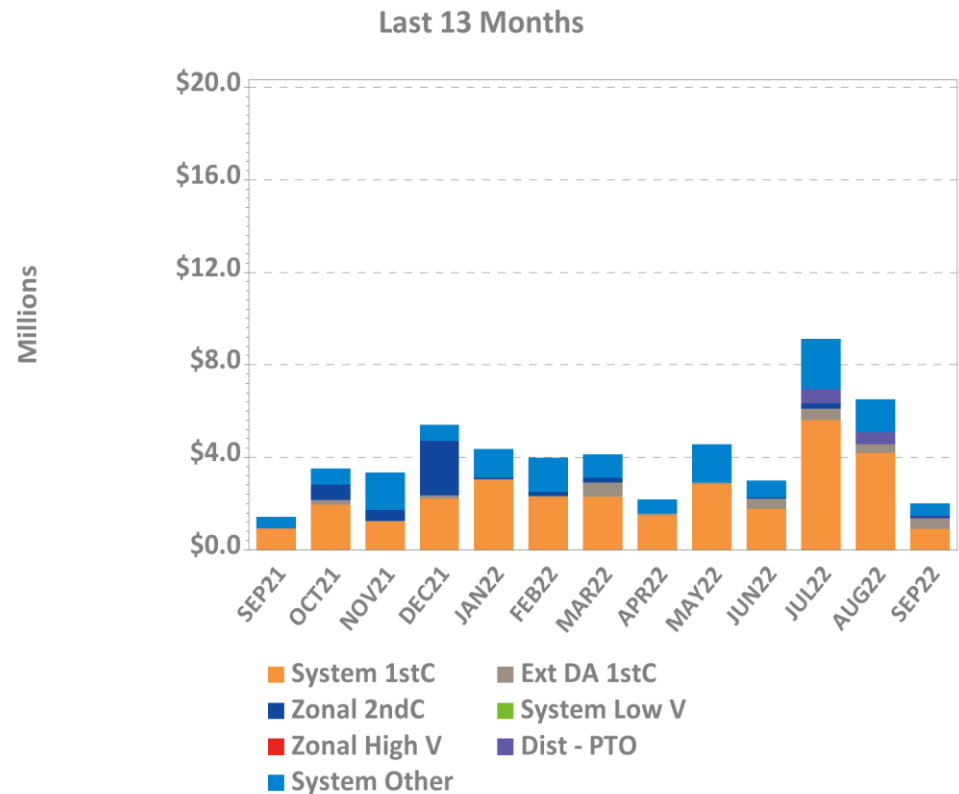
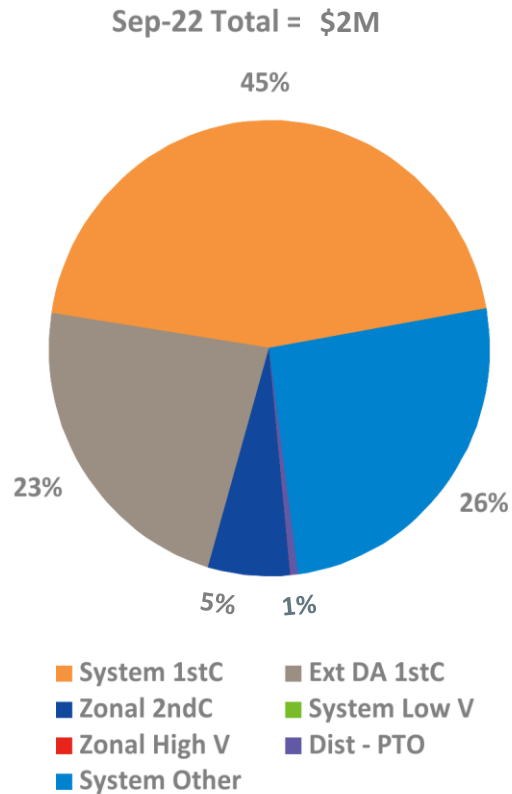
1st C 2nd C
Voltage Distrib



Daily NCPC Charges by Type

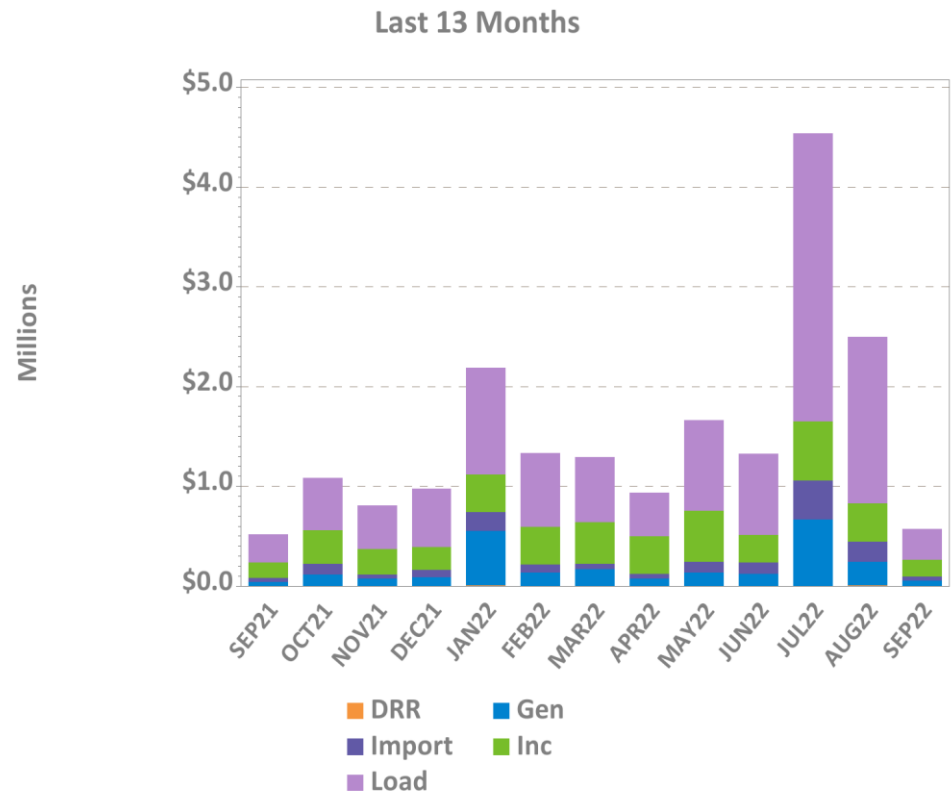
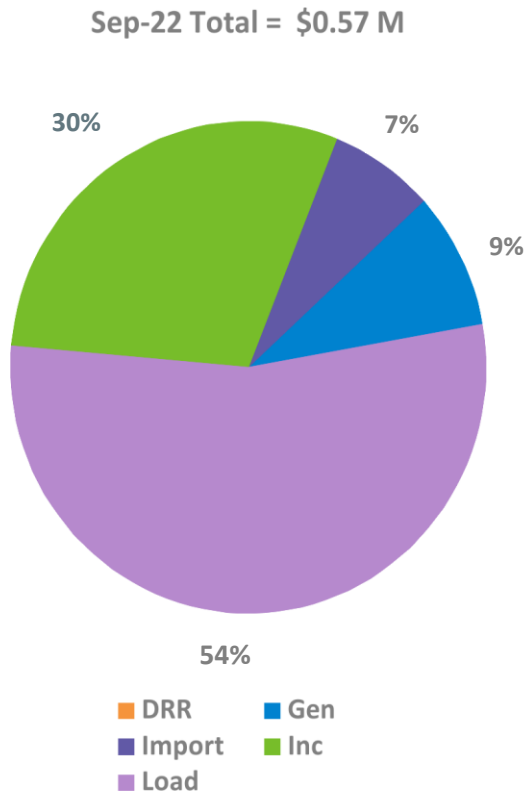


NCPC Charges by Allocation



Note: 'System Other' includes, as applicable: Resource Economic Posturing, GPA, Min Gen Emergency, Dispatch Lost Opportunity Cost (DLOC), and Rapid Response Pricing (RRP) Opportunity Cost credits.

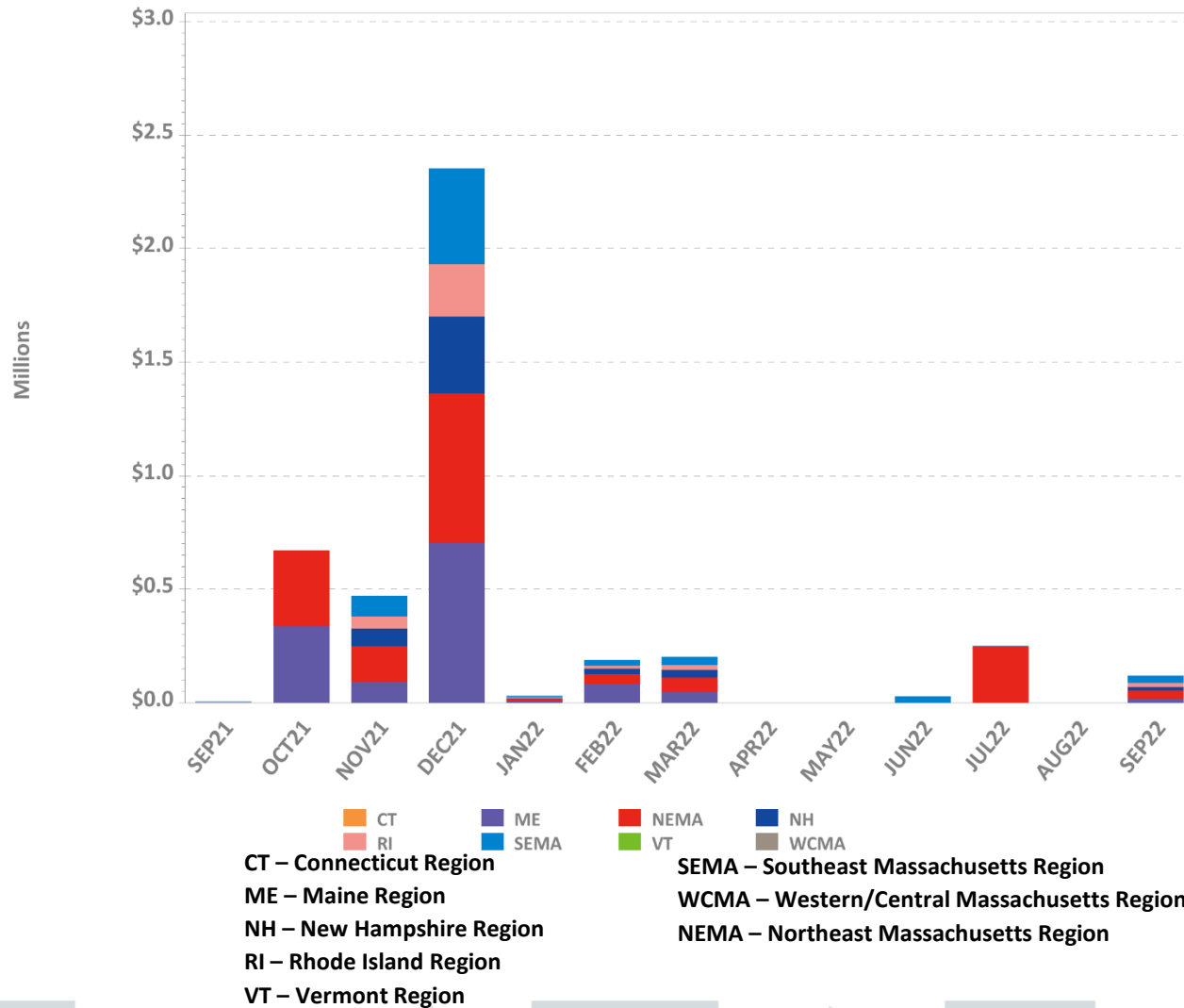
RT First Contingency Charges by Deviation Type



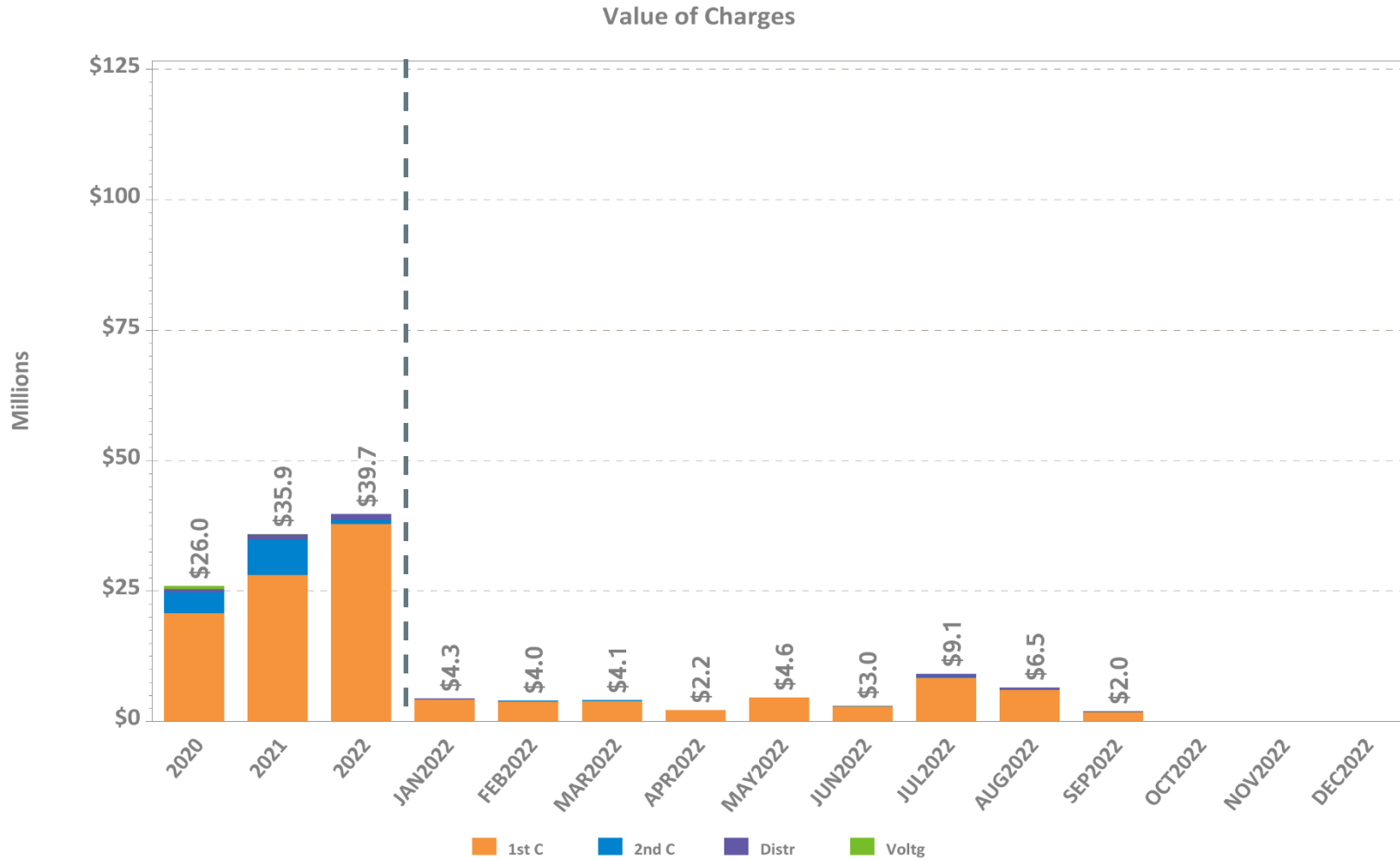
DRR – Demand Response Resource deviations
Gen – Generator deviations
Inc – Increment Offer deviations
Import – Import deviations
Load – Load obligation deviations



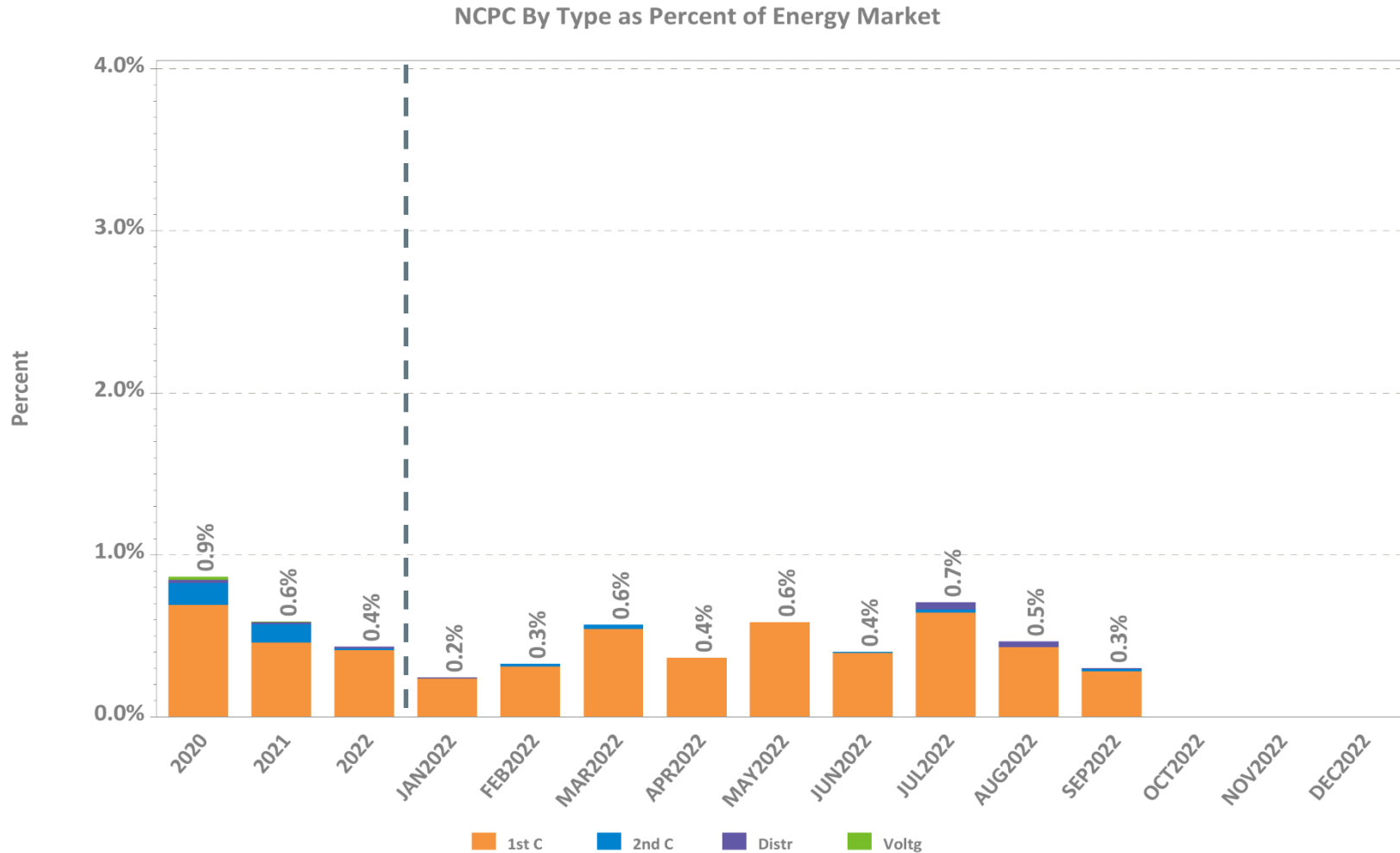
LSCPR Charges by Reliability Region



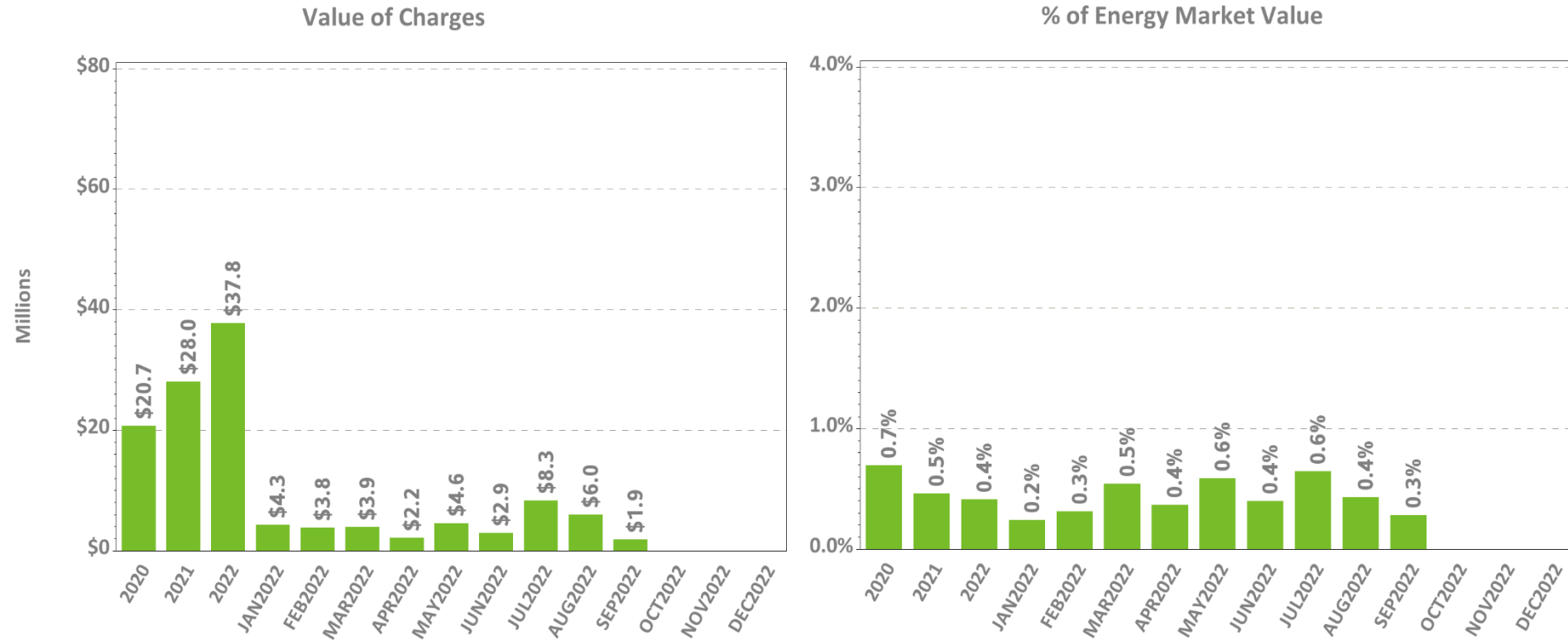
NCPC Charges by Type



NCPC Charges as Percent of Energy Market



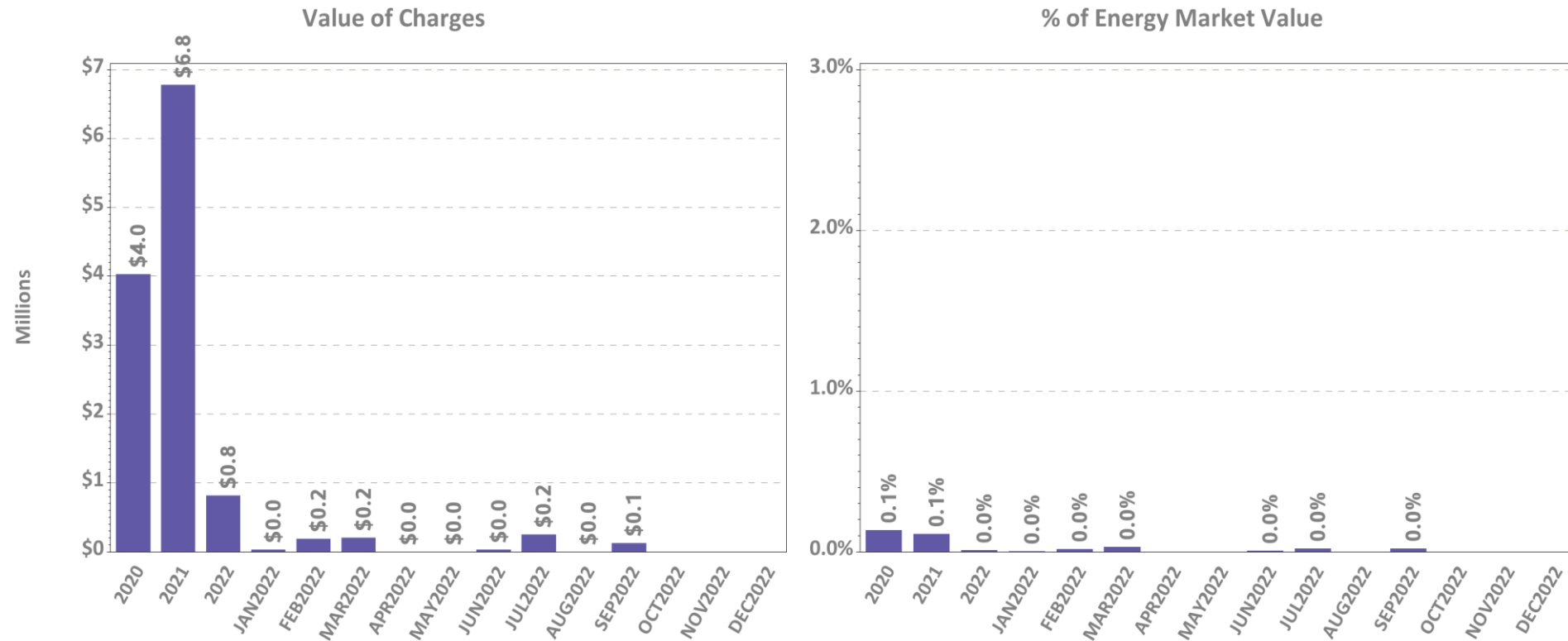
First Contingency NCPC Charges



Note: Energy Market value is the hourly locational product of load obligation and price in the DA Market plus the hourly locational product of price and RT Load Obligation Deviation in the RT Market



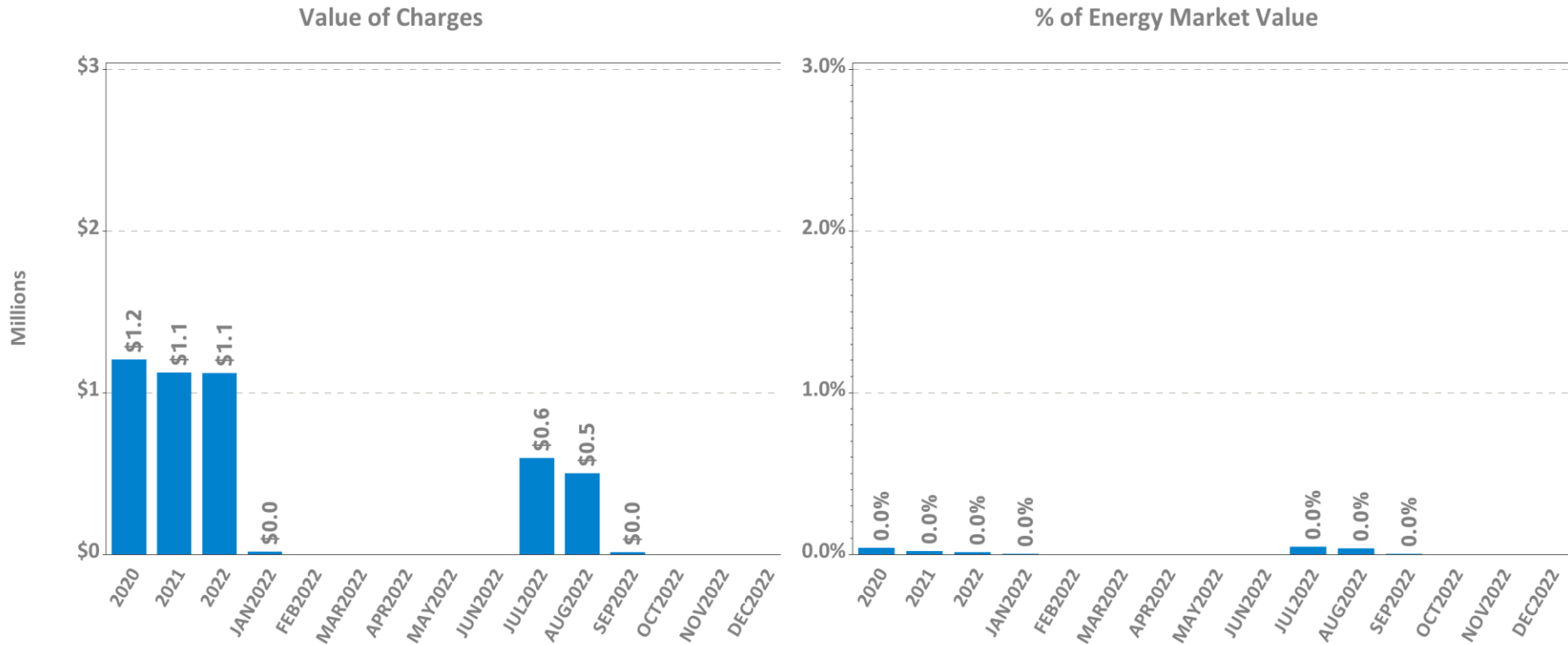
Second Contingency NCPC Charges



Note: Energy Market value is the hourly locational product of load obligation and price in the DA Market plus the hourly locational product of price and RT Load Obligation Deviation in the RT Market



Voltage and Distribution NCPC Charges



Note: Energy Market value is the hourly locational product of load obligation and price in the DA Market plus the hourly locational product of price and RT Load Obligation Deviation in the RT Market



DA vs. RT Pricing

The following slides outline:

- This month vs. prior year's average LMPs and fuel costs
- Reserve Market results
- DA cleared load vs. RT load
- Zonal and total incs and decs
- Self-schedules
- DA vs. RT net interchange



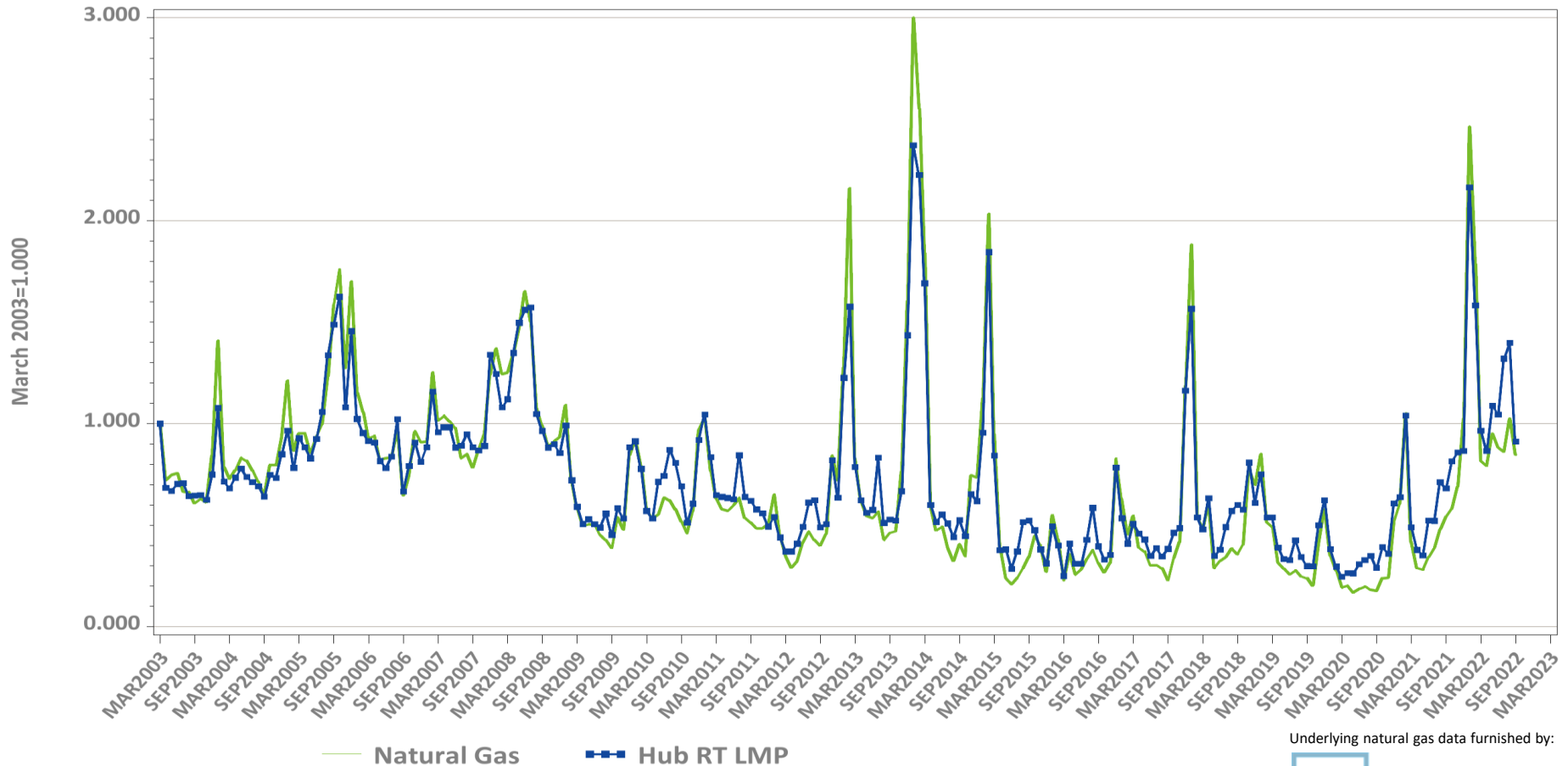
DA vs. RT LMPs (\$/MWh)

Arithmetic Average

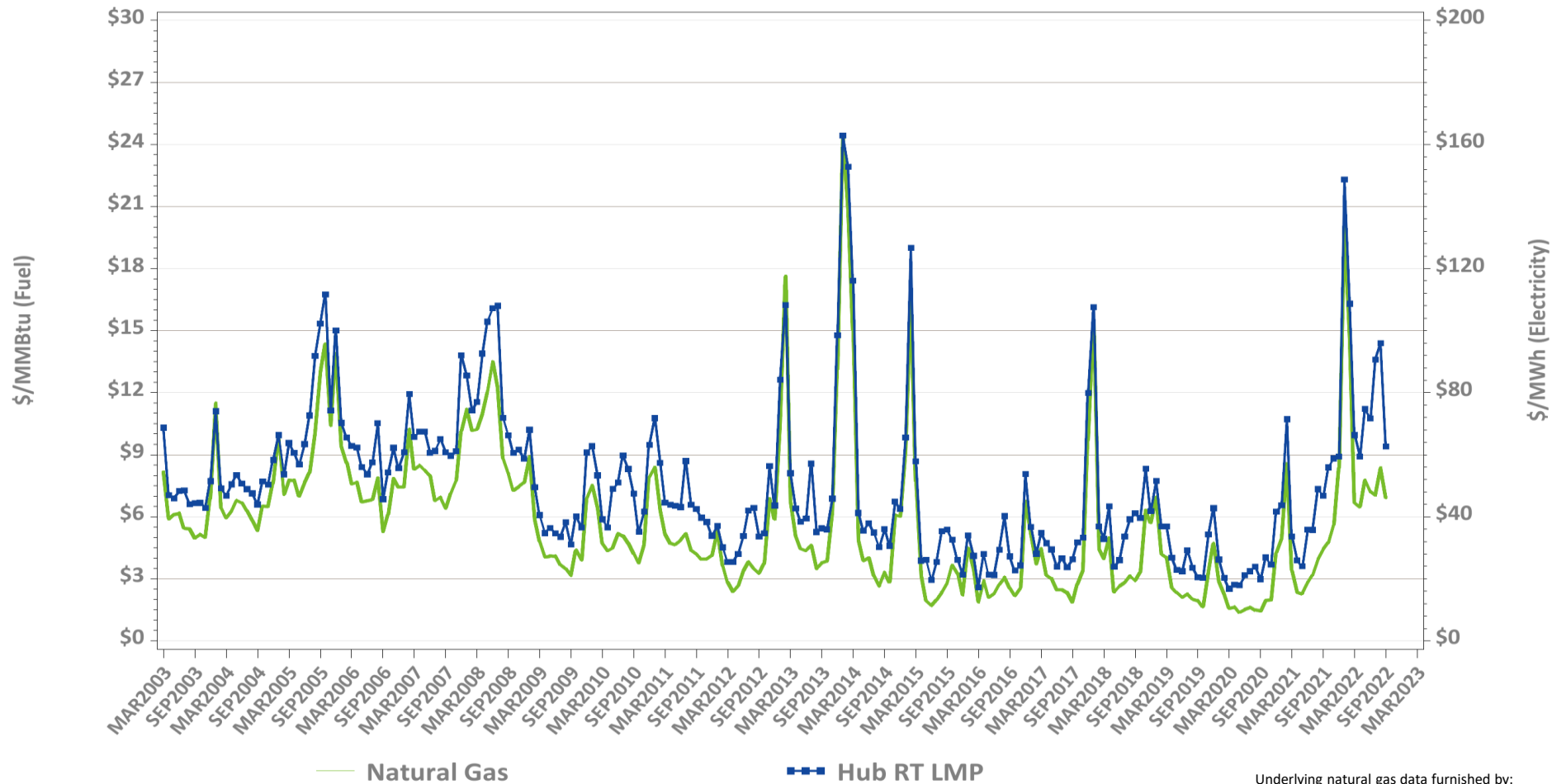
| Year 2020 | NEMA | CT | ME | NH | VT | RI | SEMA | WCMA | Hub |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Day-Ahead | \$23.62 | \$22.59 | \$23.27 | \$23.50 | \$22.76 | \$23.27 | \$23.57 | \$23.30 | \$23.32 |
| Real-Time | \$23.62 | \$22.91 | \$23.23 | \$23.54 | \$22.90 | \$23.29 | \$23.56 | \$23.37 | \$23.38 |
| RT Delta % | 0.0% | 1.4% | -0.2% | 0.2% | 0.6% | 0.1% | -0.1% | 0.3% | 0.3% |
| Year 2021 | NEMA | CT | ME | NH | VT | RI | SEMA | WCMA | Hub |
| Day-Ahead | \$46.54 | \$44.60 | \$45.52 | \$46.27 | \$45.05 | \$45.88 | \$46.38 | \$45.91 | \$45.92 |
| Real-Time | \$45.25 | \$43.97 | \$44.28 | \$45.10 | \$44.15 | \$44.61 | \$45.09 | \$44.85 | \$44.84 |
| RT Delta % | -2.8% | -1.4% | -2.7% | -2.5% | -2.0% | -2.8% | -2.8% | -2.3% | -2.3% |

| September-21 | NEMA | CT | ME | NH | VT | RI | SEMA | WCMA | Hub |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Day-Ahead | \$48.99 | \$46.79 | \$46.48 | \$48.07 | \$47.17 | \$47.61 | \$48.65 | \$48.01 | \$48.01 |
| Real-Time | \$47.22 | \$46.01 | \$45.34 | \$46.86 | \$46.09 | \$46.20 | \$47.13 | \$46.78 | \$46.76 |
| RT Delta % | -3.6% | -1.7% | -2.5% | -2.5% | -2.3% | -3.0% | -3.1% | -2.6% | -2.6% |
| September-22 | NEMA | CT | ME | NH | VT | RI | SEMA | WCMA | Hub |
| Day-Ahead | \$69.01 | \$67.14 | \$66.95 | \$68.77 | \$67.87 | \$68.25 | \$68.90 | \$68.57 | \$68.50 |
| Real-Time | \$63.03 | \$61.75 | \$61.27 | \$62.77 | \$61.99 | \$62.27 | \$62.96 | \$62.67 | \$62.61 |
| RT Delta % | -8.7% | -8.0% | -8.5% | -8.7% | -8.7% | -8.8% | -8.6% | -8.6% | -8.6% |
| Annual Diff. | NEMA | CT | ME | NH | VT | RI | SEMA | WCMA | Hub |
| Yr over Yr DA | 40.9% | 43.5% | 44.0% | 43.1% | 43.9% | 43.3% | 41.6% | 42.8% | 42.7% |
| Yr over Yr RT | 33.5% | 34.2% | 35.1% | 33.9% | 34.5% | 34.8% | 33.6% | 34.0% | 33.9% |

Monthly Average Fuel Price and RT Hub LMP Indexes



Monthly Average Fuel Price and RT Hub LMP

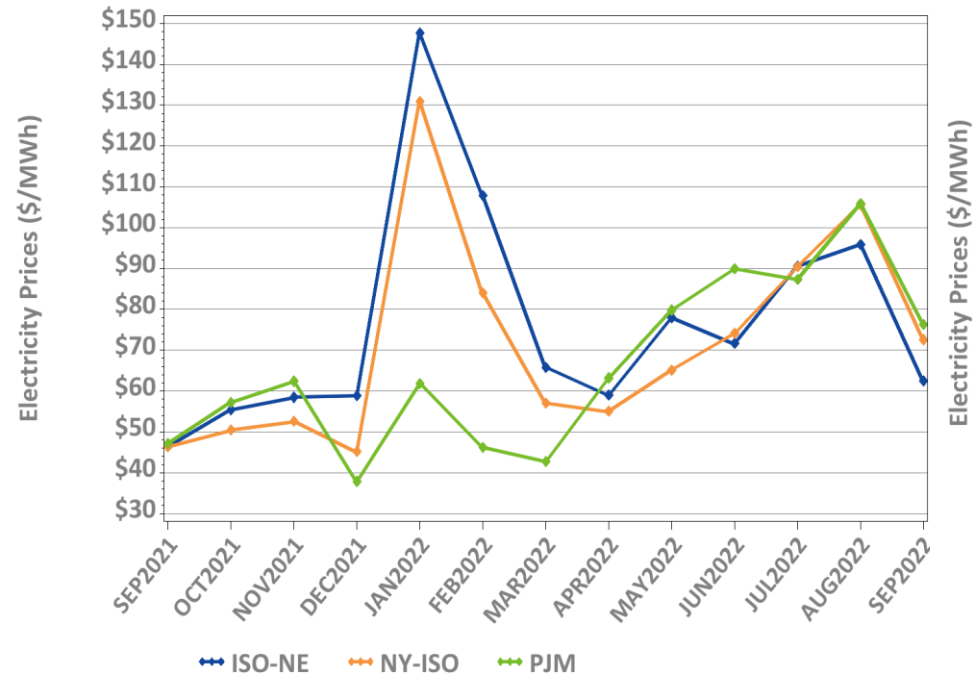


Underlying natural gas data furnished by:



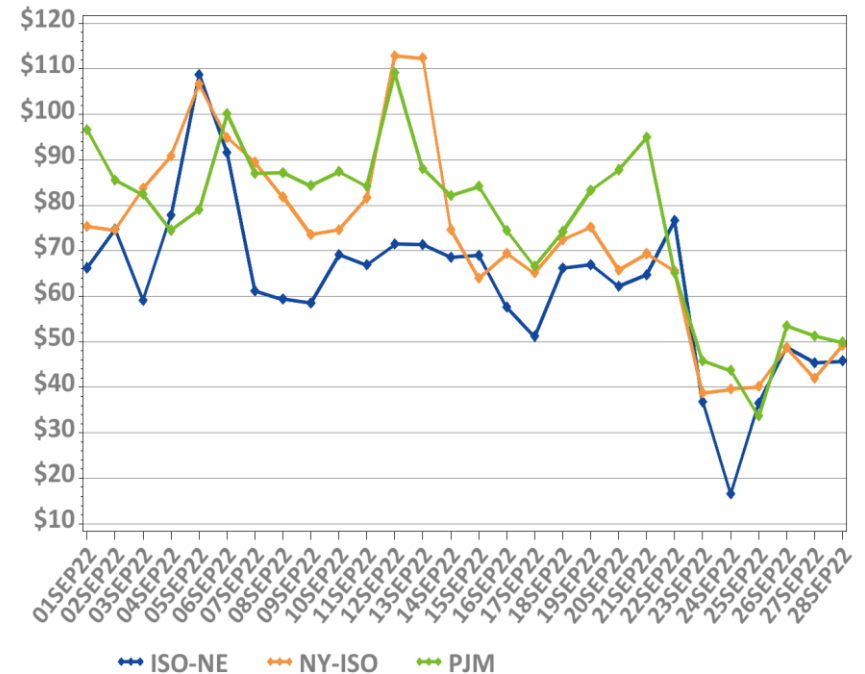
New England, NY, and PJM Hourly Average Real Time Prices by Month

Monthly, Last 13 Months



*Note: Hourly average prices are shown.

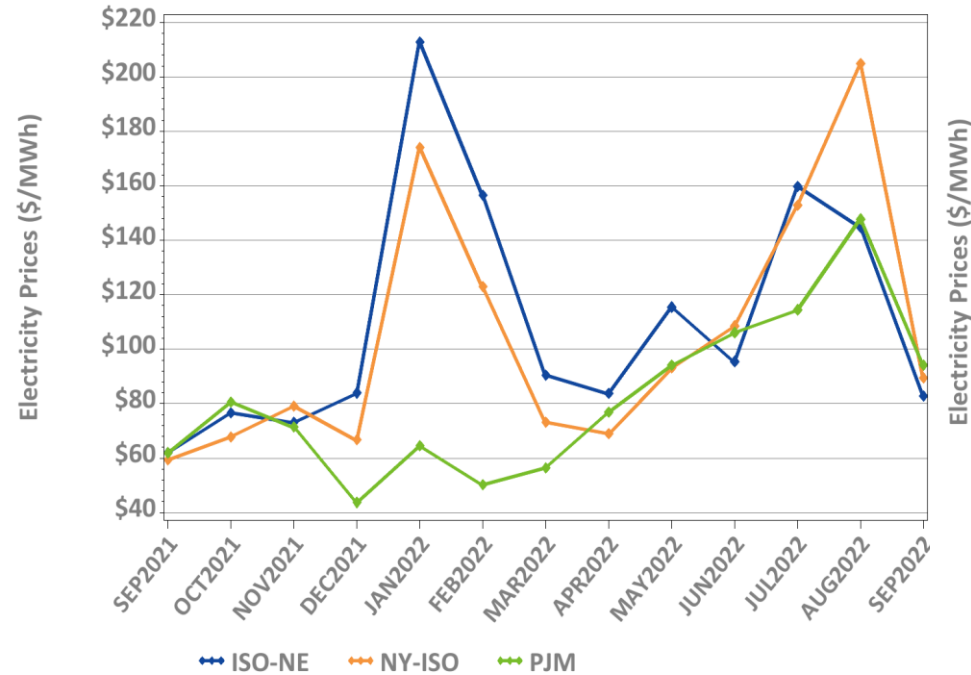
Daily: This Month



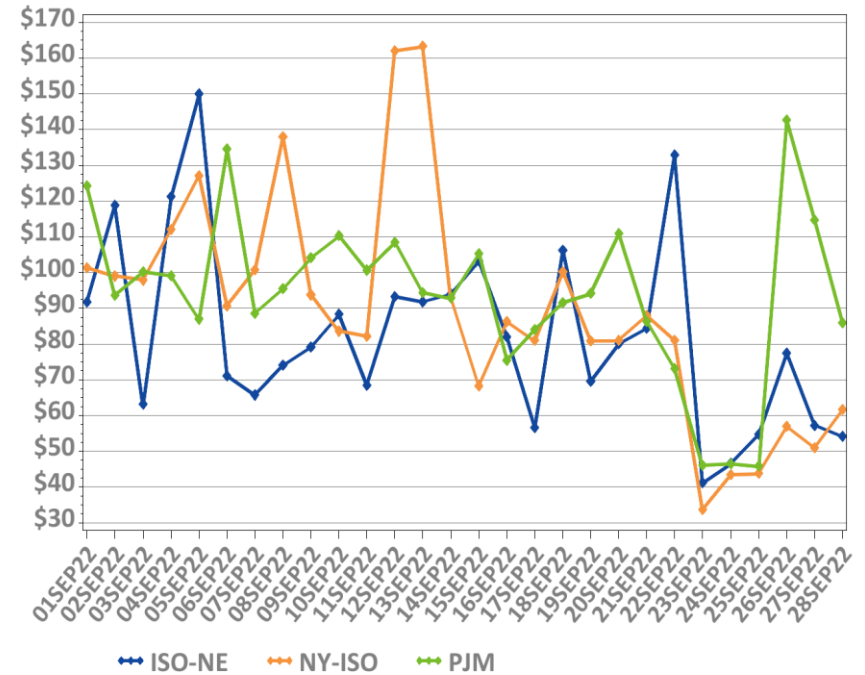
*Note: Hourly average prices are shown.

New England, NY, and PJM Average Peak Hour Real Time Prices

Monthly, Last 13 Months



Daily: This Month



*Forecasted New England daily peak hours reflected

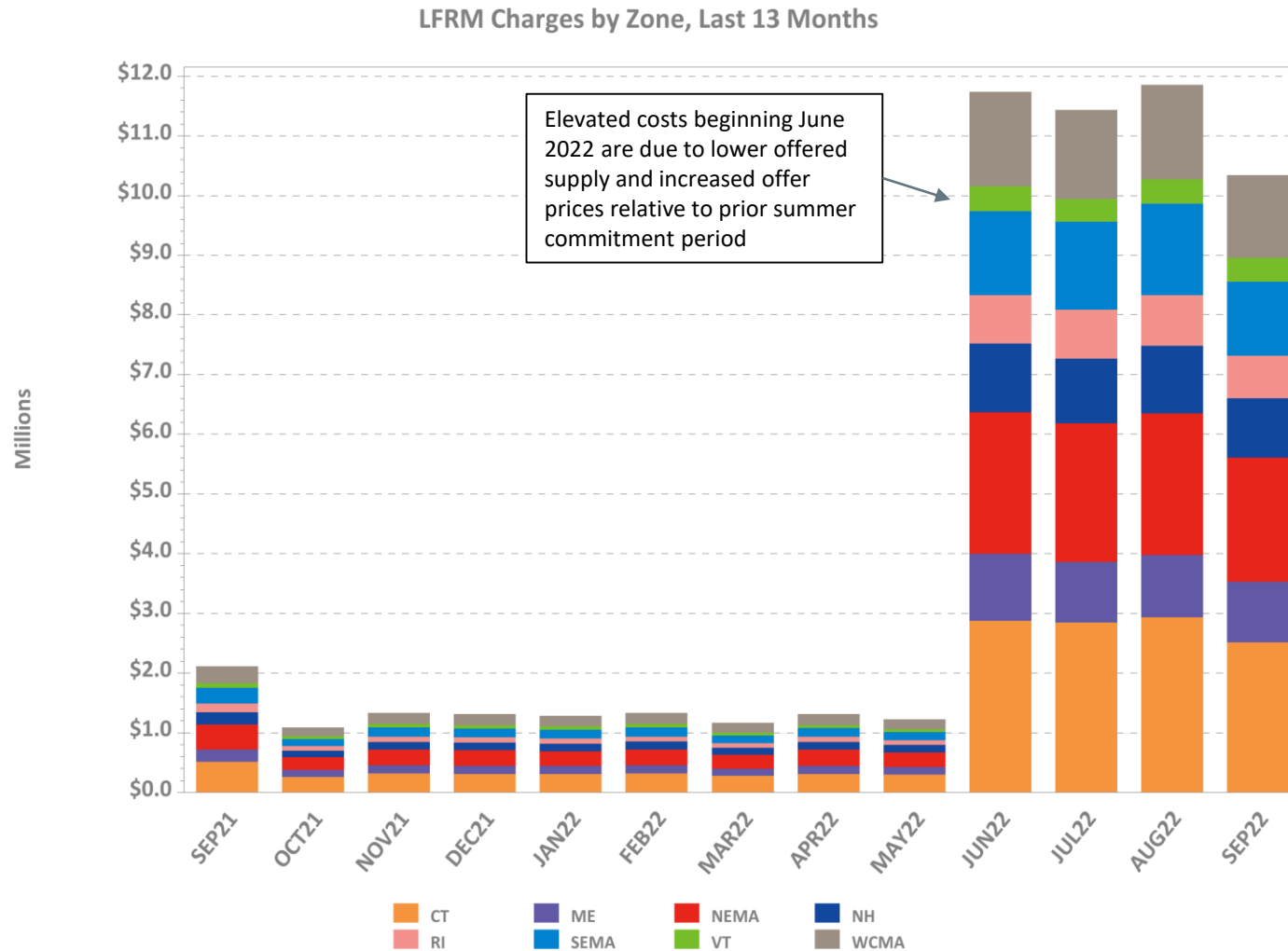
Reserve Market Results – September 2022

- Maximum potential Forward Reserve Market payments of \$10.8M were reduced by credit reductions of \$187K, failure-to-reserve penalties of \$281K and no failure-to-activate penalties, resulting in a net payout of \$10.3M or 96% of maximum
 - Rest of System: \$7.56M/7.91M (96%)
 - Southwest Connecticut: \$0.04M/0.04M (100%)
 - Connecticut: \$2.64M/2.75M (96%)
 - NEMA: \$0.1M/0.1M (97%)
- \$189K total Real-Time credits were not reduced by any Forward Reserve Energy Obligation Charges for a net of \$189K in Real-Time Reserve payments
 - Rest of System: 143 hours, \$131K
 - Southwest Connecticut: 143 hours, \$27K
 - Connecticut: 143 hours, \$20K
 - NEMA: 143 hours, \$10K

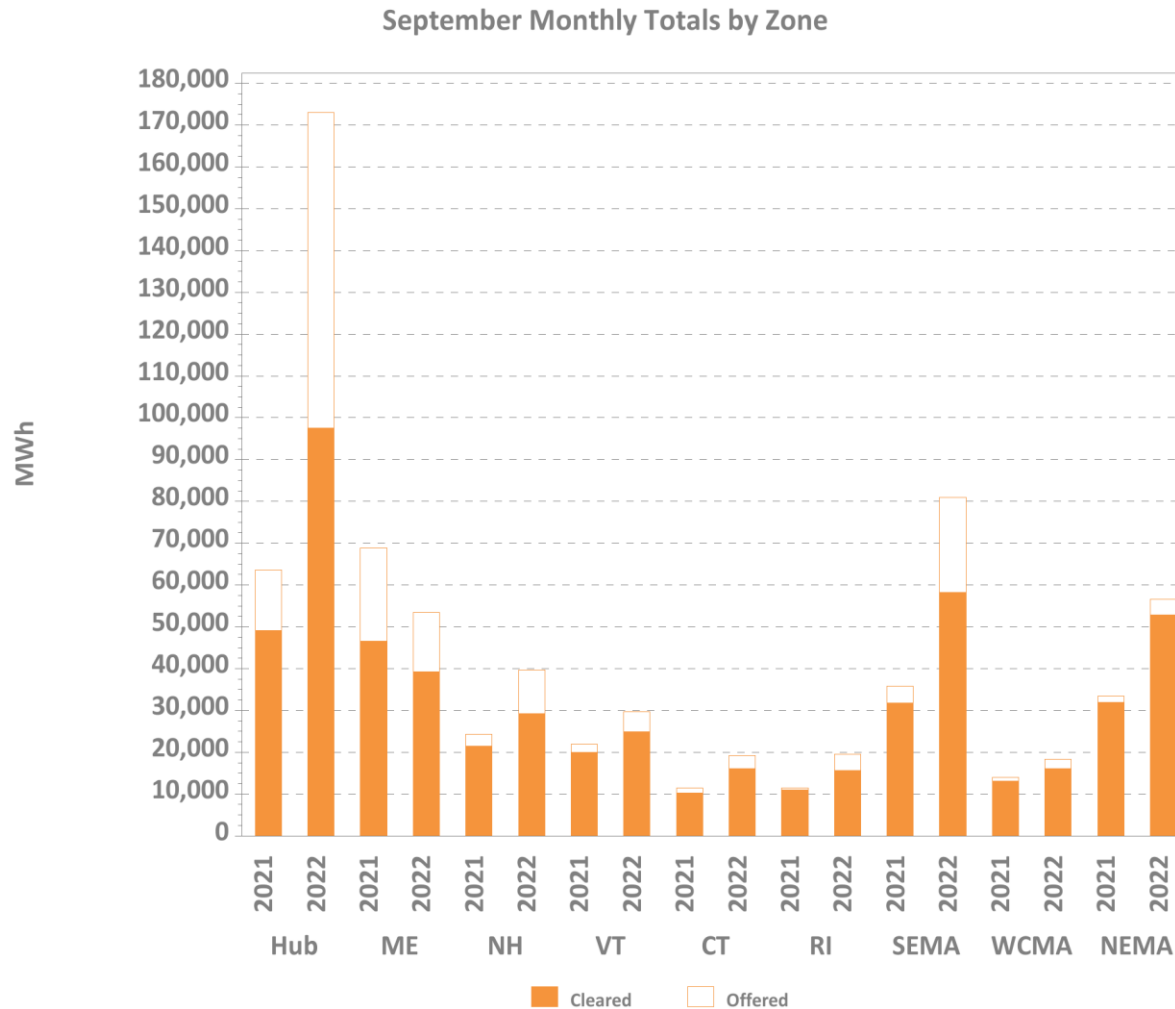
Note: “Failure to reserve” results in both credit reductions and penalties in the Locational Forward Reserve Market. While this summary reports performance by location, there were no locational requirements in effect for the current Forward Reserve auction period.



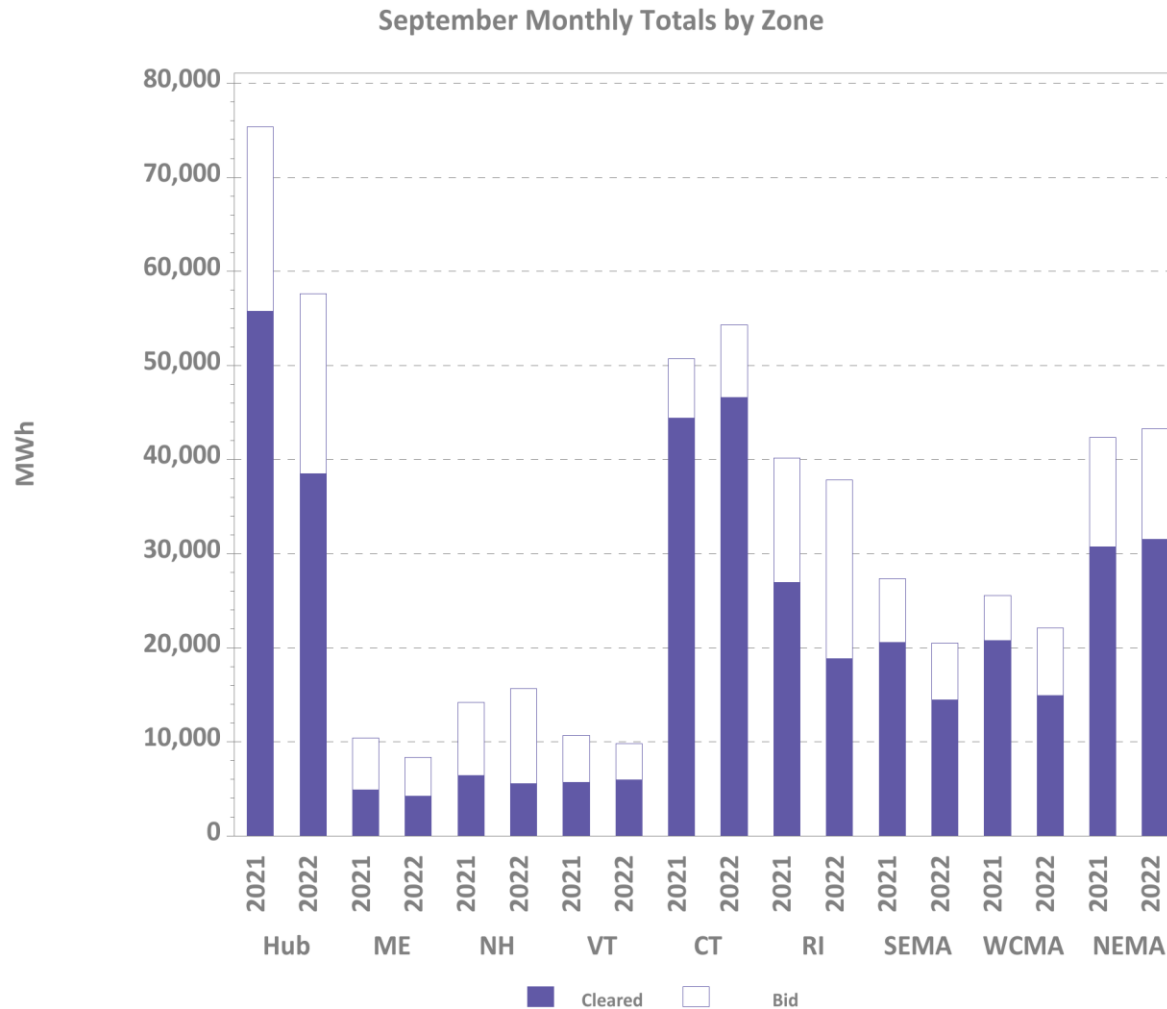
LFRM Charges to Load by Load Zone (\$)



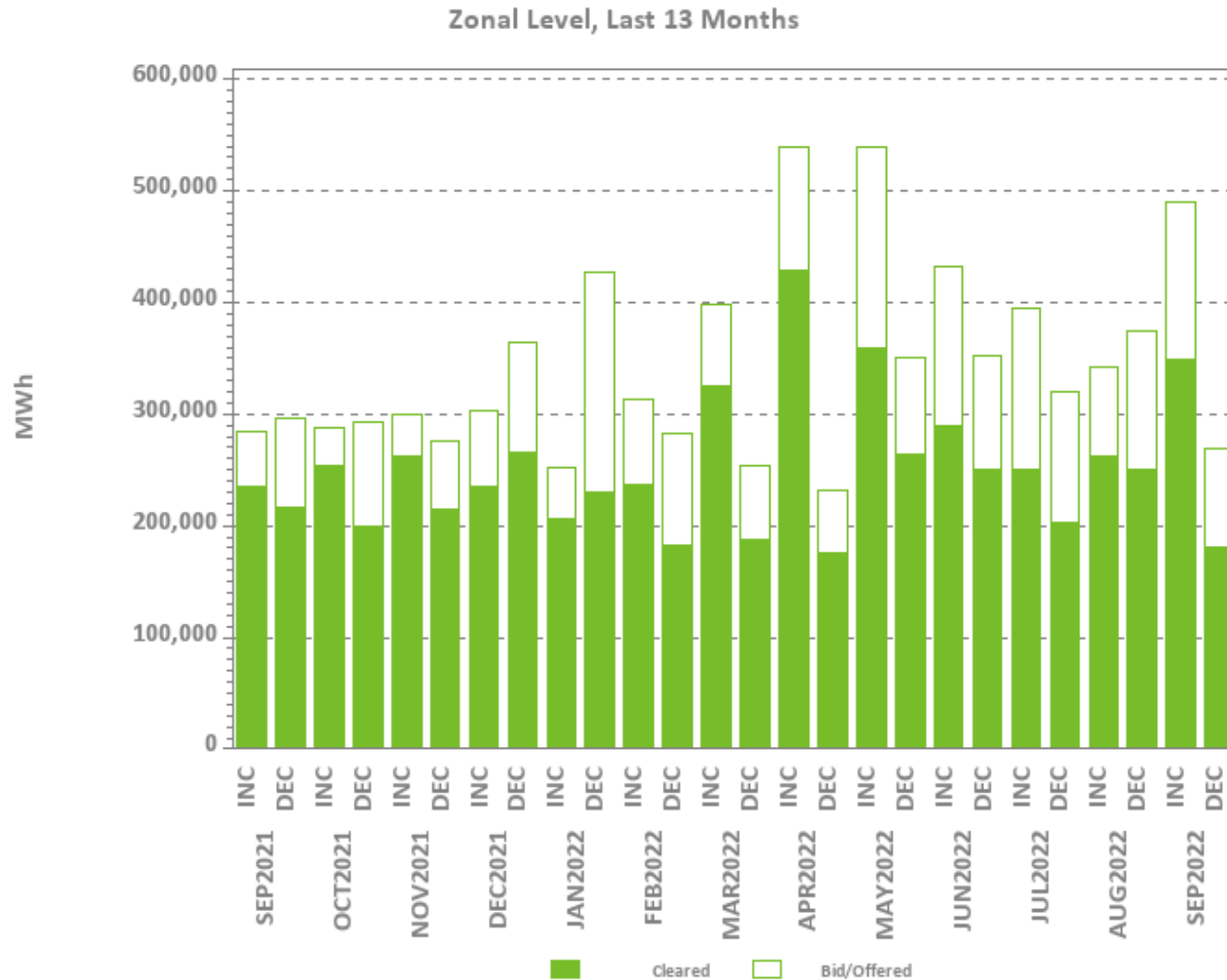
Zonal Increment Offers and Cleared Amounts



Zonal Decrement Bids and Cleared Amounts

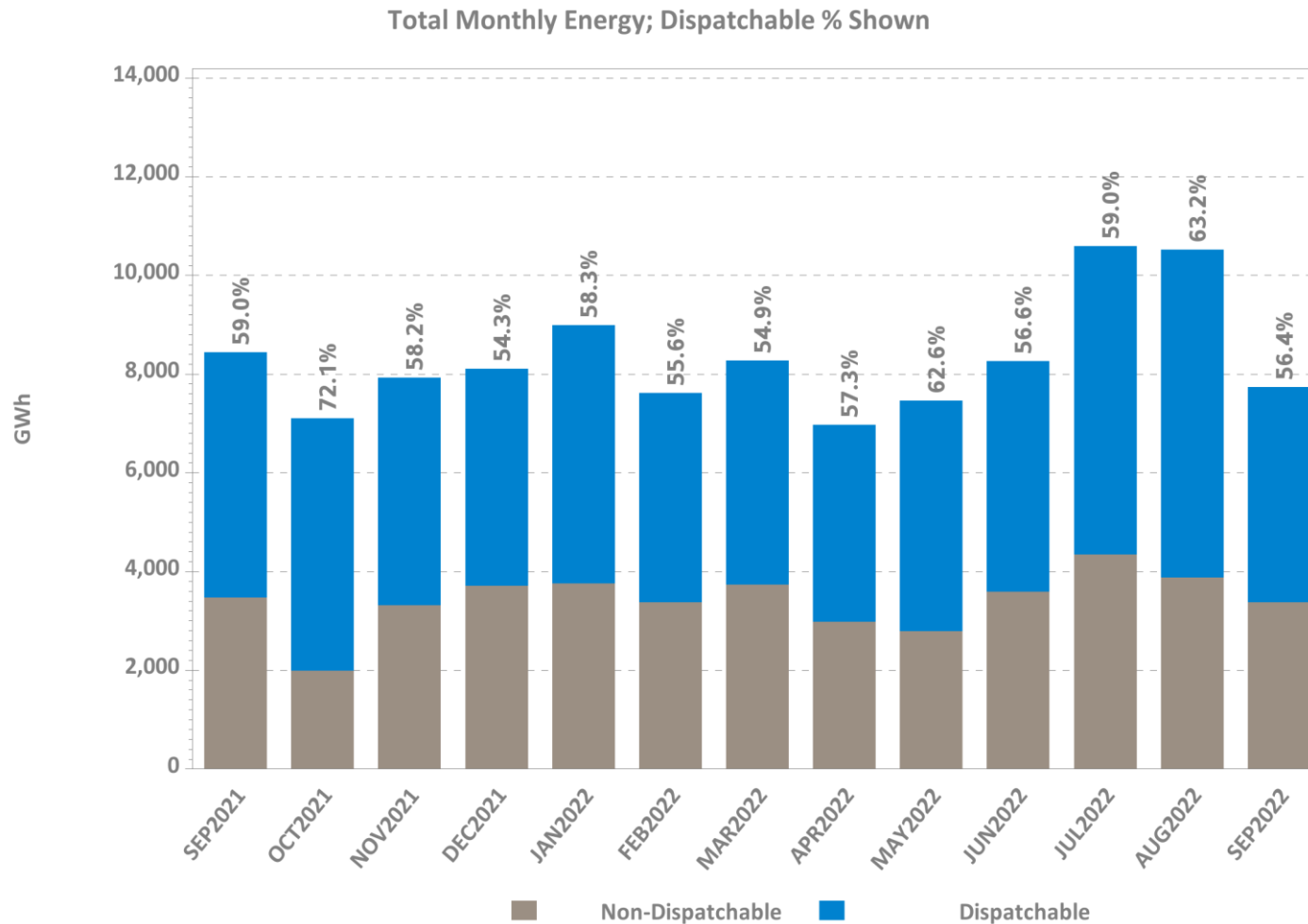


Total Increment Offers and Decrement Bids



Data excludes nodal offers and bids

Dispatchable vs. Non-Dispatchable Generation



* Dispatchable MWh here are defined to be all generation output that is not self-committed ('must run') by the customer.



REGIONAL SYSTEM PLAN (RSP)



Planning Advisory Committee (PAC)

- October 19 PAC Meeting Agenda Topics*
 - Asset Condition Projects
 - Greggs Substation Rebuild (Eversource)
 - Lines 3041 & 362 Structure Replacements & Optical Ground Wire Installation (Eversource)
 - East Devon 345/115 kV Relay Upgrades (Eversource)
 - NEP SEMA/RI Project Upgrades (National Grid)
 - NPCC Bulk Power System Classification
 - Project Updates at the PAC
 - Regional System Plan Transmission Projects and Asset Condition Update
 - Economic Planning for the Clean Energy Transition Pilot Study: Reference Scenario and Market Efficiency Scenario Assumptions & Preliminary Results
- Transmission Owners Planning Advisory Committee (TOPAC) - Updated Local System Plans
 - New Hampshire Transmission
 - VELCO
 - Versant Power
 - UI/AVANGRID
 - National Grid
 - Eversource Energy

* Agenda topics are subject to change. Visit <https://www.iso-ne.com/committees/planning/planning-advisory> for the latest PAC agendas.



Transmission Planning for the Clean Energy Transition (TPCET)

- On 9/24/20 the ISO initiated discussions with the PAC about proposed refinements to transmission planning study assumptions that better reflect long-term trends, such as increased amounts of distributed-energy resources (primarily solar PV), offshore wind generation, and battery energy storage
- A follow-up presentation at the 11/19/20, 12/16/20, and 1/21/21 PAC meetings outlined a proposal for a pilot study, with the following goals:
 - Explore transmission reliability concerns that may result from various system conditions possible by 2030
 - Quantify trade-offs necessary between transmission system reliability/flexibility and transmission investment cost
 - Inform future discussions on transmission planning study assumptions
- Results were discussed at the 6/16/21, 7/22/21, and 8/18/21 PAC meetings
- The ISO published final revisions to the Transmission Planning Technical Guide reflecting these changes on 9/30/21
- CEII supplement to the PAC presentations was released on 10/5/21
- The final TPCET Pilot Study Report was posted to the PAC website on 1/14/22
- Status updates on ongoing transient stability modeling and performance criteria were discussed at the 4/28/22, 5/18/22, 6/15/22, and 8/24/22 PAC meetings; draft changes to the Transmission Planning Technical Guide reflecting assumption changes are expected to be brought to PAC in Q4 2022

2050 Transmission Study

- A meeting with the states was held on 10/15/21 to review the draft study scope
- The draft study scope was discussed with the PAC on 11/17/21
- Written stakeholder comments were due on 12/2/21
- ISO worked with NESCOE to address the comments and finalized the scope on 12/22/21
- ISO provided initial results at the 3/16/22 PAC meeting
- Sensitivity results, as well as a high-level approach to solutions development, were discussed at the 4/28/22 PAC meeting
- ISO discussed updated results and the approximate duration of overloads at the 7/20/22 PAC meeting
- ISO is working on solution development and expects to begin initial discussions with the PAC in Q4 2022



Economic Studies

- 2021 Economic Study Request
 - Also known as Future Grid Reliability Study – Phase 1 (FGRS)
 - Study proponent is NEPOOL
 - Final report was posted on July 29
 - Draft technical appendices are expected to be posted by early Q4 2022
- Economic Planning for the Clean Energy Transition Pilot Study
 - New effort is to review all assumptions in economic planning and perform a test study consistent with the proposed changes to the Tariff
 - Initial scope of work was presented at the April PAC meeting and new modeling features and initial benchmark scenario results were presented at the August PAC meeting



Future Grid Reliability Study (FGRS)

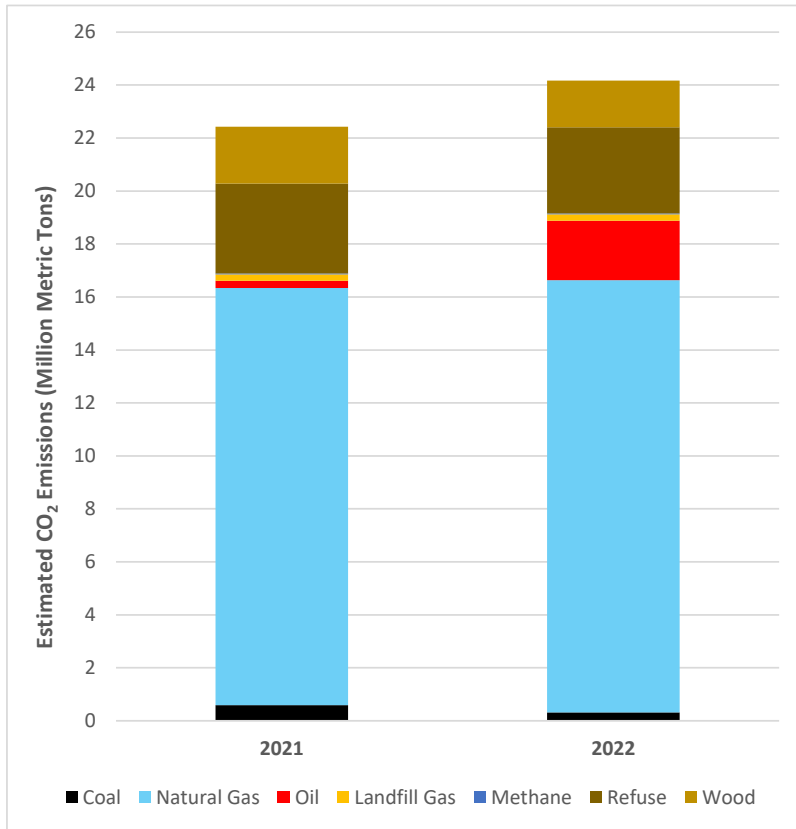
- Phase 1
 - Studies include: Production Cost Simulations; Ancillary Services Simulations; Resource Adequacy Screen; and Probabilistic Resource Availability Analysis
 - Framework Document and supporting assumptions table, which describe study scenarios and objectives, have been developed by stakeholders
 - Phase 1 work was completed as the 2021 Economic Study
- Phase 2
 - Studies include: Revenue Sufficiency Analysis and Transmission Security
 - Studies will be delayed as the Pathways and 2050 Transmission studies are performed
 - Scope expected to be shared with stakeholders in the 2nd half of 2022



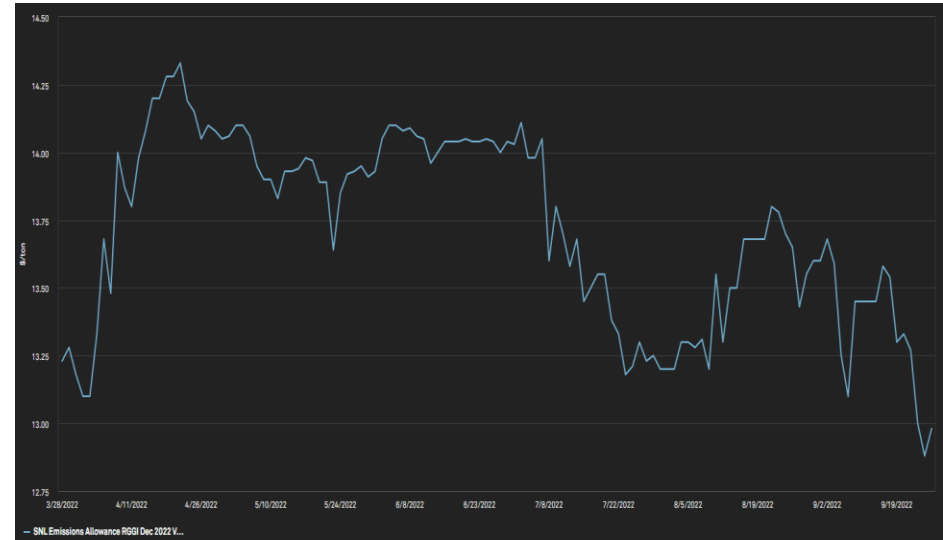
New England Power System Carbon Emissions

CO₂ emissions Up 8% year to year, reflects January oil-fired generation spike

2021 vs. 2022 New England Power System Estimated Carbon Dioxide (CO₂) Emissions



RGGI Allowance Prices Affected by Factors External to New England



- 9/26/22: RGGI allowance spot price - \$12.98 per allowance (1 allowance = 1 short ton CO₂)
- 9/7/22 57th RGGI auction cleared at \$13.45
 - Slight decrease in auction price from \$13.90 in previous (6/1/22) auction

Data as of 9/18/22

RGGI – Regional Greenhouse Gas Initiative

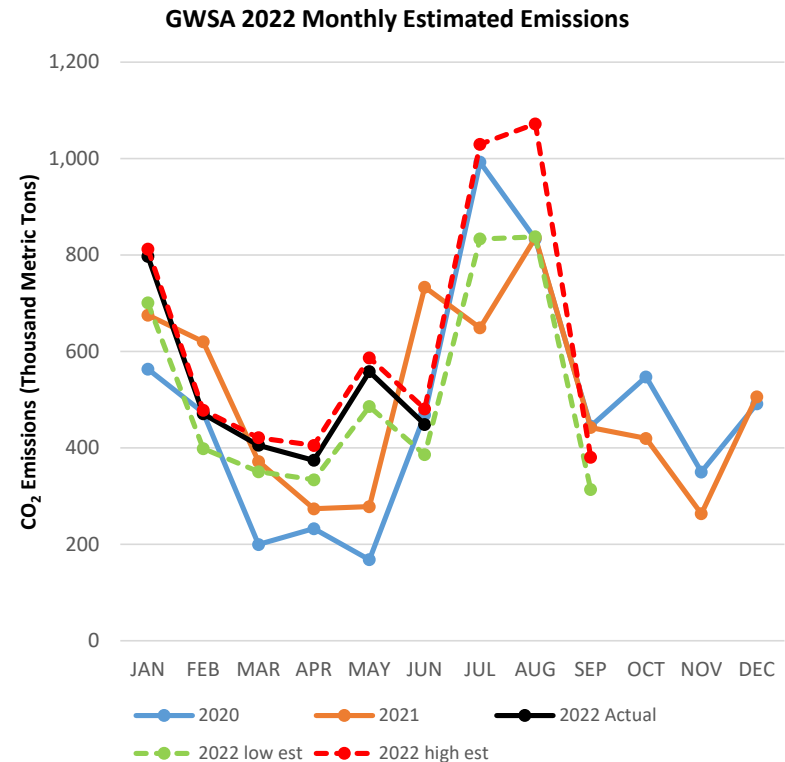
ISO-NE PUBLIC

Massachusetts CO₂ Generator Emissions Cap

2022 Estimated Emissions Under CO₂ Cap

- 9/26/22: 2022 estimated GWSA CO₂ emissions range between 4.6 and 5.7 MMT
 - 58% to 70% of the 8.06 MMT 2022 cap
- 9/14/22 GWSA auction cleared at \$14.73; 1.20 million 2022 vintage allowances sold
 - Clearing price was nearly \$5 above the previous auction
 - 0.39 million 2023 vintage GWSA allowances were also offered, clearing at \$7.51
- 2022 YTD estimated GWSA emissions range between 2% lower and 19% higher than YTD 2021 emissions

2020-2022 Estimated Monthly Emissions (Thousand Metric tons)



GWSA – Global Warming Solutions Act
MMT – Million Metric Tons

Sources: ISO-NE (estimated emissions); EPA (actual emissions)

RSP Project Stage Descriptions

| Stage | Description |
|-------|--|
| 1 | Planning and Preparation of Project Configuration |
| 2 | Pre-construction (e.g., material ordering, project scheduling) |
| 3 | Construction in Progress |
| 4 | In Service |

Note: The listings in this section focus on major transmission line construction and rebuilding.



Greater Boston Projects

Status as of 9/22/2022

Plan Benefit: Addresses long-term system needs in the Greater Boston area and improves system reliability

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------|---------------|
| 1213, 1220, 1365 | Install new 345 kV line from Scobie to Tewksbury | Dec-17 | 4 |
| 1527, 1528 | Reconductor the Y-151 115 kV line from Dracut Junction to Power Street | Apr-17 | 4 |
| 1212, 1549 | Reconductor the M-139 115 kV line from Tewksbury to Pinehurst and associated work at Tewksbury | May-17 | 4 |
| 1549 | Reconductor the N-140 115 kV line from Tewksbury to Pinehurst and associated work at Tewksbury | May-17 | 4 |
| 1260 | Reconductor the F-158N 115 kV line from Wakefield Junction to Maplewood and associated work at Maplewood | Dec-15 | 4 |
| 1550 | Reconductor the F-158S 115 kV line from Maplewood to Everett | Jun-19 | 4 |
| 1551, 1552 | Install new 345 kV cable from Woburn to Wakefield Junction, install two new 160 MVAR variable shunt reactors and associated work at Wakefield Junction and Woburn* | May-23 | 3* |
| 1329 | Refurbish X-24 69 kV line from Millbury to Northboro Road | Dec-15 | 4 |
| 1327 | Reconductor W-23W 69 kV line from Woodside to Northboro Road | Jun-19 | 4 |

* Substation portion of the project is a Present Stage status 4

Greater Boston Projects, cont.

Status as of 9/22/2022

Plan Benefit: Addresses long-term system needs in the Greater Boston area and improves system reliability

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|---|-----------------------------------|---------------|
| 1330 | Separate X-24 and E-157W DCT | Dec-18 | 4 |
| 1363 | Separate Q-169 and F-158N DCT | Dec-15 | 4 |
| 1637, 1640 | Reconductor M-139/211-503 and N-140/211-504 115 kV lines from Pinehurst to North Woburn tap | May-17 | 4 |
| 1516 | Install new 115 kV station at Sharon to segment three 115 kV lines from West Walpole to Holbrook | Sep-20 | 4 |
| 965 | Install third 115 kV line from West Walpole to Holbrook | Sep-20 | 4 |
| 1558 | Install new 345 kV breaker in series with the 104 breaker at Stoughton | May-16 | 4 |
| 1199 | Install new 230/115 kV autotransformer at Sudbury and loop the 282-602 230 kV line in and out of the new 230 kV switchyard at Sudbury | Dec-17 | 4 |
| 1335 | Install a new 115 kV line from Sudbury to Hudson | Dec-23 | 2 |

Greater Boston Projects, cont.

Status as of 9/22/2022

Plan Benefit: Addresses long-term system needs in the Greater Boston area and improves system reliability

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1336 | Replace 345/115 kV autotransformer, 345 kV breakers, and 115 kV switchgear at Woburn | Dec-19 | 4 |
| 1553 | Install a 345 kV breaker in series with breaker 104 at Woburn | Jun-17 | 4 |
| 1337 | Reconfigure Waltham by relocating PARs, 282-507 line, and a breaker | Dec-17 | 4 |
| 1339 | Upgrade 533-508 115 kV line from Lexington to Hartwell and associated work at the stations | Aug-16 | 4 |
| 1521 | Install a new 115 kV 54 MVAR capacitor bank at Newton | Dec-16 | 4 |
| 1522 | Install a new 115 kV 36.7 MVAR capacitor bank at Sudbury | May-17 | 4 |
| 1352 | Install a second Mystic 345/115 kV autotransformer and reconfigure the bus | May-19 | 4 |
| 1353 | Install a 115 kV breaker on the East bus at K Street | Jun-16 | 4 |
| 1354, 1738 | Install 115 kV cable from Mystic to Chelsea and upgrade Chelsea 115 kV station to BPS standards | Jul-21 | 4 |
| 1355 | Split 110-522 and 240-510 DCT from Baker Street to Needham for a portion of the way and install a 115 kV cable for the rest of the way | Mar-21 | 4 |

Greater Boston Projects, cont.

Status as of 9/22/2022

Plan Benefit: Addresses long-term system needs in the Greater Boston area and improves system reliability

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------|---------------|
| 1356 | Install a second 115 kV cable from Mystic to Woburn to create a bifurcated 211-514 line | Dec-22 | 3 |
| 1357 | Open lines 329-510/511 and 250-516/517 at Mystic and Chatham, respectively. Operate K Street as a normally closed station. | May-19 | 4 |
| 1518 | Upgrade Kingston to create a second normally closed 115 kV bus tie and reconfigure the 345 kV switchyard | Mar-19 | 4 |
| 1519 | Relocate the Chelsea capacitor bank to the 128-518 termination postion | Dec-16 | 4 |



Greater Boston Projects, cont.

Status as of 9/22/2022

Plan Benefit: Addresses long-term system needs in the Greater Boston area and improves system reliability

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|---|-----------------------------------|---------------|
| 1520 | Upgrade North Cambridge to mitigate 115 kV 5 and 10 stuck breaker contingencies | Dec-17 | 4 |
| 1643 | Install a 200 MVAR STATCOM at Coopers Mills | Nov-18 | 4 |
| 1341, 1645 | Install a 115 kV 36.7 MVAR capacitor bank at Hartwell | May-17 | 4 |
| 1646 | Install a 345 kV 160 MVAR shunt reactor at K Street | Dec-19 | 4 |
| 1647 | Install a 115 kV breaker in series with the 5 breaker at Framingham | Mar-17 | 4 |
| 1554 | Install a 115 kV breaker in series with the 29 breaker at K Street | Apr-17 | 4 |



SEMA/RI Reliability Projects

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Southeast Massachusetts/Rhode Island area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------|---------------|
| 1714 | Construct a new 115 kV GIS switching station (Grand Army) which includes remote terminal station work at Brayton Point and Somerset substations, and the looping in of the E-183E, F-184, X3, and W4 lines | Oct-20 | 4 |
| 1742 | Conduct remote terminal station work at the Wampanoag and Pawtucket substations for the new Grand Army GIS switching station | Oct-20 | 4 |
| 1715 | Install upgrades at Brayton Point substation which include a new 115 kV breaker, new 345/115 kV transformer, and upgrades to E183E, F184 station equipment | Oct-20 | 4 |
| 1716 | Increase clearances on E-183E & F-184 lines between Brayton Point and Grand Army substations | Nov-19 | 4 |
| 1717 | Separate the X3/W4 DCT and reconductor the X3 and W4 lines between Somerset and Grand Army substations; reconfigure Y2 and Z1 lines | Nov-19 | 4 |

SEMA/RI Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Southeast Massachusetts/Rhode Island area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------|---------------|
| 1718 | Add 115 kV circuit breaker at Robinson Ave substation and re-terminate the Q10 line | Mar-22 | 4 |
| 1719 | Install 45.0 MVAR capacitor bank at Berry Street substation | Cancelled* | N/A |
| 1720 | Separate the N12/M13 DCT and reconductor the N12 and M13 between Somerset and Bell Rock substations | May-25 | 2 |
| 1721 | Reconfigure Bell Rock to breaker-and-a-half station, split the M13 line at Bell Rock substation, and terminate 114 line at Bell Rock; install a new breaker in series with N12/D21 tie breaker, upgrade D21 line switch, and install a 37.5 MVAR capacitor | Dec-23 | 3 |
| 1722 | Extend the Line 114 from the Dartmouth town line (Eversource-National Grid border) to Bell Rock substation | Dec-24 | 1 |
| 1723 | Reconductor L14 and M13 lines from Bell Rock substation to Bates Tap | Cancelled* | N/A |

*Cancelled per ISO-NE PAC presentation on August 27, 2020



SEMA/RI Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Southeast Massachusetts/Rhode Island area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1725 | Build a new 115 kV line from Bourne to West Barnstable substations which includes associated terminal work | Dec-23 | 1 |
| 1726 | Separate the 135/122 DCT from West Barnstable to Barnstable substations | Dec-21 | 4 |
| 1727 | Retire the Barnstable SPS | Nov-21 | 4 |
| 1728 | Build a new 115 kV line from Carver to Kingston substations and add a new Carver terminal | Jun-23 | 3 |
| 1729 | Install a new bay position at Kingston substation to accommodate new 115 kV line | Jun-23 | 3 |
| 1730 | Extend the 114 line from the Eversource/National Grid border to the Industrial Park Tap | Dec-24 | 1 |



SEMA/RI Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Southeast Massachusetts/Rhode Island area

| RSP Project List ID | Upgrade | Expected/Actual In-Service | Present Stage |
|---------------------|---|----------------------------|---------------|
| 1731 | Install 35.3 MVAR capacitors at High Hill and Wing Lane substations | Dec-21 | 4 |
| 1732 | Loop the 201-502 line into the Medway substation to form the 201-502N and 201-502S lines | Dec-25 | 3 |
| 1733 | Separate the 325/344 DCT lines from West Medway to West Walpole substations | Cancelled** | N/A |
| 1734 | Reconductor and upgrade the 112 Line from the Tremont substation to the Industrial Tap | Jun-18 | 4 |
| 1736 | Reconductor the 108 line from Bourne substation to Horse Pond Tap* | Oct-18 | 4 |
| 1737 | Replace disconnect switches on 323 line at West Medway substation and replace 8 line structures | Aug-20 | 4 |

* Does not include the reconductoring work over the Cape Cod canal

** Cancelled per ISO-NE PAC presentation on August 27, 2020



SEMA/RI Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Southeast Massachusetts/Rhode Island area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|---|-----------------------------|---------------|
| 1741 | Rebuild the Middleborough Gas and Electric portion of the E1 line from Bridgewater to Middleborough | Apr-19 | 4 |
| 1782 | Reconductor the J16S line | May 22 | 4 |
| 1724 | Replace the Kent County 345/115 kV transformer | Mar-22 | 4 |
| 1789 | West Medway 345 kV circuit breaker upgrades | Apr-21 | 4 |
| 1790 | Medway 115 kV circuit breaker replacements | Nov-20 | 4 |



Eastern CT Reliability Projects

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Eastern Connecticut area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1815 | Reconductor the L190-4 and L190-5 line sections | Dec-24 | 2 |
| 1850 | Install a second 345/115 kV autotransformer (4X) and one 345 kV breaker at Card substation | Mar-23 | 3 |
| 1851 | Upgrade Card 115 kV to BPS standards | Mar-23 | 3 |
| 1852 | Install one 115 kV circuit breaker in series with Card substation 4T | Mar-23 | 3 |
| 1853 | Convert Gales Ferry substation from 69 kV to 115 kV | Dec-23 | 3 |
| 1854 | Rebuild the 100 Line from Montville to Gales Ferry to allow operation at 115 kV | Dec-22 | 3 |



Eastern CT Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Eastern Connecticut area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1855 | Re-terminate the 100 Line at Montville station and associated work. Energize the 100 Line at 115 kV | Dec-23 | 3 |
| 1856 | Rebuild 400-1 Line section to allow operation at 115 kV (Tunnel to Ledyard Jct.) | Dec-22 | 3 |
| 1857 | Add one 115 kV circuit breaker and re-terminate the 400-1 line section into Tunnel substation. Energize 400 Line at 115 kV | Dec-23 | 3 |
| 1858 | Rebuild 400-2 Line section to allow operation at 115 kV (Ledyard Jct. to Border Bus with CMEEC) | Dec-22 | 3 |
| 1859 | Rebuild the 400-3 Line Section to allow operation at 115 kV (Gales Ferry to Ledyard Jct.) | Dec-22 | 3 |
| 1860 | Install a 25.2 MVAR 115 kV capacitor and one capacitor breaker at Killingly | Dec-21 | 4 |

Eastern CT Reliability Projects, cont.

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Eastern Connecticut area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------|---------------|
| 1861 | Install one 345 kV series breaker with the Montville 1T | Nov-21 | 4 |
| 1862 | Install a 50 MVAR synchronous condenser with two 115 kV breakers at Shunock | Dec-24 | 3 |
| 1863 | Install a 1% series reactor with bypass switch at Mystic, CT on the 1465 Line | Mar-22 | 4 |
| 1864 | Convert the 400-2 Line Section to 115 kV (Border Bus to Buddington) | Dec-23 | 3 |
| 1904 | Convert 69 kV equipment at Buddington to 115 kV to facilitate the conversion of the 400-2 line to 115 kV | Dec-23 | 3 |



Boston Area Optimized Solution Projects

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Boston area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1874 | Install two 11.9 ohm series reactors at North Cambridge Station on Lines 346 and 365 | Dec-21 | 4 |
| 1875 | Install a direct transfer trip (DTT) scheme between Ward Hill and West Amesbury Substations for Line 394 | Apr-22 | 4 |
| 1876 | Install one +/- 167 MVAR STATCOM at Tewksbury 345 kV Substation | Oct-23 | 3 |



New Hampshire Solution Projects

Status as of 9/22/2022

Project Benefit: Addresses system needs in the New Hampshire area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|--|-----------------------------------|---------------|
| 1878 | Install a +50/-25 MVAR synchronous condenser at N. Keene 115 kV Substation with a 115 kV breaker | Aug-23 | 3 |
| 1879 | Install a +50/-25 MVAR synchronous condenser at Huckins Hill 115 kV Substation with a 115 kV breaker | Aug-23 | 3 |
| 1880 | Install a +100/-50 MVAR synchronous condenser at Amherst 345 kV Substation with two 345 kV breakers | Dec-23 | 2 |
| 1881 | Install two 50 MVAR capacitors on Line 363 near Seabrook Station with three 345 kV breakers | Oct-23 | 2 |



Upper Maine Solution Projects

Status as of 9/22/2022

Project Benefit: Addresses system needs in the Upper Maine area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|---|-----------------------------------|---------------|
| 1882 | Rebuild 21.7 miles of the existing 115 kV line Section 80 Highland – Coopers Mills 115 kV line | Dec-24 | 2 |
| 1883 | Convert the Highland 115 kV substation to an eight breaker, breaker-and-a-half configuration with a bus connected 115/34.5 kV transformer | Dec-27 | 1 |
| 1884 | Install a 15 MVAR capacitor at Belfast 115 kV substation | Dec-27 | 1 |
| 1885 | Install a +50/-25 MVAR synchronous condenser at Highland 115 kV substation | Dec-27 | 1 |
| 1886 | Install +50/-25 MVAR synchronous condenser at Boggy Brook 115 kV substation, and install a new 115 kV breaker to separate Line 67 from the proposed solution elements | Jun-24 | 2 |



Upper Maine Solution Projects, cont.

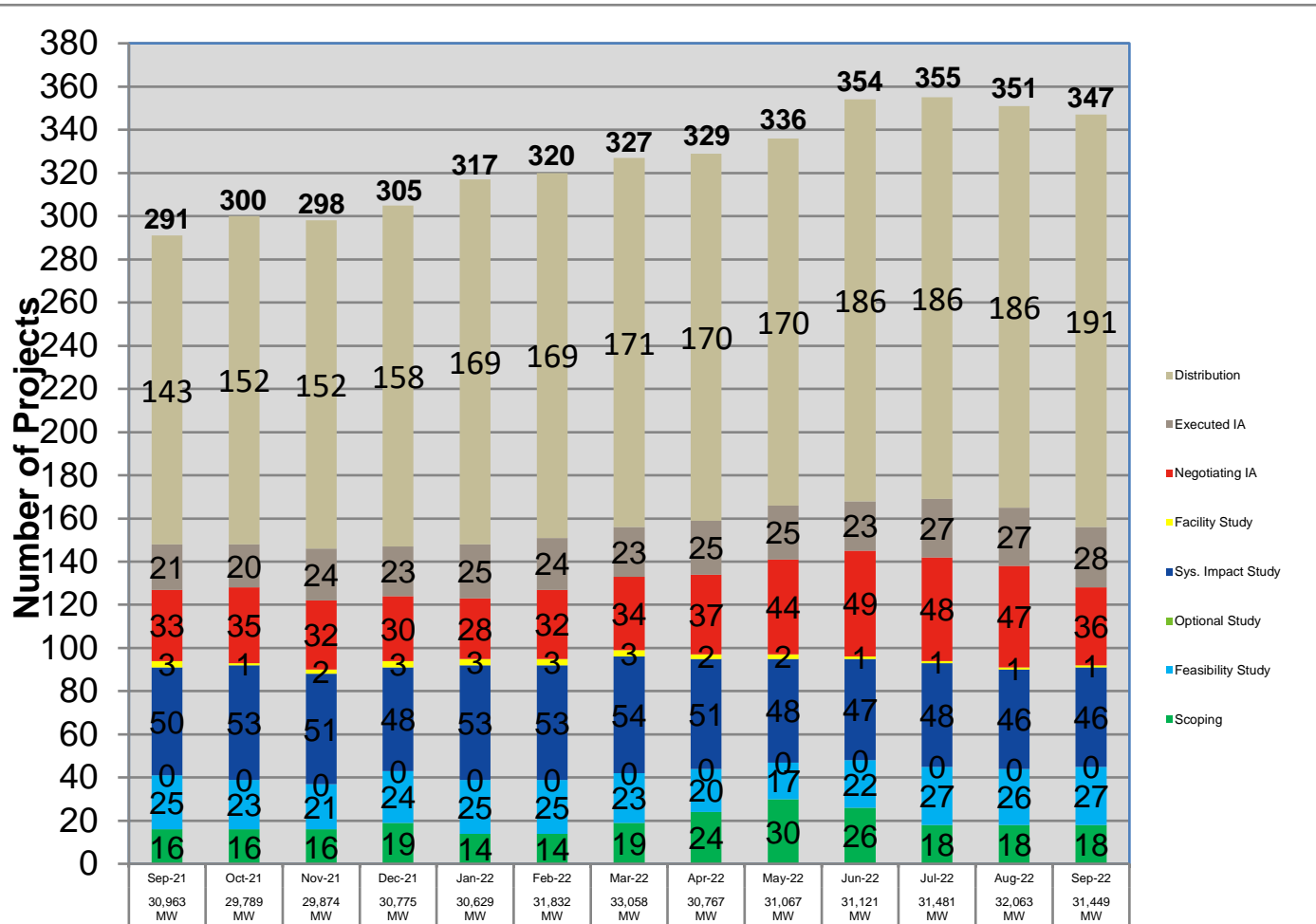
Status as of 9/22/2022

Project Benefit: Addresses system needs in the Upper Maine area

| RSP Project List ID | Upgrade | Expected/ Actual In-Service | Present Stage |
|---------------------|---|-----------------------------------|---------------|
| 1887 | Install 25 MVAR reactor at Boggy Brook 115 kV substation | Jun-24 | 2 |
| 1888 | Install 10 MVAR reactor at Keene Road 115 kV substation | Jun-24 | 2 |
| 1889 | Install three remotely monitored and controlled switches to split the existing Orrington reactors between the two Orrington 345/115 kV autotransformers | Dec-23 | 2 |



Status of Tariff Studies as of September 28, 2022



Generator Project Status

Note: September 2022 is based on partial data.

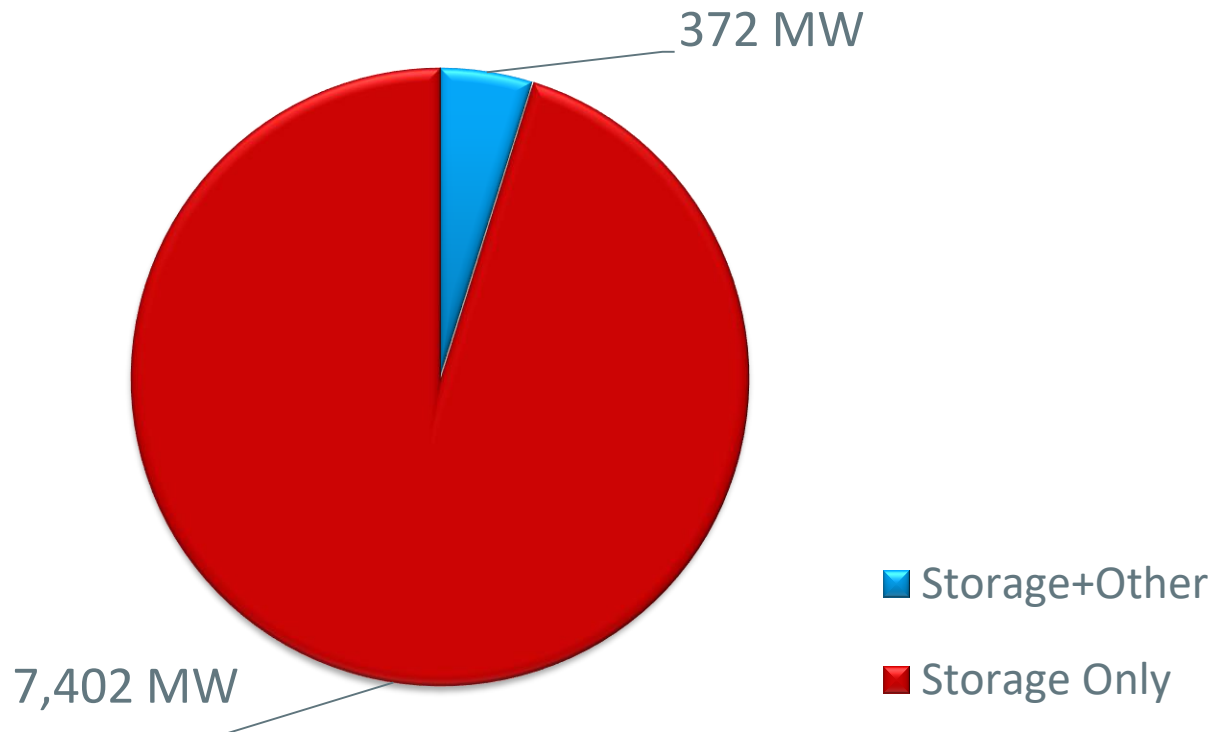
8 ETUs in Scoping, 2 in FS, 0 in SIS, 0 in OIS, 0 in FAC, 2 Negotiating IA, and 3 with Executed IA

Transmission Service Requests needing study: 2 in Scoping and 1 in SIS

<https://irtt.iso-ne.com/external.aspx>

What is in the Queue (as of September 28, 2022)

Storage Projects are proposed as stand-alone storage or as co-located with wind or solar projects



OPERABLE CAPACITY ANALYSIS

Fall 2022 Analysis



Fall 2022 Operable Capacity Analysis

| 50/50 Load Forecast (Reference) | Oct. - 2022 ² CSO (MW) | Oct. - 2022 ² SCC (MW) |
|---|--------------------------------------|--------------------------------------|
| Operable Capacity MW ¹ | 28,171 | 31,975 |
| Active Demand Capacity Resource (+) ⁵ | 559 | 410 |
| External Node Available Net Capacity, CSO imports minus firm capacity exports (+) | 1,070 | 1,070 |
| Non Commercial Capacity (+) | 62 | 62 |
| Non Gas-fired Planned Outage MW (-) | 2,655 | 3,247 |
| Gas Generator Outages MW (-) | 3,250 | 4,191 |
| Allowance for Unplanned Outages (-) ⁴ | 3,600 | 3,600 |
| Generation at Risk Due to Gas Supply (-) ³ | 0 | 0 |
| Net Capacity (NET OPCAP SUPPLY MW) | 20,357 | 22,479 |
| Peak Load Forecast MW(adjusted for Other Demand Resources) ² | 16,687 | 16,687 |
| Operating Reserve Requirement MW | 2,305 | 2,305 |
| Operable Capacity Required (NET LOAD OBLIGATION MW) | 18,992 | 18,992 |
| Operable Capacity Margin | 1,365 | 3,487 |

¹Operable Capacity is based on data as of **September 27, 2022** and does not include Capacity associated with Settlement Only Generators, Passive and Active Demand Response, and external capacity. The Capacity Supply Obligation (CSO) and Seasonal Claim Capability (SCC) values are based on data as of **September 27, 2022**.

² Load forecast that is based on the 2022 CELT report and represents the week with the lowest Operable Capacity Margin, week beginning **October 29, 2022**.

³ Total of (Gas at Risk MW) – (Gas Gen Outages MW).

⁴ Allowance For Unplanned Outage MW is based on the month corresponding to the day with the lowest Operable Capacity Margin for the week.

⁵ Active Demand Capacity Resources (ADCRs) can participate in the Forward Capacity Market (FCM), have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.

Fall 2022 Operable Capacity Analysis

| 90/10 Load Forecast | Oct. - 2022 ² CSO (MW) | Oct. - 2022 ² SCC (MW) |
|---|--------------------------------------|--------------------------------------|
| Operable Capacity MW ¹ | 28,171 | 31,975 |
| Active Demand Capacity Resource (+) ⁵ | 559 | 410 |
| External Node Available Net Capacity, CSO imports minus firm capacity exports (+) | 1,070 | 1,070 |
| Non Commercial Capacity (+) | 62 | 62 |
| Non Gas-fired Planned Outage MW (-) | 2,655 | 3,247 |
| Gas Generator Outages MW (-) | 3,250 | 4,191 |
| Allowance for Unplanned Outages (-) ⁴ | 3,600 | 3,600 |
| Generation at Risk Due to Gas Supply (-) ³ | 0 | 0 |
| Net Capacity (NET OPCAP SUPPLY MW) | 20,357 | 22,479 |
| Peak Load Forecast MW(adjusted for Other Demand Resources) ² | 17,274 | 17,274 |
| Operating Reserve Requirement MW | 2,305 | 2,305 |
| Operable Capacity Required (NET LOAD OBLIGATION MW) | 19,579 | 19,579 |
| Operable Capacity Margin | 778 | 2,900 |

¹Operable Capacity is based on data as of **September 27, 2022** and does not include Capacity associated with Settlement Only Generators, Passive and Active Demand Response, and external capacity. The Capacity Supply Obligation (CSO) and Seasonal Claim Capability (SCC) values are based on data as of **September 27, 2022**.

² Load forecast that is based on the 2022 CELT report and represents the week with the lowest Operable Capacity Margin, week beginning **October 29, 2022**.

³ Total of (Gas at Risk MW) – (Gas Gen Outages MW).

⁴ Allowance For Unplanned Outage MW is based on the month corresponding to the day with the lowest Operable Capacity Margin for the week.

⁵ Active Demand Capacity Resources (ADCRs) can participate in the Forward Capacity Market (FCM), have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.

Fall 2022 Operable Capacity Analysis

50/50 Forecast (Reference)

ISO-NE OPERABLE CAPACITY ANALYSIS

September 27, 2022 - 50/50 FORECAST using CSO MW

This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week from October through November.

Report created: 9/27/2022

| Study Week (Week Beginning , Saturday) | CSO Supply Resource Capacity MW | CSO Demand Resource Capacity MW | External Node Capacity MW | Non-Commercial Capacity MW | CSO Non Gas- Only Generator Planned Outages MW | CSO Gas-Only Generator Planned Outages MW | Unplanned Outages Allowance MW | CSO Generation at Risk Due to Gas Supply 50- 50PLE MW | CSO Net Available Capacity MW | Peak Load Forecast 50- 50PLE MW | Operating Reserve Requirement MW | CSO Net Required Capacity MW | CSO Operable Capacity Margin MW | Season Min Opcap Margin Flag | |
|--|---------------------------------------|---------------------------------------|------------------------------|-------------------------------|---|--|--------------------------------------|--|-------------------------------------|---------------------------------------|---|------------------------------------|---------------------------------------|---------------------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 10/15/2022 | 28060 | 511 | 1046 | 13 | 3159 | 2503 | 2800 | 0 | 21168 | 16121 | 2305 | 18426 | 2742 | N | Fall 2022 |
| 10/22/2022 | 28060 | 511 | 1046 | 13 | 1666 | 2101 | 2800 | 0 | 23063 | 16482 | 2305 | 18787 | 4276 | N | Fall 2022 |
| 10/29/2022 | 28171 | 559 | 1070 | 62 | 2655 | 3250 | 3600 | 0 | 20357 | 16687 | 2305 | 18992 | 1365 | Y | Fall 2022 |
| 11/5/2022 | 28171 | 559 | 1070 | 62 | 2686 | 2397 | 3600 | 0 | 21179 | 16802 | 2305 | 19107 | 2072 | N | Fall 2022 |
| 11/12/2022 | 28171 | 559 | 1070 | 62 | 2257 | 1414 | 3600 | 0 | 22591 | 17143 | 2305 | 19448 | 3143 | N | Fall 2022 |
| 11/19/2022 | 28171 | 559 | 1070 | 62 | 1494 | 296 | 3600 | 1074 | 23398 | 17875 | 2305 | 20180 | 3218 | N | Fall 2022 |

Column Definitions

- CSO Supply Resource Capacity MW:** Summation of all resource Capacity supply Obligations (CSO). Does not include Settlement Only Generators (SOG).
- CSO Demand Resource Capacity MW:** Demand resources known as Real-Time Demand Response (RTDR) will become Active Demand Capacity Resources (ADCRs) and can participate in the Forward Capacity market (FCM). These resources will have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.
- External Node Capacity MW:** Sum of external Capacity Supply Obligations (CSO) imports and exports.
- Non-Commercial capacity MW:** New resources and generator improvements that have acquired a CSO but have not become commercial.
- CSO Non Gas-Only Generator Planned Outages MW:** All Non-Gas Planned Outages is the total of Non Gas-fired Generator/DARD Outages for the period. This value would also include any known long-term Non Gas-fired Forced Outages.
- CSO Gas-Only Generator Planned Outages MW:** All Planned Gas-fired generation outage for the period. This value would also include any known long-term Gas-fired Forced Outages.
- Unplanned Outage Allowance MW:** Forced Outages and Maintenance Outages scheduled less than 14 days in advance per ISO New England Operating Procedure No. 5 Appendix A.
- CSO Generation at Risk Due to Gas Supply Mw:** Gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.
- CSO Net Available Capacity MW:** the summation of columns (1+2+3+4-5-6-7-8-9)
- Peak Load Forecast MW:** Provided in the annual 2022 CELT Report and adjusted for Passive Demand Resources assumes Peak Load Exposure (PLE) and does include credit of Passive Demand Response (PDR) and behind-the-meter PV (BTM PV).
- Operating Reserve Requirement MW:** 120% of first largest contingency plus 50% of the second largest contingency.
- CSO Net Required Capacity MW:** (Net Load Obligation) (10+11=12)
- CSO Operable Capacity Margin MW:** CSO Net Available Capacity MW minus CSO Net Required Capacity MW (9-12=13)
- Operable Capacity Season Label:** Applicable season and year.
- Season Minimum Operable Capacity Flag:** this column indicates whether or not a week has the lowest capacity margin for its applicable season.

Fall 2022 Operable Capacity Analysis

90/10 Forecast

ISO-NE OPERABLE CAPACITY ANALYSIS

September 27, 2022 - 90/10 FORECAST using CSO MW

This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week from October through November.

Report created: 9/27/2022

| Study Week (Week Beginning , Saturday) | CSO Supply Resource Capacity MW | CSO Demand Resource Capacity MW | External Node Capacity MW | Non-Commercial Capacity MW | CSO Non Gas- Only Generator Planned Outages MW | CSO Gas-Only Generator Planned Outages MW | Unplanned Outages Allowance MW | CSO Generation at Risk Due to Gas Supply 90- 10PLE MW | CSO Net Available Capacity MW | Peak Load Forecast 90- 10PLE MW | Operating Reserve Requirement MW | CSO Net Required Capacity MW | CSO Operable Capacity Margin MW | Season Min Opcap Margin Flag | Season_Label |
|--|---------------------------------------|---------------------------------------|------------------------------|-------------------------------|---|--|--------------------------------------|--|-------------------------------------|---------------------------------------|---|------------------------------------|---------------------------------------|---------------------------------|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 10/15/2022 | 28060 | 511 | 1046 | 13 | 3159 | 2503 | 2800 | 0 | 21168 | 16690 | 2305 | 18995 | 2173 | N | Fall 2022 |
| 10/22/2022 | 28060 | 511 | 1046 | 13 | 1666 | 2101 | 2800 | 0 | 23063 | 17063 | 2305 | 19368 | 3695 | N | Fall 2022 |
| 10/29/2022 | 28171 | 559 | 1070 | 62 | 2655 | 3250 | 3600 | 0 | 20357 | 17274 | 2305 | 19579 | 778 | Y | Fall 2022 |
| 11/5/2022 | 28171 | 559 | 1070 | 62 | 2686 | 2397 | 3600 | 0 | 21179 | 17392 | 2305 | 19697 | 1482 | N | Fall 2022 |
| 11/12/2022 | 28171 | 559 | 1070 | 62 | 2257 | 1414 | 3600 | 121 | 22470 | 17744 | 2305 | 20049 | 2421 | N | Fall 2022 |
| 11/19/2022 | 28171 | 559 | 1070 | 62 | 1494 | 296 | 3600 | 2009 | 22463 | 18498 | 2305 | 20803 | 1660 | N | Fall 2022 |

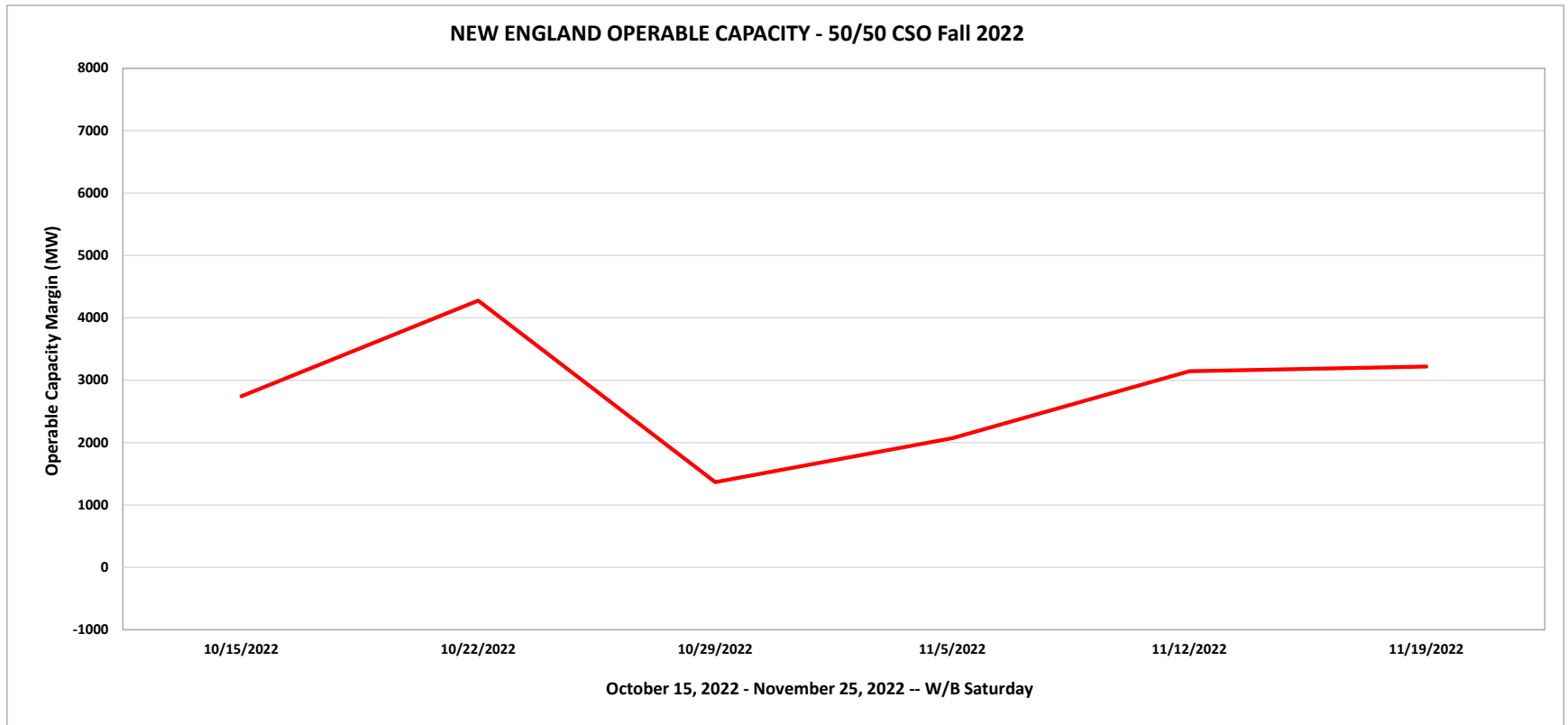
Column Definitions

- CSO Supply Resource Capacity MW:** Summation of all resource Capacity supply Obligations (CSO). Does not include Settlement Only Generators (SOG).
- CSO Demand Resource Capacity MW:** Demand resources known as Real-Time Demand Response (RTDR) will become Active Demand Capacity Resources (ADCRs) and can participate in the Forward Capacity market (FCM). These resources will have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.
- External Node Capacity MW:** Sum of external Capacity Supply Obligations (CSO) imports and exports.
- Non-Commercial capacity MW:** New resources and generator improvements that have acquired a CSO but have not become commercial.
- CSO Non Gas-Only Generator Planned Outages MW:** All Non-Gas Planned Outages is the total of Non Gas-fired Generator/DARD Outages for the period. This value would also include any known long-term Non Gas-fired Forced Outages.Outages.
- CSO Gas-Only Generator Planned Outages MW:** All Planned Gas-fired generation outage for the period. This value would also include any known long-term Gas-fired Forced Outages.
- Unplanned Outage Allowance MW:** Forced Outages and Maintenance Outages scheduled less than 14 days in advance per ISO New England Operating Procedure No. 5 Appendix A.
- CSO Generation at Risk Due to Gas Supply Mw:** Gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.
- CSO Net Available Capacity MW:** the summation of columns (1+2+3+4-5-6-7-8=9)
- Peak Load Forecast MW:** Provided in the annual 2022 CELT Report and adjusted for Passive Demand Resources assumes Peak Load Exposure (PLE) and does include credit of Passive Demand Response (PDR) and behind-the-meter PV (BTM PV).
- Operating Reserve Requirement MW:** 120% of first largest contingency plus 50% of the second largest contingency.
- CSO Net Required Capacity MW:** (Net Load Obligation) (10+11=12)
- CSO Operable Capacity Margin MW:** CSO Net Available Capacity MW minus CSO Net Required Capacity MW (9-12=13)
- Operable Capacity Season Label:** Applicable season and year.
- Season Minimum Operable Capacity Flag:** this column indicates whether or not a week has the lowest capacity margin for its applicable season.

*Highlighted week is based on the week determined by the 50/50 Load Forecast Reference week

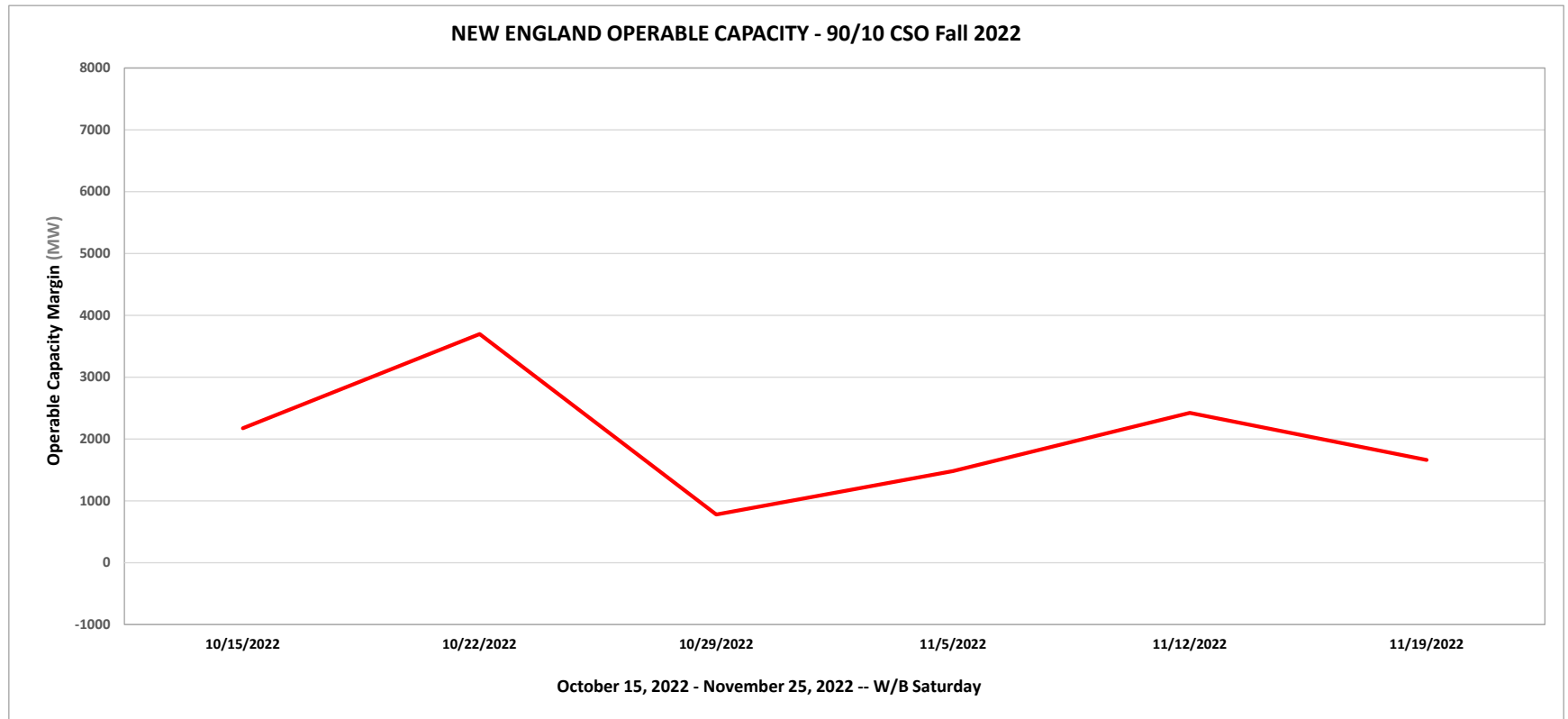
Fall 2022 Operable Capacity Analysis

50/50 Forecast (Reference)



Fall 2022 Operable Capacity Analysis

90/10 Forecast



OPERABLE CAPACITY ANALYSIS

Preliminary Winter 2022/23 Analysis



Preliminary Winter 2022/23 Operable Capacity Analysis

| 50/50 Load Forecast (Reference) | Jan. - 2023 ² CSO (MW) | Jan. - 2023 ² SCC (MW) |
|---|--------------------------------------|--------------------------------------|
| Operable Capacity MW ¹ | 28,247 | 31,975 |
| Active Demand Capacity Resource (+) ⁵ | 560 | 410 |
| External Node Available Net Capacity, CSO imports minus firm capacity exports (+) | 1,070 | 1,070 |
| Non Commercial Capacity (+) | 62 | 62 |
| Non Gas-fired Planned Outage MW (-) | 89 | 195 |
| Gas Generator Outages MW (-) | 7 | 151 |
| Allowance for Unplanned Outages (-) ⁴ | 2,800 | 2,800 |
| Generation at Risk Due to Gas Supply (-) ³ | 3,728 | 4,136 |
| Net Capacity (NET OPCAP SUPPLY MW) | 23,315 | 26,235 |
| Peak Load Forecast MW (adjusted for Other Demand Resources) ² | 20,009 | 20,009 |
| Operating Reserve Requirement MW | 2,305 | 2,305 |
| Operable Capacity Required (NET LOAD OBLIGATION MW) | 22,314 | 22,314 |
| Operable Capacity Margin | 1,001 | 3,921 |

¹Operable Capacity is based on data as of **September 27, 2022** and does not include Capacity associated with Settlement Only Generators, Passive and Active Demand Response, and external capacity. The Capacity Supply Obligation (CSO) and Seasonal Claim Capability (SCC) values are based on data as of **September 27, 2022**.

² Load forecast that is based on the 2022 CELT report and represents the week with the lowest Operable Capacity Margin, week beginning **January 7, 2023**.

³ Total of (Gas at Risk MW) – (Gas Gen Outages MW).

⁴ Allowance For Unplanned Outage MW is based on the month corresponding to the day with the lowest Operable Capacity Margin for the week.

⁵ Active Demand Capacity Resources (ADCRs) can participate in the Forward Capacity Market (FCM), have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.

Preliminary Winter 2022/23 Operable Capacity Analysis

| 90/10 Load Forecast | Jan. - 2023 ² CSO (MW) | Jan. - 2023 ² SCC (MW) |
|---|--------------------------------------|--------------------------------------|
| Operable Capacity MW ¹ | 28,247 | 31,975 |
| Active Demand Capacity Resource (+) ⁵ | 560 | 410 |
| External Node Available Net Capacity, CSO imports minus firm capacity exports (+) | 1,070 | 1,070 |
| Non Commercial Capacity (+) | 62 | 62 |
| Non Gas-fired Planned Outage MW (-) | 89 | 195 |
| Gas Generator Outages MW (-) | 7 | 151 |
| Allowance for Unplanned Outages (-) ⁴ | 2,800 | 2,800 |
| Generation at Risk Due to Gas Supply (-) ³ | 4,539 | 5,066 |
| Net Capacity (NET OPCAP SUPPLY MW) | 22,504 | 25,305 |
| Peak Load Forecast MW (adjusted for Other Demand Resources) ² | 20,695 | 20,695 |
| Operating Reserve Requirement MW | 2,305 | 2,305 |
| Operable Capacity Required (NET LOAD OBLIGATION MW) | 23,000 | 23,000 |
| Operable Capacity Margin | -496 | 2,305 |

¹Operable Capacity is based on data as of **September 27, 2022** and does not include Capacity associated with Settlement Only Generators, Passive and Active Demand Response, and external capacity. The Capacity Supply Obligation (CSO) and Seasonal Claim Capability (SCC) values are based on data as of **September 27, 2022**.

² Load forecast that is based on the 2022 CELT report and represents the week with the lowest Operable Capacity Margin, week beginning **January 7, 2023**.

³ Total of (Gas at Risk MW) – (Gas Gen Outages MW).

⁴ Allowance For Unplanned Outage MW is based on the month corresponding to the day with the lowest Operable Capacity Margin for the week.

⁵ Active Demand Capacity Resources (ADCRs) can participate in the Forward Capacity Market (FCM), have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.

Preliminary Winter 2022/23 Operable Capacity Analysis

50/50 Forecast (Reference)

ISO-NE OPERABLE CAPACITY ANALYSIS

September 27, 2022 - 50-50 FORECAST using CSO MW

This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week from December through March.

Report created: 9/27/2022

| Study Week (Week Beginning , Saturday) | CSO Supply Resource Capacity MW | CSO Demand Resource Capacity MW | External Node Capacity MW | Non-Commercial Capacity MW | CSO Non Gas- Only Generator Planned Outages MW | CSO Gas-Only Generator Planned Outages MW | Unplanned Outages Allowance MW | CSO Generation at Risk Due to Gas Supply 50- 50PLE MW | CSO Net Available Capacity MW | Peak Load Forecast 50- 50PLE MW | Operating Reserve Requirement MW | CSO Net Required Capacity MW | CSO Operable Capacity Margin MW | Season Min Opcap Margin Flag | Season_Label |
|--|---------------------------------------|---------------------------------------|------------------------------|-------------------------------|---|--|--------------------------------------|--|-------------------------------------|---------------------------------------|---|------------------------------------|---------------------------------------|---------------------------------|------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 11/26/2022 | 28171 | 559 | 1070 | 62 | 506 | 296 | 3600 | 1662 | 23798 | 18588 | 2305 | 20893 | 2905 | N | Winter 2022/2023 |
| 12/3/2022 | 28247 | 560 | 1070 | 62 | 412 | 578 | 3200 | 1804 | 23945 | 18919 | 2305 | 21224 | 2721 | N | Winter 2022/2023 |
| 12/10/2022 | 28247 | 560 | 1070 | 62 | 420 | 213 | 3200 | 2368 | 23738 | 19205 | 2305 | 21510 | 2228 | N | Winter 2022/2023 |
| 12/17/2022 | 28247 | 560 | 1070 | 62 | 391 | 49 | 3200 | 2745 | 23554 | 19216 | 2305 | 21521 | 2033 | N | Winter 2022/2023 |
| 12/24/2022 | 28247 | 560 | 1070 | 62 | 61 | 7 | 3200 | 3134 | 23537 | 19278 | 2305 | 21583 | 1954 | N | Winter 2022/2023 |
| 12/31/2022 | 28247 | 560 | 1070 | 62 | 108 | 7 | 2800 | 3733 | 23291 | 19549 | 2305 | 21854 | 1437 | N | Winter 2022/2023 |
| 1/7/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 3728 | 23315 | 20009 | 2305 | 22314 | 1001 | Y | Winter 2022/2023 |
| 1/14/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 3583 | 23460 | 20009 | 2305 | 22314 | 1146 | N | Winter 2022/2023 |
| 1/21/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 3134 | 23909 | 20009 | 2305 | 22314 | 1595 | N | Winter 2022/2023 |
| 1/28/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 2835 | 23935 | 19789 | 2305 | 22094 | 1841 | N | Winter 2022/2023 |
| 2/4/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 2536 | 24234 | 19524 | 2305 | 21829 | 2405 | N | Winter 2022/2023 |
| 2/11/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 2237 | 24533 | 19496 | 2305 | 21801 | 2732 | N | Winter 2022/2023 |
| 2/18/2023 | 28247 | 560 | 1070 | 62 | 35 | 7 | 3100 | 1788 | 25009 | 19236 | 2305 | 21541 | 3468 | N | Winter 2022/2023 |
| 2/25/2023 | 28247 | 560 | 1070 | 62 | 210 | 7 | 3100 | 1489 | 25133 | 18258 | 2305 | 20563 | 4570 | N | Winter 2022/2023 |
| 3/4/2023 | 28247 | 560 | 1070 | 62 | 177 | 783 | 2200 | 414 | 26365 | 17912 | 2305 | 20217 | 6148 | N | Winter 2022/2023 |
| 3/11/2023 | 28247 | 560 | 1070 | 62 | 177 | 290 | 2200 | 308 | 26964 | 17718 | 2305 | 20023 | 6941 | N | Winter 2022/2023 |
| 3/18/2023 | 28247 | 560 | 1070 | 62 | 867 | 1179 | 2200 | 0 | 25693 | 17357 | 2305 | 19662 | 6031 | N | Winter 2022/2023 |
| 3/25/2023 | 28247 | 560 | 1070 | 62 | 826 | 2162 | 2200 | 0 | 24751 | 16797 | 2305 | 19102 | 5649 | N | Winter 2022/2023 |

Column Definitions

- CSO Supply Resource Capacity MW:** Summation of all resource Capacity supply Obligations (CSO). Does not include Settlement Only Generators (SOG).
- CSO Demand Resource Capacity MW:** Demand resources known as Real-Time Demand Response (RTDR) will become Active Demand Capacity Resources (ADCRs) and can participate in the Forward Capacity market (FCM). These resources will have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.
- External Node Capacity MW:** Sum of external Capacity Supply Obligations (CSO) imports and exports.
- Non-Commercial capacity MW:** New resources and generator improvements that have acquired a CSO but have not become commercial.
- CSO Non Gas-Only Generator Planned Outages MW:** All Non-Gas Planned Outages is the total of Non Gas-fired Generator/DARD Outages for the period. This value would also include any known long-term Non Gas-fired Forced Outages.
- CSO Gas-Only Generator Planned Outages MW:** All Planned Gas-fired generation outage for the period. This value would also include any known long-term Gas-fired Forced Outages.
- Unplanned Outage Allowance MW:** Forced Outages and Maintenance Outages scheduled less than 14 days in advance per ISO New England Operating Procedure No. 5 Appendix A.
- CSO Generation at Risk Due to Gas Supply Mw:** Gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.
- CSO Net Available Capacity MW:** the summation of columns (1+2+3+4-5-6-7-8=9)
- Peak Load Forecast MW:** Provided in the annual 2022 CELT Report and adjusted for Passive Demand Resources assumes Peak Load Exposure (PLE) and does include credit of Passive Demand Response (PDR) and behind-the-meter PV (BTM PV).
- Operating Reserve Requirement MW:** 120% of first largest contingency plus 50% of the second largest contingency.
- CSO Net Required Capacity MW:** (Net Load Obligation) (10+11=12)
- CSO Operable Capacity Margin MW:** CSO Net Available Capacity MW minus CSO Net Required Capacity MW (9-12=13)
- Operable Capacity Season Label:** Applicable season and year.
- Season Minimum Operable Capacity Flag:** this column indicates whether or not a week has the lowest capacity margin for its applicable season.

Preliminary Winter 2022/23 Operable Capacity Analysis

90/10 Forecast

ISO-NE OPERABLE CAPACITY ANALYSIS

September 27, 2022 - 90/10 FORECAST using CSO MW

This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week from December through March.

Report created: 9/27/2022

| Study Week (Week Beginning , Saturday) | CSO Supply Resource Capacity MW | CSO Demand Resource Capacity MW | External Node Capacity MW | Non-Commercial Capacity MW | CSO Non Gas- Only Generator Planned Outages MW | CSO Gas-Only Generator Planned Outages MW | Unplanned Outages Allowance MW | CSO Generation at Risk Due to Gas Supply 90- 10PLE MW | CSO Net Available Capacity MW | Peak Load Forecast 90- 10PLE MW | Operating Reserve Requirement MW | CSO Net Required Capacity MW | CSO Operable Capacity Margin MW | Season Min Opcap Margin Flag | Season_Label |
|--|---------------------------------------|---------------------------------------|------------------------------|-------------------------------|---|--|--------------------------------------|--|-------------------------------------|---------------------------------------|---|------------------------------------|---------------------------------------|---------------------------------|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 11/26/2022 | 28171 | 559 | 1070 | 62 | 506 | 296 | 3600 | 2576 | 22884 | 19234 | 2305 | 21539 | 1345 | N | Winter 2022/2023 |
| 12/3/2022 | 28247 | 560 | 1070 | 62 | 412 | 578 | 3200 | 2792 | 22957 | 19571 | 2305 | 21876 | 1081 | N | Winter 2022/2023 |
| 12/10/2022 | 28247 | 560 | 1070 | 62 | 420 | 213 | 3200 | 3355 | 22751 | 19866 | 2305 | 22171 | 580 | N | Winter 2022/2023 |
| 12/17/2022 | 28247 | 560 | 1070 | 62 | 391 | 49 | 3200 | 3864 | 22435 | 19877 | 2305 | 22182 | 253 | N | Winter 2022/2023 |
| 12/24/2022 | 28247 | 560 | 1070 | 62 | 61 | 7 | 3200 | 4280 | 22391 | 19941 | 2305 | 22246 | 145 | N | Winter 2022/2023 |
| 12/31/2022 | 28247 | 560 | 1070 | 62 | 108 | 7 | 2800 | 4408 | 22616 | 20220 | 2305 | 22525 | 91 | N | Winter 2022/2023 |
| 1/7/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 4539 | 22504 | 20695 | 2305 | 23000 | -496 | Y | Winter 2022/2023 |
| 1/14/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 4331 | 22712 | 20695 | 2305 | 23000 | -288 | N | Winter 2022/2023 |
| 1/21/2023 | 28247 | 560 | 1070 | 62 | 89 | 7 | 2800 | 4032 | 23011 | 20695 | 2305 | 23000 | 11 | N | Winter 2022/2023 |
| 1/28/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 4032 | 22738 | 20468 | 2305 | 22773 | -35 | N | Winter 2022/2023 |
| 2/4/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 3583 | 23187 | 20195 | 2305 | 22500 | 687 | N | Winter 2022/2023 |
| 2/11/2023 | 28247 | 560 | 1070 | 62 | 62 | 7 | 3100 | 3284 | 23486 | 20166 | 2305 | 22471 | 1015 | N | Winter 2022/2023 |
| 2/18/2023 | 28247 | 560 | 1070 | 62 | 35 | 7 | 3100 | 2686 | 24111 | 19898 | 2305 | 22203 | 1908 | N | Winter 2022/2023 |
| 2/25/2023 | 28247 | 560 | 1070 | 62 | 210 | 7 | 3100 | 2237 | 24385 | 18889 | 2305 | 21194 | 3191 | N | Winter 2022/2023 |
| 3/4/2023 | 28247 | 560 | 1070 | 62 | 177 | 783 | 2200 | 1311 | 25468 | 18533 | 2305 | 20838 | 4630 | N | Winter 2022/2023 |
| 3/11/2023 | 28247 | 560 | 1070 | 62 | 177 | 290 | 2200 | 1206 | 26066 | 18333 | 2305 | 20638 | 5428 | N | Winter 2022/2023 |
| 3/18/2023 | 28247 | 560 | 1070 | 62 | 867 | 1179 | 2200 | 0 | 25693 | 17960 | 2305 | 20265 | 5428 | N | Winter 2022/2023 |
| 3/25/2023 | 28247 | 560 | 1070 | 62 | 826 | 2162 | 2200 | 0 | 24751 | 17383 | 2305 | 19688 | 5063 | N | Winter 2022/2023 |

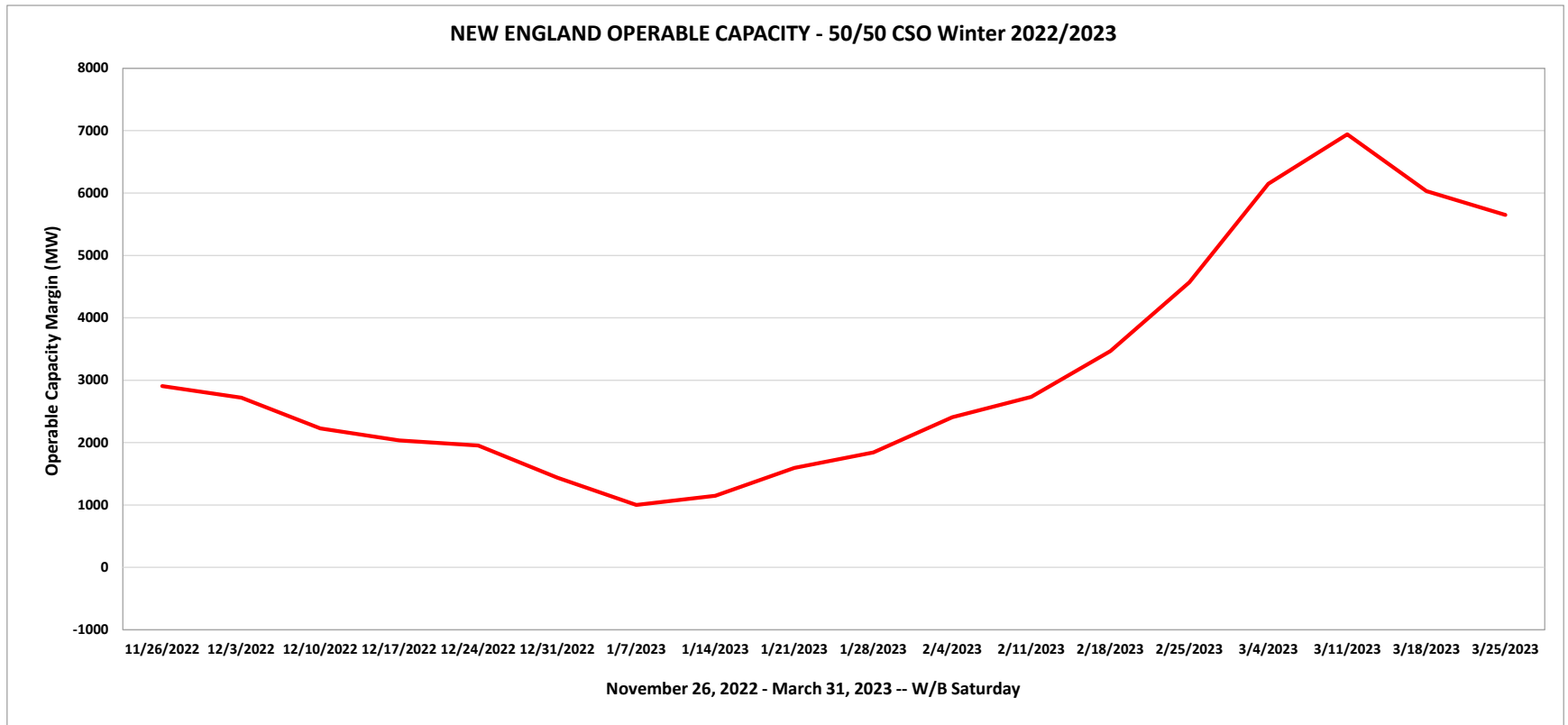
Column Definitions

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- 2. CSO Demand Resource Capacity MW:** Demand resources known as Real-Time Demand Response (RTDR) will become Active Demand Capacity Resources (ADCRs) and can participate in the Forward Capacity market (FCM). These resources will have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.
- 3. External Node Capacity MW:** Sum of external Capacity Supply Obligations (CSO) imports and exports.
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- 6. CSO Gas-Only Generator Planned Outages MW:** All Planned Gas-fired generation outage for the period. This value would also include any known long-term Gas-fired Forced Outages.
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- 8. CSO Generation at Risk Due to Gas Supply Mw:** Gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.
- 9. CSO Net Available Capacity MW:** the summation of columns (1+2+3+4-5-6-7-8-9)
- 10. Peak Load Forecast MW:** Provided in the annual 2022 CELT Report and adjusted for Passive Demand Resources assumes Peak Load Exposure (PLE) and does include credit of Passive Demand Response (PDR) and behind-the-meter PV (BTM PV).
- 11. Operating Reserve Requirement MW:** 120% of first largest contingency plus 50% of the second largest contingency.
- 12. CSO Net Required Capacity MW:** (Net Load Obligation) (10+11=12)
- 13. CSO Operable Capacity Margin MW:** CSO Net Available Capacity MW minus CSO Net Required Capacity MW (9-12=13)
- 14. Operable Capacity Season Label:** Applicable season and year.
- 15. Season Minimum Operable Capacity Flag:** this column indicates whether or not a week has the lowest capacity margin for its applicable season.

*Highlighted week is based on the week determined by the 50/50 Load Forecast Reference week

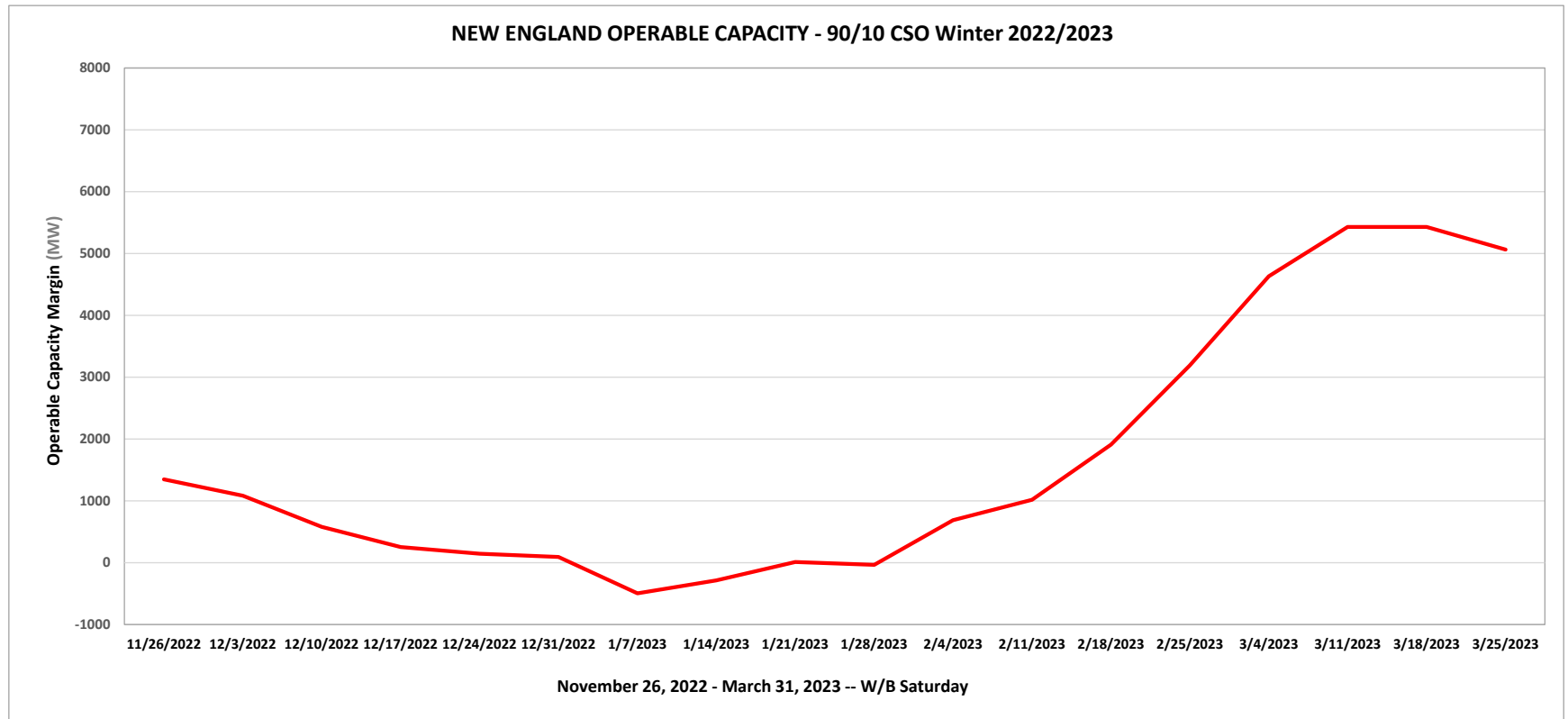
Preliminary Winter 2022/23 Operable Capacity Analysis

50/50 Forecast (Reference)



Preliminary Winter 2022/23 Operable Capacity Analysis

90/10 Forecast



OPERABLE CAPACITY ANALYSIS

Appendix



Possible Relief Under OP4: Appendix A

| OP 4 Action Number | Page 1 of 2 Action Description | Amount Assumed Obtainable Under OP 4 (MW) |
|--------------------------|---|---|
| 1 | Implement Power Caution and advise Resources with a CSO to prepare to provide capacity and notify “Settlement Only” generators with a CSO to monitor reserve pricing to meet those obligations. Begin to allow the depletion of 30-minute reserve. | 0 ¹ 600 |
| 2 | Declare Energy Emergency Alert (EEA) Level 1 ⁴ | 0 |
| 3 | Voluntary Load Curtailment of Market Participants’ facilities. | 40 ² |
| 4 | Implement Power Watch | 0 |
| 5 | Schedule Emergency Energy Transactions and arrange to purchase Control Area-to-Control Area Emergency | 1,000 |
| 6 | Voltage Reduction requiring > 10 minutes | 125 ³ |

NOTES:

1. Based on Summer Ratings. Assumes 25% of total MW Settlement Only resources <5 MW will be available and respond.
2. The actual load relief obtained is highly dependent on circumstances surrounding the appeals, including timing and the amount of advanced notice that can be given.
3. The MW values are based on a 25,000 MW system load and verified by the most recent voltage reduction test.
4. EEA Levels are described in Attachment 1 to NERC Reliability Standard EOP-011 - Emergency Operations

Possible Relief Under OP4: Appendix A

| OP 4 Action Number | Page 2 of 2 Action Description | Amount Assumed Obtainable Under OP 4 (MW) |
|--------------------------|---|--|
| 7 | Request generating resources not subject to a Capacity Supply Obligation to voluntary provide energy for reliability purposes | 0 |
| 8 | 5% Voltage Reduction requiring 10 minutes or less | 250 ³ |
| 9 | Transmission Customer Generation Not Contractually Available to Market Participants during a Capacity Deficiency. Voluntary Load Curtailment by Large Industrial and Commercial Customers. | 5 200 ² |
| 10 | Radio and TV Appeals for Voluntary Load Curtailment Implement Power Warning | 200 ² |
| 11 | Request State Governors to Reinforce Power Warning Appeals. | 100 ² |
| Total | | 2,520 |

NOTES:

1. Based on Summer Ratings. Assumes 25% of total MW Settlement Only resources <5 MW will be available and respond.
2. The actual load relief obtained is highly dependent on circumstances surrounding the appeals, including timing and the amount of advanced notice that can be given.
3. The MW values are based on a 25,000 MW system load and verified by the most recent voltage reduction test.
4. EEA Levels are described in Attachment 1 to NERC Reliability Standard EOP-011 - Emergency Operations



ISO New England's 2023 Annual Work Plan (AWP)

*For Discussion at the October 6, 2022,
NEPOOL Participants Committee Meeting*

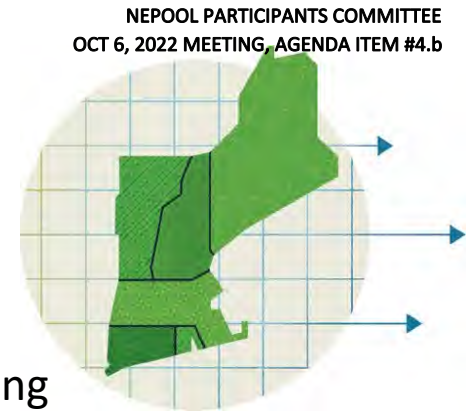
Vamsi Chadalavada

EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER



2023 Objectives and Highlights

Advancing a reliable clean-energy transition through innovation and collaboration



- **Anchor projects** require dedicated focus and a regional commitment to securing power system reliability while facilitating the integration of clean-energy and distributed-energy resources
 - **Resource Capacity Accreditation** to update the approach for reflecting individual resource contributions to resource adequacy in the capacity market as the resource mix evolves
 - **Day-Ahead Ancillary Services** to create pricing incentives for specific energy and reserve capabilities needed for reliability as regional supply and demand transform
 - **Extended-Term Transmission Planning Phase 2** to develop Tariff changes allowing a process for states to move policy-related transmission investments forward and allocate the costs
 - **2050 Transmission Study** to inform region of possible transmission infrastructure and associated cost estimates needed to reliably serve peak loads in 2035, 2040, and 2050 using scenarios that reflect state decarbonization policies
 - **Operational Impacts of Extreme Weather Events** to model and assess energy-security risks from future low-probability, high-impact weather events under a changing power system
 - **Energy Adequacy Considerations and Actions** to more precisely define the region's energy adequacy challenges and begin to consider options and directions
 - **nGem Market Clearing Engine** to continue development and implementation of a new platform that is foundational to supporting an exponentially complex, future system
- **Notable initiatives** target innovation, advance efficiency, and help manage risks across markets, planning, operations, and software structures



Effects of Shifting Priorities

The ISO strives to support regional reliability and decarbonization goals in a coordinated manner



- Plans may need to adjust over time to reflect emerging requests, regulations, trends, and risks
 - Increased or expanded stakeholder requests, regional policy interests, and new issues can affect project schedules of planned efforts
 - Upfront agreement on priority work, including NEPOOL and state priorities, are intended to keep listed projects and schedules on track
 - A number of Federal Energy Regulatory Commission (FERC) actions (orders, notices of proposed rulemaking) are expected by or in 2023 and may shift priorities (e.g., NOPR RM21-17; Docket No. AD22-8)
 - Major changes that arise will be reflected in the Spring 2023 AWP Update
- Note that the AWP identifies key initiatives and not the full ISO workload; the ISO's annual budget incorporates the full volume of ISO work, including initiatives in the AWP as well as:
 - Work on smaller projects or projects nearing completion
 - Work to implement projects already through design, stakeholder, and regulatory phases
 - Work representing the ISO's extensive day-to-day operations related to running the grid, markets, IT infrastructure, and its organization



ANCHOR PROJECTS

Enhancements for the Current and Future Grid



Markets Anchor Projects

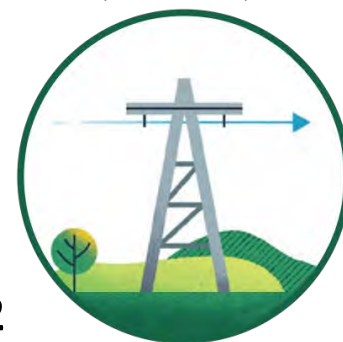
Improving pricing and resource valuation to promote reliability and manage resource uncertainty as grid evolves



- **Resource Capacity Accreditation (RCA) in the Forward Capacity Market (FCM)**
 - This effort already underway seeks to implement new methodologies to quantify/accredit resources' capacity contributions to regional resource adequacy, which will be critical to reliability and market efficiency as the resource mix transforms
 - In 2023, the ISO and stakeholders will discuss the detailed framework design; the ISO plans to file with FERC by Q4 2023 and implement changes for Forward Capacity Auction 19 (FCA 19)
- **Day-Ahead Ancillary Services**
 - This initiative seeks to develop market constructs for procuring and transparently pricing ancillary service capabilities needed for a reliable, next-day operating plan with an evolving resource mix
 - **Energy Imbalance Reserve** would cover the “gap” when the day-ahead market’s physical energy supply awards are below the ISO’s forecast real-time load
 - **Day-Ahead Flexible Response Services** would procure day-ahead 10- and 30-minute response services to enable the system to recover from sudden source-loss contingencies and respond quickly to fluctuations in net load during the operating day
 - Market mitigation and other conforming rule changes will be addressed, including elimination of the Forward Reserve Market
 - In Q4 2022 and throughout 2023, the ISO and stakeholders will discuss the detailed designs; the ISO plans to file with FERC by the end of 2023

Planning Anchor Projects

Providing longer-term transmission planning that assesses a reliable, clean-energy future grid in response to the New England States' Energy Vision



- **Extended-Term/Longer-Term Transmission Planning Phase 2**

- In 2022, FERC approved a first phase of changes to Attachment K of the [OATT](#), creating a process that allows the New England States to request the ISO to perform planning analyses that may extend beyond the 10-year planning horizon that would provide visibility into the transmission investment needed to further state energy policy objectives
- The second phase of changes would provide the process for the states to move public policy-related transmission investments forward along with the associated cost-allocation method; the process should permit conversion of longer-term transmission studies into developable projects
- Stakeholder discussions on Phase 2 to begin in late 2022/early 2023, with a potential FERC filing in Q3 2023; ongoing processes at FERC may further inform this effort

- **2050 Transmission Study**

- As per the Phase 1 changes above, the ISO has been conducting a transmission study that informs the region of possible transmission infrastructure and associated cost estimates needed to reliably serve peak loads in 2035, 2040, and 2050 using scenarios/assumptions that reflect state decarbonization policies
- The ISO presented study results in spring and summer of 2022 and began developing possible transmission solutions; further development of solutions and associated cost estimates will extend into 2023

Operations Anchor Project

Energy adequacy study of reliability risks from severe events as grid supply and demand transform



- **Energy-Security Study: Operational Impacts of Extreme Weather Events**
 - The ISO is working with the Electric Power Research Institute (EPRI) to build an innovative framework for conducting a probabilistic energy-security study that assesses the operational impact of future extreme weather events
 - Step 1 Weather Modeling: Identify weather events of interest using statistical analysis and develop hourly profiles of weather variables for the periods of study in the future
 - Step 2 Risk Model Development and Scenario Generation: Identify events of interest and develop the inputs to the 21-day energy assessment in Step 3
 - Step 3 Energy-Security Assessments: Using the enhanced 21-day Energy Assessment tool, assess operational impacts by studying scenarios generated in Step 2
 - Steps 1 and 2 are expected to be completed in 2022; step 3 analysis and discussions to continue through Q1 2023

Energy Adequacy Anchor Project

Addressing winter reliability challenges



- NEPOOL, the New England States, FERC, and the ISO agree that energy adequacy discussions and actions are a top priority
- Upcoming work is outlined on the next slide
- To guide discussions, the following time horizons are considered:
 - **Immediate-term:** Winter 2022/23
 - **Short-term:** Winters 2023/2024 and 2024/2025
 - **Medium-term:** The subsequent seven winters–2025/2026 through 2032/2033
 - **Longer-term:** Beyond 2033 (roughly a decade from now)
- Defining timelines in terms of calendar years may offer clarity to the marketplace



Energy Adequacy Anchor Project, cont'd

Addressing winter reliability challenges



- **Q4 2022**

- Immediate-term: Confirm protocols to work with the DOE on emissions restrictions; maintain lines of communication for Jones Act waivers
- Short-term: Update the Inventoried Energy Program for Winters 2023/2024, 2024/2025 (as indicated on slide 13)
- Short/medium-term: Continue regional dialogue with respect to the Everett LNG Facility
- Medium/longer-term: Present and gather feedback on the EPRI energy security study's risk model and scenario generation (Step 2 as indicated on slide 7)

- **Q1 2023**

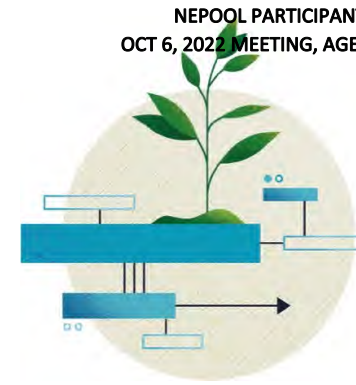
- Short-term: Review past winter and confirm readiness plans for winter 2023/2024
- Medium/longer-term: Present preliminary results of the EPRI study energy-security assessments (Step 3 as indicated on slide 7)
 - Run additional Step 3 scenarios based on stakeholder feedback
- Medium/longer-term: Finalize problem statement

- **Q2 2023**

- Medium/longer-term: Discuss scope and viability of energy adequacy solutions and define the list of options to pursue, which could include:
 - A modernized strategic energy reserve, market enhancements, infrastructure options such as transmission
- Reflect energy adequacy plans in the *2023 AWP Update* published in the spring

Technology Anchor Project

Overhauling the market software system to manage an exponentially complex future grid



- **nGEM Market Clearing Engine**

- This major initiative replaces the ISO's 20+ year old Market Management System (MMS) with the next Generation Electricity Management (nGEM) platform that is foundational to supporting a system with a growing number and type of grid assets, new and more complex market features, ever multiplying security threats, and advancing IT technologies
 - GE Solutions is developing nGEM in collaboration with ISO-NE, MISO, and PJM
 - This effort spans 2020-2027/2028
- The ISO has been working on the complex processes for customizing and implementing the day-ahead version of the new market clearing engine (MCE) software and infrastructure, which is expected to be in service in Q2 2023
- Once the day-ahead MCE goes in service, the ISO expects to go onto the next phase, which includes real-time MCE



NOTABLE INITIATIVES

Other Major Initiatives Identified for 2023



New England's Future Grid Initiative

Continuing two-part initiative to help prepare for and support the transition to a future grid that meets state energy policies



- **Future Grid Reliability Study (FGRS) Phase 2**
 - In Phase 2, modeling tools and assumptions from the Pathways and FGRS Phase 1 studies will be used to solve for the set of clean-energy resources that are revenue sufficient and meet the 1-in-10 resource adequacy standard, including for a “preferred pathway” if established
 - Reliability attributes/capabilities of this revenue-sufficient resource mix and any potential reliability “gaps” that remain will be identified
- **Preferred Pathway to the Future Grid Assessment**
 - The ISO, states, and stakeholders have been working to define a preferred market pathway for facilitating the evolution of New England’s power grid that reflects state energy policies (forward clean energy market, net carbon pricing, or hybrid)
 - In 2023, this will require a threshold determination of jurisdiction and governance frameworks for the path, which will largely involve policymakers and regulators, as well as identifying details needed to develop the market design



Notable Markets Initiatives, cont'd

Efficient pricing and updating the IEP



- **Updates to Interim Energy Program (IEP) for Winters 2023/2024, 2024/2025**
 - The IEP was approved by FERC in June 2020; eligibility terms need to be updated to comply with a recent court order, and the rate needs to be updated to reflect the current fuel-price environment
 - Stakeholder discussions to begin in 2022; the ISO plans to file changes with FERC in early 2023 so that updates can be implemented in time for winter 2023/2024
- **Energy Shortage Pricing Assessment**
 - The ISO plans to evaluate treatment of load-shed events in the energy and ancillary services market pricing software and discuss with stakeholders enhancements that may be needed to signal appropriate day-ahead and real-time prices during an event
 - Some day-ahead pricing changes will be discussed with stakeholders beginning in Q4 2022; evaluation and discussion with stakeholders regarding real-time changes will extend through 2023
- **Alternative FCM Commitment Horizons (Prompt/Seasonal)**
 - In 2023, the ISO plans to begin its evaluation of changes to the FCM commitment horizon under a construct that would replace the FCA with a prompt capacity auction and would structure the capacity product as a seasonal product
 - Stakeholder discussions would take place in 2024

Notable Markets Initiatives

Adjusting the FCM to better balance incentives for resources



- **FCM Retirement Reforms: Bid Flexibility**
 - Beginning in Q4 2022 and extending into 2023, the ISO will discuss with stakeholders the ISO's assessment of the proposal, and possible market rule changes regarding bid flexibly associated with Retirement and Permanent De-list Bids, with a potential FERC filing by end of 2023 targeting FCA 19 implementation
 - Project stems from NEPOOL Proposal/2022 AWP Update
- **FCM Retirement Reforms: Return to Service**
 - Beginning in Q4 2022 and extending into 2023, the ISO will discuss with stakeholders the ISO's assessment of the proposal, as last presented to the Markets Committee in [January](#) and [February](#) 2022, with a potential FERC filing of any market rule changes by end of 2023 targeting FCA 19
 - Project stems from NEPOOL Proposal/2022 AWP Update
- **FCM Financial Assurance Policy/Entry-Related Improvement**
 - In 2023, the ISO plans to assess whether and why new capacity resources are clearing in the FCA when they may not be commercial by the associated Capacity Commitment Period and discuss possible reforms with stakeholders, with a potential FERC filing by end of 2023 targeting FCA 18 implementation
 - Project stems from NEPOOL Proposal/2023 Priorities

Notable Planning & Operations Initiatives

Continuously improving operations and processes



- **FCM Three-Year Capacity Time Out**

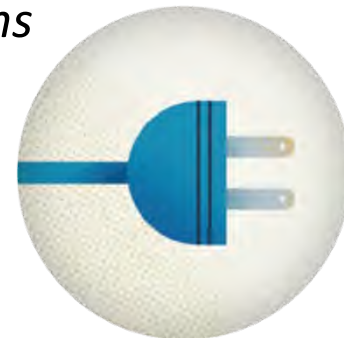
- As new generation shifts largely from gas-fired generation to renewable energy, resource development approaches and timelines have changed significantly since the three-year time-out rules were first designed
 - The rules aligned with pre-existing queue-discipline time-out rules and designed to protect against “queue-blocking” in the FCM by resources not ready for development
- As a priority item for NEPOOL, the ISO will discuss with stakeholders in 2023 possible elimination of the time-out rules, with a potential FERC filing by end of year

- **Expanded Weather Analytics for 21-Day to Intra-Day Load Forecasting**

- This initiative will expand the number of weather forecasts from 8 to 23 cities and add two additional weather attributes to improve the forecast accuracy of the zonal and regional operational load forecast models
- The project will also implement a behind-the-meter photovoltaic (BTM PV) forecasting blending process, which will eliminate reliance on a single vendor forecast for BTM PV forecasting data to increase accuracy
- The ISO plans to present to stakeholders in Q2-3 and implement in Q3 2023
 - This initiative is one of the “Load, Solar, Wind Forecast Improvements” listed in the ISO’s [2022-2025 Roadmap to the Future Grid](#)

Notable Technology & Security Initiatives

Implementing sophisticated technologies and security applications to support the clean-energy transition and mitigate risks



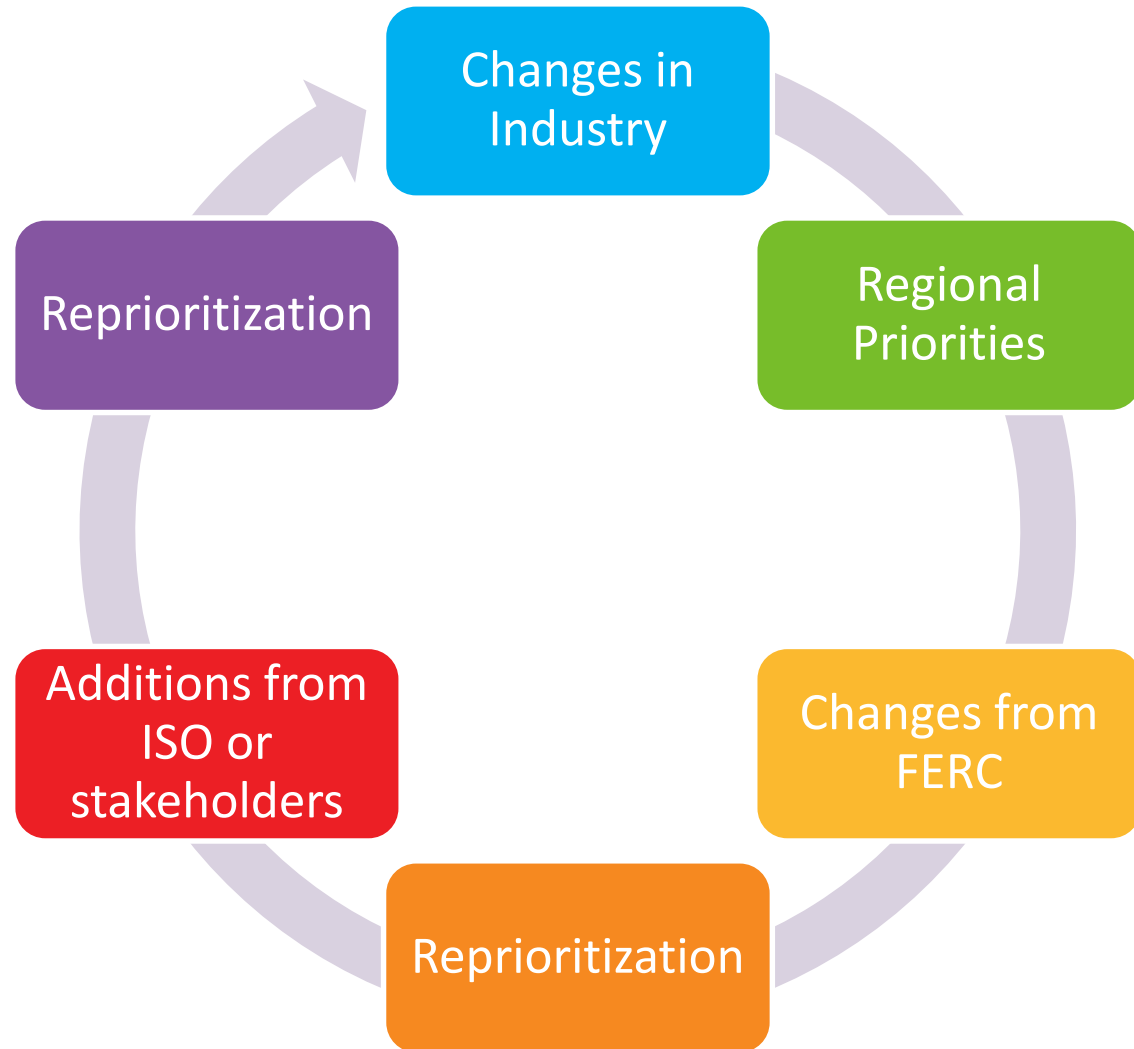
- **Models and Simulators to Support Future Grid:** The ISO is continuing development of models and tools for both reliability and planning study purposes that allows the ISO to more accurately and efficiently simulate potential market design changes and a future grid with rapidly evolving and increasing levels of DERs and inverter-based resources
 - **Inverter-Based Resource Integration and Modeling:** In 2023, the ISO will work to integrate new hybrid-simulation processes and multi-core parallel capability into large-scale system studies and standardize the Electromagnetic Transient simulation workflow
 - **Integrated Market Simulator:** Work continues on the day-ahead simulator; in 2023, the ISO will improve the performance of sub-hourly simulation and start developing network analysis capability
- **Cloud Computing:** Reliably operating a modern system comprised of renewable and storage resources requires the processing, transfer, and storing of vast amounts of data; in multiple phases, the ISO will be implementing cloud-computing infrastructure and virtualization technology to reduce reliance on energy-heavy data centers and enable more dynamic expansion of computing capability, while maintaining reliability
- **Cyber Security:** The ISO is implementing a portfolio of projects to address increasingly complex and frequent cyber-security threats plus new attack vectors, including Identity and Access Management improvements, Security Event Monitoring Infrastructure, updates to the CIP Electronic Security Perimeter, a new Security Operations Center, and other improved detection and response capabilities

WORK PLAN PRIORITIZATION

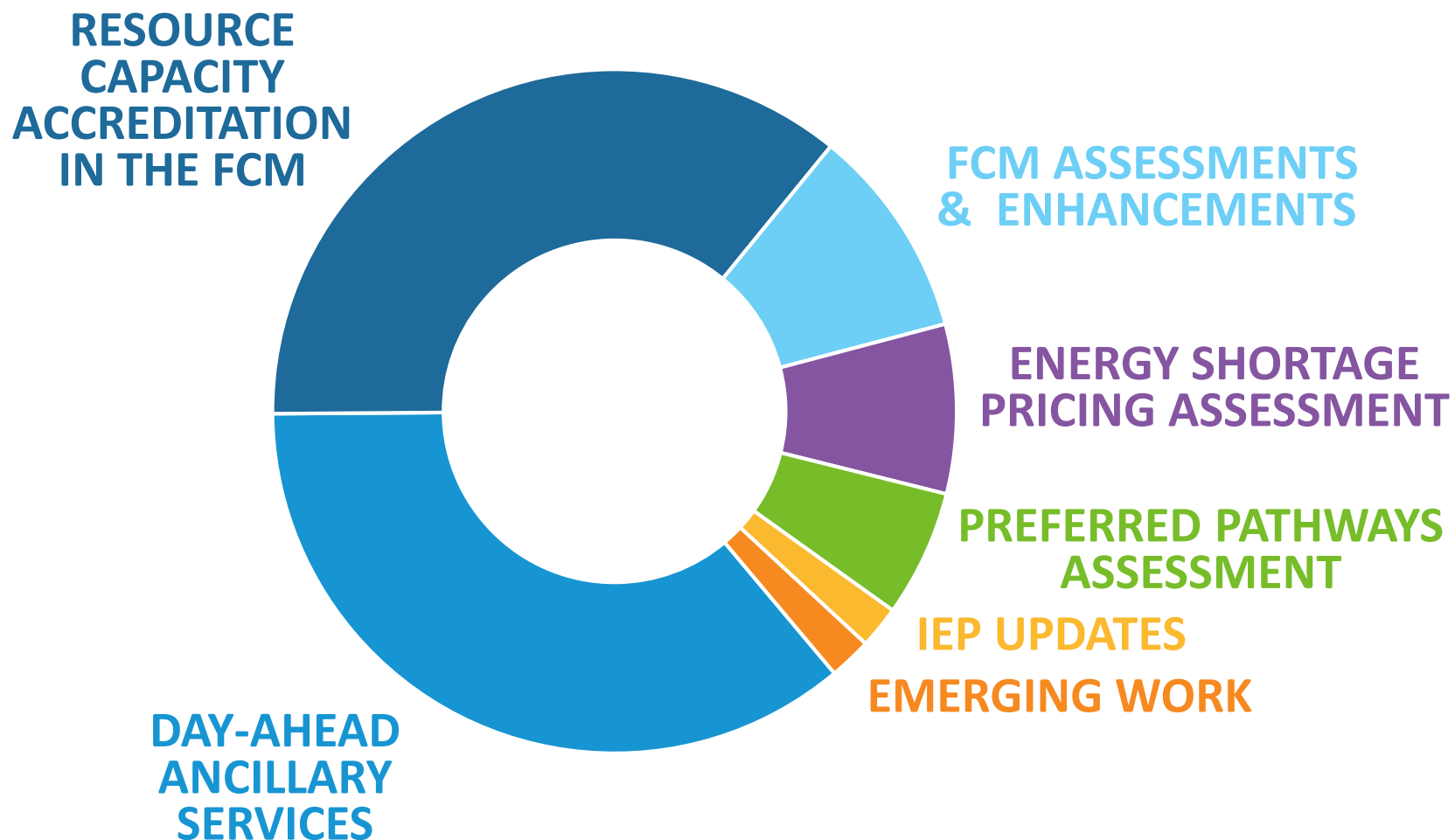


Prioritization Process

- The ISO adjusts its priorities as needed to best maintain reliable operations, robustly plan for a changing grid, and ensure competitive wholesale markets
- Planned projects are impacted as scopes shift or new projects emerge



Markets-Related Priorities Include:



Planning/Operations Priorities Include:

CONTINUING BUSINESS

- Support qualification and interconnection of increased volume of distributed energy resources
- Administer FCA #17 and FCM-related modeling
- Economic Planning for the Clean Energy Transition Pilot Study
- NERC/FERC Compliance
- Implement lessons learned from the Controlled Outage Tabletop Exercise with TOs

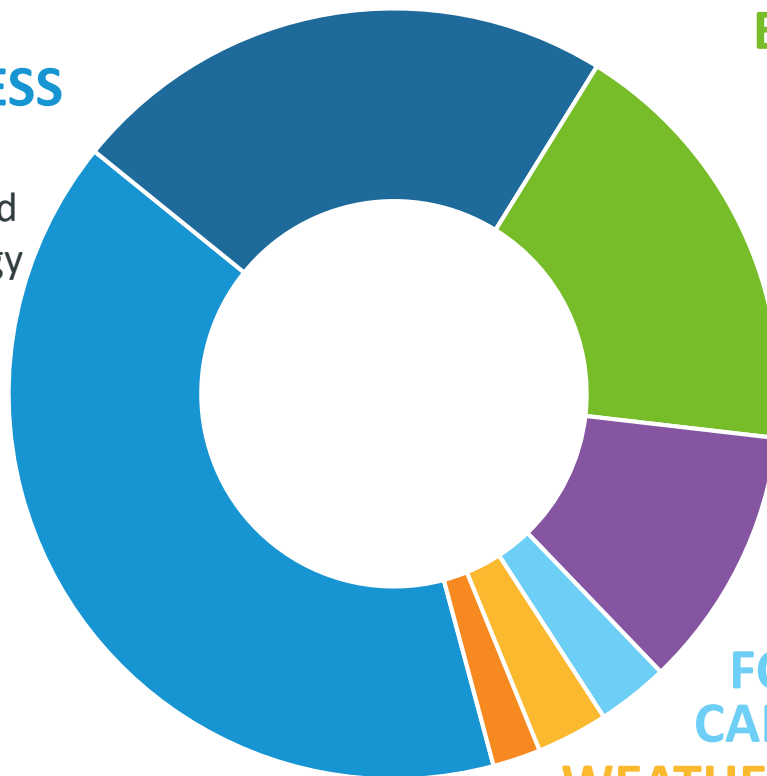
EXTREME WEATHER/EPRI & ENERGY ADEQUACY

EXTENDED/LONGER- TERM TRANSMISSION PLANNING Phase 2 & 2050 TRANSMISSION STUDY

FUTURE GRID RELIABILITY STUDY PHASE 2

FCM THREE-YEAR CAPACITY TIME OUT

WEATHER ANALYTICS EMERGING WORK



Capital Project Priorities Include:

APPLICATION AND DATABASE ENHANCEMENTS

- Support for systems managing increased quantity and complexity of grid assets
- FCTS Infrastructure Conversion Part III
- MIS Sub Accounts
- Integrated Market Simulator
- Windows Server 2019R2 Deployment
- IT Asset Workflow
- PMU Data Repository
- Order 2222 Software Development

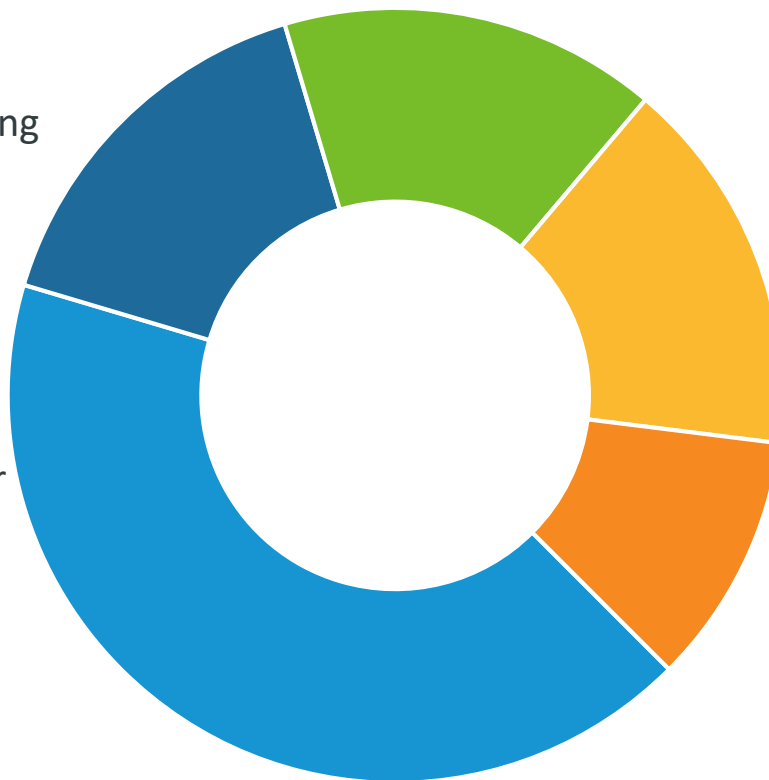
CLOUD COMPUTING




CYBER SECURITY

IT INFRASTRUCTURE ENHANCEMENTS

- Control Room Voice Recorder Modernization
- Hardware replacements
- Amazon Web Services Pilot
- Website Migration to Cloud

nGEM MARKET CLEARING ENGINE



| 2023 AWP | Q1 | Q2 | Q3 | Q4 |
|---|--|----|----|----|
|  Markets Related | Resource Capacity Accreditation | | | |
| | Day-Ahead Ancillary Services | | | |
| | Preferred Pathway to the Future Grid Assessment | | | |
| | FCM Assessments and Enhancements | | | |
| | Energy Shortage Pricing Assessment | | | |
| | IEP Updates | | | |
|  Planning & Operations | Extended/Longer-Term Transmission Planning Phase 2 | | | |
| | 2050 Transmission Study | | | |
| | Future Grid Reliability Study Phase 2 | | | |
| | Three-Year Capacity Time Out | | | |
| | Extreme Weather/EPRI | | | |
| | Energy Adequacy | | | |
| | Expanded Weather Analytics | | | |
| | Continuing Business | | | |
|  Capital Priorities | nGEM Market Clearing Engine | | | |
| | Models & Simulators to Support Future Grid | | | |
| | Cloud Computing | | | |
| | Cyber Security | | | |



New England States Committee on Electricity

To: ISO-NE
From: NESCOE
Date: September 22, 2022
Subject: Comments on ISO-NE's Draft 2023 Work Plan

The New England States Committee on Electricity (NESCOE) appreciates the opportunity to have reviewed ISO New England's (ISO-NE) draft 2023 Work Plan on September 1, 2022 with NEPOOL leadership and to provide preliminary reactions. We may have additional input after ISO-NE discusses the draft 2023 Work Plan at the October 6, 2022 NEPOOL Participants Committee meeting.

The projects ISO-NE identifies in the draft Work Plan represent significant work across multiple fronts as the region continues progress toward the 21st century regional electric system that NESCOE called for in its Vision Statement – one that is clean, reliable, and affordable. We appreciate the significant grid-transformation work that ISO-NE staff has already undertaken and plans to pursue in the coming year.

Our feedback focuses primarily on priority matters including energy adequacy and future grid initiatives.

I. Energy Adequacy

New England has struggled with winter energy adequacy challenges for two decades. NESCOE joins NEPOOL in categorizing this issue as high priority in 2023 and supporting prioritization of work to identify durable solutions to persistent winter energy adequacy challenges.

We urge focus on the need to achieve a better understanding of the region's energy adequacy challenges during the winter months and to explore solution(s) to address such challenges. While ISO-NE and the region have taken productive steps to guard against energy shortfalls, including the 21-Day Energy Assessment Forecast and the Inventoried Energy Program (IEP), more work is required.

Since ISO-NE shared its draft Work Plan, it has provided further thinking on this critical issue to stakeholders, the Federal Energy Regulatory Commission (FERC), and the U.S. Department of Energy (DOE) through written communications and participation at the New England Winter Gas-Electric Forum convened by FERC.¹ Since these

¹ FERC New England Winter Gas-Electric Forum, Docket No. AD22-9-000. See also, *Letter from Gordon van Welie to Secretary Granholm, including a Draft ISO/EDC/LDC Problem Statement and Call to Action on LNG and Energy Adequacy*, August 29, 2022, at https://www.iso-ne.com/static-assets/documents/2022/08/isone_energy_security_letter_to_us_doe_and_statement_for_ferc_winter_forum_2022_08_29.pdf.

communications followed the draft Work Plan, NESCOE suggests ISO-NE translate those communications into Work Plan-style action items. To that end, we offer comments on the themes of, and the action items that emerged from, those communications.

- **Given the seriousness, breadth, and depth of the energy adequacy challenge, ISO-NE should categorize energy adequacy as a separate initiative.** The draft Work Plan lists energy adequacy as an operations anchor project. Energy adequacy is broader than an “operations” issue and the revised Work Plan should reflect that fact.
- **ISO-NE should update the draft 2023 Work Plan’s energy adequacy components to bring clarity and allow common understandings about timeframes.** NESCOE urges timeframe discipline in all energy adequacy communications, including the 2023 Work Plan. All items in the final Work Plan that relate to energy adequacy should clearly indicate their relevant timeframe(s). Consistent reference to relevant timeframes will be help states, stakeholders, and the public better understand ISO-NE’s communications.

To that end, we offer the following as possible timeframe delineations for consistent reference going forward:

- **Immediate-term** means the winter of 2022/2023.
- **Short-term** means the subsequent winters with the Mystic Cost of Service contract (ending in 2024) and IEP (winters 2023/2024 and 2024/2025).
- **Medium-term** means after the current Mystic Cost of Service contract ends on May 31, 2024 through the clean energy transition, as the grid of the future becomes prominent with a change in the generation fleet.
- **Longer-term** means after the clean energy transition becomes prominent.
- **Extreme Weather** means low-probability, high impact events at any point in time.

If ISO-NE believes these suggested timeframes need adjustment, NESCOE suggests a regional discussion to define and settle on timeframes for consistent future reference.

- **ISO-NE should commence work on energy adequacy as soon as possible.** Energy adequacy needs are broadly considered to be urgent and meriting priority focus. The draft Work Plan seems to indicate that the region should begin energy adequacy conversations after ISO-NE completes the ongoing Operational Impacts of Extreme Weather Events analysis conducted in conjunction with the Electric Power Research Institute. NESCOE urges ISO-NE to identify what energy adequacy work can begin prior to the completion of that analysis that focuses on Extreme Weather, especially in connection with first four of the five timeframes noted above. To that end, please consider including work on items listed below.
- **In 2023, and for the foreseeable future, ISO-NE’s Work Plan should include an annual analysis of data and associated recommendation(s) on any interim incremental winter action to protect reliability.** This past July, at the states’ request, ISO-NE provided analysis and its recommendation as to whether New England needed to take incremental action to bolster reliability for the winter of

2022/2023.² This type of analysis should be part of ISO-NE's annual Work Plan until durable solutions to winter energy adequacy are in place. ISO-NE, states, and stakeholders should work together to define the scope and timing of the analysis to ensure it provides adequate information to the region on a timetable that allows action. Each year, ISO-NE should provide that analysis, and any confidential data the analysis rests on, to FERC.

- **The Work Plan should reflect the following action items ISO-NE discussed in recent communications and at the Gas-Electric Forum.**
 - **Exploring the development of a modernized Strategic Energy Reserve.** The New England Governors recently sought U.S. DOE support to modernize the strategic fuel reserve it has managed since 2002.³ We appreciate ISO-NE's willingness to allocate resources to explore the development of a modernized strategic energy reserve to protect electric system reliability in the event of low probability, high impact weather events.⁴
 - **Laying necessary groundwork for possible Jones Act exemptions.** There may be acute needs to shore up fuel supplies in the immediate-term. Dedicating resources to early collaboration on possible targeted requests for Jones Act exemptions may allow New England to access domestic LNG by tanker in emergency conditions.
 - **Development of the longer-term reliability program ISO-NE referenced at the Gas-Electric Forum.** At the Forum, ISO-NE observed that the limited time ISO-NE would have had to develop a program for winter 2022/2023 led ISO-NE to focus the analysis it conducted in the July of 2022 on two existing programs: the winter reliability program and IEP. While ISO-NE concluded that neither program would provide incremental reliability for winter 2022/2023, ISO-NE observed that a new program would have helped.⁵ To the extent this work is contemplated in the 2023 draft Work Plan, NESCOE suggests it should be explicit.

II. Future Grid Initiatives

NESCOE appreciates ISO-NE's work in furtherance of the foundational shift ahead to our future resource mix. In July 2019, in the context of the 2020 Work Plan, NESCOE

² Winter 2022/23 Analysis, Presented to the NEPOOL Markets Committee, July 14, 2022.

³ New England Governors Letter to Secretary Granholm, July 27, 2022, https://nepool.com/wp-content/uploads/2022/08/NPC_20220804_Composite5.pdf at page 59

⁴ *Letter from Gordon van Welie to Secretary Granholm, including a Draft ISO/EDC/LDC Problem Statement and Call to Action on LNG and Energy Adequacy*, August 29, 2022, at https://www.iso-ne.com/static-assets/documents/2022/08/isone_energy_security_letter_to_us_doe_and_statement_for_ferc_winter_forum_2022_08_29.pdf. Mr. van Welie also echoed this sentiment at the Gas-Electric Forum.

⁵ Specifically, Mr. van Welie noted that “what would provide value would be some new program that told every generator to fill up their tanks going into the winter and put somebody on the hook to buy 20 bcf through St. John... but to design such a thing and get it through the regulatory system and have it approved in time for winter was an impossibility.” FERC New England Winter Gas-Electric Forum, Panel 4, at <https://www.ferc.gov/media/webcast-panel-04-video-new-england-winter-gas-electric-forum>.

asked that ISO-NE dedicate market development and planning resources to support states and stakeholders in analyzing and discussing potential future market frameworks that contemplate and are compatible with the implementation of state energy and environmental laws. Our interest was to explore these issues on a calendar of the region's making and not driven by an emergent issue or near-term filing deadline.

Thanks to the analysis ISO-NE has undertaken since then, including the Pathways to the Future Grid Study and the Future Grid Reliability Study (FGRS), we have a clearer picture of what the clean energy transition and the future grid might entail, and some of the challenges that will need to be addressed. NESCOE supports the work on these initiatives identified in the draft 2023 Work Plan and offers the following comments:

- **Discussions on acceptable governance structures for any possible Pathway approach will benefit from ISO-NE's legal analysis and associated conversations.** The states continue to have a collective interest in exploring the development of a Forward Clean Energy Market (FCEM).⁶ We look forward to reviewing work by the Massachusetts Department of Energy Resources on an FCEM design,⁷ which may further inform our thinking. We appreciate the region's recognition of the need for state input on acceptable governance structures. We continue to consider a range of governance options, from a state jurisdictional approach (single or multi-state) to a federal jurisdictional, ISO-NE tariff approach.
- **Continue to focus on market designs to provide sufficient revenue to existing clean energy resources needed for reliable system operation today and for the grid of the future.** This includes exploring market mechanisms that reduce reliance on capacity market revenues.
- **Continue the reliability-centric Future Grid Reliability Study as contemplated to better connect it to the market-centric Pathways Study in order to provide a fuller picture on how to transition today's grid to one that is compatible with state energy and environmental laws through a wholesale market design.** At the outset, the FGRS contemplated a Phase 2 "gap analysis" to identify whether the current market design would provide revenue sufficient to operate the system reliably in the future state. That analysis was to be followed by identifying approaches to address any gaps. We understand that ISO-NE is scoping Phase 2 and will share its proposal by early Q4 2022. We appreciate ISO-NE's continued allocation of resources to this prior NESCOE- and NEPOOL-supported process.

We believe this request aligns with NEPOOL's interest in clarity about ISO-NE's plan to evolve wholesale markets and the electric grid to achieve decarbonization.

- **NESCOE supports allocating work plan hours to issues that may be identified in the Future Grid studies that may be more emergent or beneficial.** In addition to

⁶ NESCOE *Observations on the Pathways Study*. May 6, 2022, at <https://nescoe.com/resource-center/pathways-observations-may-2022/>.

⁷ The Massachusetts Department of Energy Resources is currently undertaking work to develop a comprehensive market design proposal for a New England regional FCEM.

the planned forthcoming study work, we encourage ISO-NE to proactively identify and leverage opportunities to enhance planned market design changes in ways that are directionally consistent with needs identified in the various future grid studies. While it is important to see the Future Grid studies through completion, we urge ISO-NE not to wait for final studies to work with states and NEPOOL on items that may emerge in the near-term.

- **NESCOE affirms its prior request for ISO-NE to consider and develop standards or guidelines for right-sizing future transmission projects that may provide opportunities for efficient incremental transmission buildout.** Earlier this year, NESCOE asked ISO-NE to set aside resources in its 2023 Work Plan “to develop standards or guidelines for right-sizing future transmission projects, including asset condition and reliability projects.”⁸ This issue also appeared in NEPOOL’s August 9, 2022 memo on its 2023 Priorities. This is an important emergent issue in light of the significant asset replacement projects in New England and the transmission investment anticipated to transition to the future grid.

III. Other Items

- **NESCOE urges ISO-NE to review and discuss with states and stakeholders several recommendations in the External Market Monitor (EMM) Annual Report and determine if they should be included in the 2023 Work Plan.** Specifically, NESCOE requests discussion of the following items for potential inclusion in the 2023 Work Plan, which the EMM identified as feasible in the short-term:
 - Modify allocation of “Economic” NCPC charges as this may be helpful to market liquidity.
 - Consider allowing firm energy imports from neighboring areas to satisfy second contingency requirements to possibly lower NCPC costs.
 - Utilize the lowest-cost configuration for multi-unit generators when committed for local reliability.
- **NESCOE supports the request in NEPOOL’s 2023 Work Plan Priorities memo to set aside resources to initiate groundwork discussion on the scope of an initiative to integrate environmental justice considerations into regional electric system processes.** We appreciate the recognition of the need to integrate equity and environmental justice considerations in energy operations and infrastructure decisions, and the inherent acknowledgement of the need for a partnership between the states, ISO-NE, NEPOOL, and others to do so.

* * *

NESCOE looks forward to working with ISO-NE and others in the region on these issues and others in the 2023 Work Plan in the coming year.

⁸ NESCOE, Memo to PAC on Right-Sizing Transmission Projects, April 11, 2022, at <https://nescoe.com/resource-center/right-sizing-tx-projects/>.

To: ISO New England

From: Dave Cavanaugh – Chairman, NEPOOL Participants Committee &
Vice-Chair, Publicly Owned Entity Sector
Christina (Tina) Belew – Vice-Chair, End User Sector
Sarah Bresolin – Vice-Chair, Alternative Resources Sector
Frank Etori – Vice-Chair, Transmission Sector
Michelle Gardner – Vice-Chair, Generation Sector
Aleks Mitreski – Vice-Chair, Supplier Sector

Date: August 9, 2022

Subject: **NEPOOL's 2023 Priorities**

From among the many issues identified to each of the six Vice-Chairs of the Participants Committee by members of their respective Sector, the Officers collectively identified the following NEPOOL business priorities (provided below in no particular order). A high priority exists among multiple Sectors for each of these items and thus are presented here for consideration as ISO-NE management prepares the 2023-24 regional work plan.

➤ **ENERGY ADEQUACY/SECURITY CHALLENGE**

Overall objective for this high-priority item is to achieve better understanding and greater consensus among regional stakeholders, the States and ISO of the region's energy adequacy challenges (particularly during the winter months) and to explore market-based solution(s) to address such challenge(s).

In furtherance of this shared objective, NEPOOL believes it is critically important for stakeholders and the ISO to further discuss and assess the challenges together. Consistent with the stated objectives for the September 8 FERC-hosted New England Winter Forum, these discussions should include identification of any steps or analysis/information that may be needed to better understand and define the problem. Collective agreement on a problem statement is key to successfully moving forward as a region.

With a better common understanding of our energy security/adequacy challenges, the region will then be better positioned to explore and consider together an effective long-term market-based solution(s) that is transparent to the marketplace and can be hedged.

Some of the related questions/concerns that have been expressed on this item include:

- Need a clear(er) definition of the problem. Is there agreement on the problem(s) or challenge(s) we are trying to solve for? (i.e., three-month winter fuel security

- problem or year-round energy security challenge, or both, short-term or affected by future changes in the resource mix, or something different?)
- Assessment of whether additional information or tools are needed to better understand the challenges and develop effective solutions.
 - There is a seeming lack of a comprehensive statement/plan from ISO on how to solve the problem as well as comments suggesting the potential efficacy or not of any market-based solution. What is the scope of potential solutions here?
 - How does this fit into RCA and ancillary service efforts/enhancements?
 - Concern that there might be another Mystic-like retention or other out-of-market actions.

➤ **FCM ENTRY-RELATED IMPROVEMENTS**

This priority item requests that as part of the 2023 Work Plan, ISO would work with stakeholders to review and adopt and/or develop proposed reforms to establish a better balancing of incentives for new entry in the Forward Capacity Market.

- ***3-Year Capacity Time Out*** – Request for ISO to work with stakeholders to review/evaluate current rules and consider elimination or modification of the 3-year time out rule while continuing to address the queue blocking issues that the time out rule was intended to mitigate.

NEPOOL agrees with the ISO's assessment that new generation timelines and approaches have changed since the 3-year time out rules were first developed. Given the "relatively modest" effort ISO anticipates to address this issue and the benefit it may provide to the marketplace by permitting projects to enter the capacity market only when they are ready to do so, NEPOOL requests that the ISO incorporate this assessment and potential modification into the 2023 annual work plan.

- ***FCM Financial Assurance Policy*** – Request for ISO to review/assess the current FCM FA requirements and implement reforms to address identified efficiencies/gaps (such as the ISO adopting CPV proposal or something similar).

NEPOOL appreciates ISO's reluctance to adopt certain rule changes that would place greater reliance on the CPS monitoring process (such as those included in the CPV proposal) but would like to explore with ISO-NE how the ISO may be able to achieve similar objectives, without such CPS-related changes, through a slightly different or modified approach that wouldn't be in the category of a "major lift."

PRIORITY ITEMS THAT ARE PART OF, OR RELATED TO, ONGOING REGIONAL EFFORTS/PROJECTS¹

The priority items listed under this category are or could potentially be within the scope of ongoing or planned projects/efforts; projects that have either been initiated by the ISO voluntarily or prompted by FERC through pending rulemaking proceedings. NEPOOL appreciates that the Sector-identified priority items listed here are or will be part of those ongoing efforts. And although one or more of these items did not achieve a consensus position amongst the Sectors at this time, NEPOOL may revisit these items as a priority based on the results of ongoing/planned ISO initiatives and/or FERC compliance requirements.

- **Explore Incremental Improvements/Right-Sizing Transmission Projects** – Consider and develop standards or guidelines for right-sizing future transmission projects.

This request could/should be addressed or reassessed as a result of the Phase 2 of Extended-Term Transmission Studies initiative and/or FERC Order related to the Transmission NOPR (RM21-17). NEPOOL acknowledges that to the extent that specific issues of concern to certain Sectors or individual members are not addressed through the aforementioned initiatives, NEPOOL may be asked to re-visit/consider this item as a potential future NEPOOL priority.

- **Transmission Planning Transparency & Oversight of Costs** – Request that ISO-NE analyze and report on the following:
 - How to ensure highest impact, lowest cost solutions
 - Evaluation of alternatives
 - Oversight of transmission projects for design, scope and cost
 - How to ensure broadest benefit from transmission solutions.
 - How ISO-NE could work with the states on potential siting-related issues early in the process of evaluating transmission solutions.

Like the previous item, this request could also be addressed or reassessed as a result of the initiatives cited above, including through the ongoing NOPR-related effort.

¹ While not identified as a new priority item herein, NEPOOL notes the continued importance of the **Future Grid Initiative**, which NEPOOL leadership, working closely with NESCOE and ISO-NE representatives, launched in 2020 to help the region prepare for and support New England's transition to a future grid. Through two parallel processes, this initiative was established for two key purposes: (1) to define and assess the future state of New England's regional power system (***Future Grid Reliability Study***); and (2) to explore and evaluate potential market frameworks that could be pursued to help advance the clean energy transition (***Pathways to the Future Grid***). Both of these efforts have materially advanced this year. Successfully moving forward with any particular alternative market framework(s) depends on the collaboration and consensus building within the region, particularly with and among the six New England States and NEPOOL members. NEPOOL looks forward to continued engagement with, and input from, the States (through NESCOE and NECPUC) and ISO-NE before deciding on next steps for the ***Pathways*** process.

- **FCM Retirement Reforms** – NEPOOL appreciates that the ISO will be tackling the retirement reform proposal that was approved by NEPOOL earlier this year² and that ISO is also planning to explore with stakeholders additional market reforms to enable retired resources to return to service under a broader set of conditions.³

In addition to the above, NEPOOL remains interested in hearing from ISO about potential inclusion of plans/projects in the 2023 Work Plan to continue to improve upon the rules relating to exit from the market.

- **Pay-For-Performance (PFP) Issues** – The list of questions/concerns with PFP is long -- is the Performance Penalty Rate (PPR) too high, do the stop loss and PPR rate at current levels work against each other and send inappropriate signals during scarcity conditions that lasts longer than an hour, should we revisit the definition of a Capacity Scarcity Condition, is the current construct frustrating retirement signals, and others.

NEPOOL looks forward to the release of ISO's anticipated Q3 2022 memorandum and subsequent Markets Committee discussions relating to ISO's assessment of PFP-related issues. Because it is unclear at this time whether or not additional PFP-related work will be considered as part of ISO's expected 2023 Work Plan, NEPOOL may revisit this item once more information is available and/or further dialogue is completed on this subject matter.

- **Request for Detailed Information on ISO's Overall Plan to support Clean Energy Transition** – Desire for better/clearer understanding of the ISO's overall plan to evolve wholesale markets and the electric grid to achieve decarbonization. As part of this Sector-identified priority item, there was a request for ISO to produce a detailed roadmap of the initiatives it believes will be necessary to achieve a reliable decarbonized grid, beyond the resource capacity accreditation reform and new day-ahead ancillary services initiatives already included in the ISO's Work Plan.

As ISO noted in its preliminary feedback on the larger list of Sector-identified priorities, "this work is underway and ongoing." NEPOOL appreciates the ISO's attention to and ongoing work related to this item, including ISO's recent publication/distribution of its *2022-2025 Roadmap to the Future Grid*, which identifies planned work over the next few years to adapt the markets and the power system for the evolving resource mix and clean-energy transition.

² During its February 3, 2022 meeting, the NEPOOL Participants Committee approved a participant-sponsored proposal to modify provisions of Market Rule 1 (Sections III.13.1.2.3, III.13.1.2.4 and III.13.8.1) to allow Retirement De-List Bids and Permanent De-List Bids the ability to decrease their originally submitted bid prices by up to 25% during the Static De-List Bid finalization window and to move the Internal Market Monitor's filing of finalized prices and elections to early November.

³ Per its updated 2022 Annual Work Plan, ISO plans to begin NEPOOL stakeholder discussions on an alternative mothball option in Q4 of this year. See https://www.iso-ne.com/static-assets/documents/2022/04/2022_awp_update_for_04_07_22_pc.pdf.

- **Capacity Accreditation of Tie Benefits and HQICCs** – While the Resource Capacity Accreditation (RCA) effort is already a priority item within the existing Work Plan, the request here was to assure the RCA effort included an evaluation of the reliability contributions from tie benefits and HQICCs.

ISO stated in its written feedback to NEPOOL that: “*Evaluation of the reliability contributions from tie benefits and HQICCs in the RCA initiative would take place over the next year as part of the project.*”

- **Dynamic Line Ratings (DLR)** – FERC Order 881 prompted examination and reform of transmission line ratings in New England, resulting in ISO’s compliance changes to implement ambient adjusted line ratings (AARs). However, Order 881 did not require the use of DLRs. With FERC earlier this year opening a Notice of Inquiry to examine whether the use of DLRs would improve the accuracy and transparency of transmission line ratings, the request here is for ISO to further consider with stakeholders whether DLR requirements would help with some of the congestion issues in the region.

With acknowledgement of the requisite priority of FERC compliance-related work, NEPOOL agrees with ISO’s assessment that this request could be resolved or reassessed later based on AAR implementation and/or receipt of FERC’s potential NOPR on DLRs.

OTHER ITEMS OF REQUESTED NEPOOL PRIORITY

The following items were identified by member representatives within one or more of the Sectors but did not achieve consensus among the Sector Vice-Chairs as items of the highest priority for NEPOOL as a whole. NEPOOL leadership does though encourage the ISO to consider these items on a going forward basis, especially if one or more such item(s) may help to address any of the aforementioned priorities. Additionally, NEPOOL may revisit these items as a potential priority in the future.

- **Overlapping Impact Study Result Transparency** – Request to publish publicly (with the appropriate CEII approval) overlapping impact test results, in exactly the same way that Feasibility Study and System Impact Study reports are available in the interconnection space.

NEPOOL appreciates the ISO’s preliminary assessment that any changes to effectuate this request would require a relatively modest amount of effort. However, there appears to be a split among certain of the NEPOOL Sectors regarding both the benefits and potential downsides of public release of currently protected information from the overlapping impact test results. Some within NEPOOL continue to believe that publication would significantly improve the amount of information and transparency available to the marketplace, while a few other members have expressed some preliminary concern with the public release of certain market information. NEPOOL would appreciate any further insight from ISO on the potential pros and cons of publicly publishing results from overlapping impact tests.

- **Consideration of an additional performance mechanism** – Request that as part of the 2023 Work Plan, the ISO dedicates time and resources for further consideration of additional market design features that provide improved performance distinctions among resources holding a Capacity Supply Obligation (separate and distinct from scarcity event hours under PFP). It was suggested that such a mechanism could help to improve energy adequacy signals.
- **FCM Planning Horizons** – Request of ISO to dedicate resources to review the current three-year forward planning horizon and depending on outcome of assessment, consider potential alternative time horizons.
- **Potential Regulation Market Enhancements** – This requested effort would include ISO and stakeholder review, evaluation and consideration of the following issues and/or changes to the Regulation Market:
 - Implementing a co-optimization of the regulation market
 - Increasing the current caps of the regulation market
 - How is a unit that provides regulation treated during PFP events?
 - If an asset is regulating in an hour with day-ahead schedule, and energy prices in real-time increase over day-ahead, the NCPC will not cover the shortfall
- **Settlement Item on Reactive Power** – ISO-NE settlement system currently allocates Schedule 2 VAR/Reactive Power capacity cost payments for qualified reactive resources to identified Asset Owners monthly as part of its energy settlement. There is no ability for a Lead Market Participant to receive those payments directly. The request here is for ISO to consider changes to the allocation option in its settlement system for Schedule 2 VAR/Reactive Power capacity cost payments.

Although this is not a NEPOOL-wide priority, the ISO has identified a limited in scope approach to this request:

“Change the settlement system so that all Lead Market Participants are paid VAR Capacity Cost instead of Asset Owners, which they encourage the ISO to review as part of its customer service efforts. This is a relatively simple cost-allocation change that would require some minor IT and documentation changes.”

Given the lighter lift with this contemplated approach, the NEPOOL Sector Vice-Chairs encourage the ISO to review addressing this request as part of its ongoing customer service efforts.

REQUESTS FOR ASSESSMENT BY IMM AND/OR EMM

While one or both of the following Sector-identified priority items may be worthwhile for inclusion in the 2023 Work Plan, there is general agreement among the NEPOOL Officers that these items would likely benefit from new or additional assessment by either the ISO’s Internal or External Market Monitor. Also, because the scope of the DDBT-related request could, as ISO

noted, “be affected by the Sealed Bid FCA request/assessment”, NEPOOL appreciates the value in getting the sequencing right here with the two items. If this request is done prior, it may need to be modified based on the outcome of the Sealed Bid FCA request/assessment.”

- **Dynamic Delist Bid Threshold (DDBT) Review/Assessment** – Based on bidding in the latest auction (FCA 17), more than 1500 MW sought to delist within 2 cents of one another. This large amount of delists across a very small price range at least indicative of an issue that should be reviewed. Upon further assessment by the IMM or EMM, the ISO should consider possible revisions to the current formula to add more bandwidth (e.g., multiplying the current formula by 1.5).
- **Further Evaluation/Consideration of Sealed Bid FCA** – Prompted by a desire among some of the NEPOOL members to move to a sealed bid Forward Capacity Auction to streamline mitigation of existing resources given significant competition under the DDBT demonstrated in past auctions, this request is for ISO to work with stakeholders to review and consider a sealed bid FCA.

As noted above, NEPOOL leadership is interested in the IMM (and/or EMM) conducting further assessment of the mitigation issues at play with both of these items.

REQUEST TO INITIATE GROUNDWORK DISCUSSION

- **Environmental Justice** – During the States’ Energy Vision process, various stakeholders, including end users, raised the need to incorporate environmental justice considerations into regional decision-making. In their Advancing the Vision Report, the states subsequently asked the ISO to incorporate environment justice considerations into its decision-making. The initial request here is for ISO to detail any plans to address the states’ ask concerning the interplay of environmental justice issues.

As a first step, NEPOOL leadership acknowledges the request of the states and agrees that it would be helpful, as a starting point, for an interested group of stakeholders to initiate preliminary discussions within NEPOOL, with the ISO, state representatives and others as to the proposed scope of such an initiative, including on issues relating to the overlap of environmental justice objectives and ISO jurisdictional authority. Initiation and completion of such discussions should help to lay the foundation for further consideration by ISO and NEPOOL.



memo

To: NEPOOL Participants Committee

From: Vamsi Chadalavada

Date: October 3 , 2022

Subject: Resource Capacity Accreditation (RCA) Scope for the Nineteenth Forward Capacity Auction (FCA 19)

The RCA project is an anchor project for the ISO and the region spanning across 2022 and 2023. In order to best ensure an approach that is both cohesive and sensible, the ISO has evaluated what is feasible to design and implement in advance of FCA 19. The scope of this effort is focused on three specific areas:

1. Updating the resource accreditation framework to apply a marginal reliability impact (MRI) approach to all resources;
2. Enhancing resource and load modeling in GE-MARS; and
3. Integrating gas-limitations into the resource adequacy assessment and capacity market.

The ISO believes that these changes will help establish a strong foundation and are critical in aligning the contribution of resources to the reliability of the region. Much of this work is new and the ISO will benefit from active stakeholder feedback. The ISO is also planning on conducting an impact analysis to present the impact of these changes on resource technologies. Each of these core items will take time and careful consideration to develop and will require targeted focus by the ISO and stakeholders.

The ISO has received several inquiries about the scope of the RCA project. With the three changes listed above, the scope already requires extensive changes throughout the Tariff. As is expected with a project that encompasses a change of this magnitude, the ISO anticipates developing additional changes after the initial filing to further conform other related market components. This memo serves to highlight some of the major items that are not in scope for the RCA project that will be filed in 2023, while the full list of items will be reviewed by ISO staff at an upcoming Markets Committee meeting.

- (1) Prompt Auction and Seasonal Considerations: While several participants have expressed an interest in either a prompt capacity auction and/or seasonal capacity auctions, we cannot assess and develop those changes in this project cycle. Importantly, however, the ISO's overall RCA design would be compatible with a prompt auction if it was to be developed later.

Similarly, the proposed MRI design changes within the RCA scope will consider certain seasonal components. The ISO also is evaluating the summer tie benefits assumptions during the winter months as part of the RCA project, although the project is not intended to include a full overhaul of the tie benefits framework.

- (2) Generator Capacity Interconnection: The ISO is not proposing any reforms to the Capacity Network Resource Capacity Interconnection Service or the approach that would be used in the studies to establish these values.
- (3) Descending Clock Auction: The ISO is not proposing to eliminate the descending clock auction framework in this project, but will conform the tariff and software to apply it to RCA.
- (4) Installed Capacity Requirements and Demand Curve: The project will not change the approach used to establish the installed capacity requirement, the new MRI capacity requirement, or demand curves – rather, the project will be conforming these constructs to work with the new MRI approach to accreditation.
- (5) Pay-for-Performance (PFP) Revisions: While the PFP rules may need to be conformed for the new RCA design, the project will not propose any substantive changes to the PFP design.
- (6) Reliability Review Assumptions: These reviews consider physical capabilities and, as such, the ISO is not proposing to change how it performs reliability reviews. The ISO will continue to use Qualified Capacity (QC) or the cleared QC (effective capacity supply obligation [CSO]) as they are used today for purposes of reliability studies.

The ISO appreciates the level of engagement and support that stakeholders have shown for the RCA project. While we understand and respect that stakeholders may hold differing views on the various components, we are hopeful that we will continue to work together on completing the core design in a collaborative manner. There is still quite a way to go to get to the finish line on this project and your feedback and focused attention are always appreciated.

MEMORANDUM

TO: NEPOOL Participants Committee Members and Alternates

FROM: Paul Belval and Pat Gerity, NEPOOL Counsel

DATE: September 29, 2022

RE: ISO New England Inc. (“ISO”) 2023 Operating and Capital Budgets
New England States Committee on Electricity (“NESCOE”) 2023 Budget

At its October 6, 2022 meeting, the Participants Committee (the “NPC”) will be asked to vote on the ISO’s proposed 2023 operating and capital budgets (collectively, the “ISO Budgets”) and on NESCOE’s 2023 operating budget (the “NESCOE Budget”). We have included with this memorandum and will post with the composite for this meeting background materials regarding these budgets.

The ISO 2023 Budgets

The ISO Budgets were prepared according to the processes included in the Participants Agreement and in the Settlement Agreement with state agencies in FERC Dockets Nos. ER13-185 and ER13-192. The ISO presented its preliminary budgets to NECPUC on June 6 and at the June 21 NPC Summer Meeting. The ISO next presented the ISO Budgets to the NEPOOL Budget and Finance Subcommittee (the “Subcommittee”) on August 11 and to the New England state agencies and attorneys general on August 12. Mr. Ludlow also provided an overview of the ISO Budgets at the September 1 NPC meeting and offered to answer any questions that NPC members may have on the ISO Budgets. Questions on the ISO Budgets provided by certain New England state regulators and consumer advocates, as well as the ISO’s responses thereto, are posted on the ISO’s website.

Included with this memorandum is a memorandum from Mr. Ludlow describing the changes that have been made to the ISO Budgets from the versions reviewed by the Subcommittee and provided previously to the NPC. That memorandum includes a link to the updated ISO Budgets presentation and a link to the comments from the New England state regulators and consumer advocates and the ISO’s response to those comments. The ISO’s September 29 memorandum regarding the allocation of its projected costs among the ISO Tariff Schedules is also included with this memorandum.¹

The 2023 ISO operating budget, prior to true-ups, reflects an 11.7 percent increase over the 2022 operating budget. After accounting for the true-up mechanism in the ISO Tariff, the revenue requirement to fund the 2023 operating budget (i.e., the amount collected under the ISO administrative cost tariff) will

¹ The memo addressing the Projected 2023 Revenue Requirement, including the final true-up for 2021 and a comparison to the 2022 Revenue Requirement, a Draft 2023 Revenue Requirement by activity, and Draft 2023 Rate Components, was circulated by the ISO to Participants Committee members and alternates and Budget & Finance Subcommittee members on September 28. A copy is included with this memorandum for your convenience.

increase by 4.4 percent over the amount projected to be collected in 2022. The ISO capital budget for 2023 is \$33.5 million. This reflects a \$1.5 million increase over the amount of the 2022 capital budget.

The following form of resolution can be used by the NPC on this matter:

RESOLVED, that the Participants Committee supports the Year 2023 operating budget and capital budget proposed by the ISO, as presented at this meeting.

The NESCOE 2023 Budget

Ms. Heather Hunt, the Executive Director of NESCOE, joined the Subcommittee's August 11 meeting and informed the Subcommittee that NESCOE expected the NESCOE Budget for 2023 to be approximately \$2,696,171. NESCOE's August 11 presentation to the Subcommittee was included with the materials for the September 1 NPC meeting and Ms. Hunt offered to answer any questions that NPC members may have on the NESCOE Budget. A revised summary presentation regarding the NESCOE Budget, which reflects the actual 2023 Schedule 5 Rate as calculated by the ISO (\$0.00701 per kW-mo.), rather than an estimated rate, is included with this memorandum. The revised presentation is identical to the NESCOE August 11, 2022 presentation, with only slide 12 updated and marked to reflect the final 2023 Network Load factor and final Schedule 5 Rate and slide 2 updated to reflect the NPC's support and FERC filing of NESCOE's 5-year pro forma budget.

The following form of resolution can be used by the NPC in its consideration of the proposed 2023 NESCOE Budget:

RESOLVED, that the Participants Committee supports the 2023 NESCOE budget, as proposed by NESCOE at this meeting, as the Year 2023 operating budget for NESCOE.

cc: R. Ludlow
C. Arnold
H. Hunt
NEPOOL Budget and Finance Subcommittee



memo

To: NEPOOL Participants Committee

From: Robert C. Ludlow, VP & CFO

Date: September 29, 2022

Subject: ISO New England's 2023 Proposed Operating and Capital Budgets

This 2023 operating and capital budgets (the "Budgets") update is intended to provide the NEPOOL Participants Committee with information regarding the changes that have been made to the ISO's 2023 proposed Budgets since the last review of the Budgets at the September 1, 2022 NEPOOL Participants Committee ("NPC") meeting.

Summary of Changes

The 2023 operating budget remains unchanged from the version presented to the NEPOOL Budget and Finance Subcommittee in August and to the NPC in September. Accordingly, the only updates to the budget presentation are to reflect the updated compensation survey data and that the Compensation and Human Resources Committee of ISO New England's Board of Directors approved the budgeted merit and promotional increase amounts. In summary, the 2023 operating budget, excluding the true-up, is an increase of 11.7% or \$25.1M as compared to the 2022 operating budget. The 2023 operating budget, including the true-up, results in a 4.4% increase to the Revenue Requirement compared to 2022.

The 2023 overall capital budget of \$33.5M has not changed from the amount presented at the August and September Budget and Finance and NPC meetings, respectively. Without impacting the overall budget, there were changes to certain capital projects that have been reflected in the updated budget presentation. The Forward Capacity Market Order 2222 and IT Asset Workflow Integration and Updates projects have moved from the planning phase to chartered, and, accordingly had changes in the 2022, 2023 and overall budget amounts. The currently chartered Physical Security Improvement Project has an updated 2023 and overall budget amount and an updated estimated completion date. Finally, the 2023 Other Emerging Work balance was adjusted to reflect the funding changes to the foregoing projects.

Materials

The August 11, 2022 budget presentation presented to the NEPOOL Budget and Finance Subcommittee has been updated to reflect the changes described above. The updated budget presentation can be found at the following link: https://www.iso-ne.com/static-assets/documents/2022/09/7_isonew_2023_proposed_op_cap_budget_update_09_29_2022.pdf

The 2023 state agencies' written comments and the accompanying response can be found at the following link: https://www.iso-ne.com/static-assets/documents/2022/09/7_states_2023_budget_comments_isonew_response.pdf

NEPOOL Participants Committee
September 29, 2022
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Budget Presentation Slide Changes

The following pages have been updated in the budget presentation:

Operating Budget Compensation Slides, pages 87, 90, and 99

Capital Budget Slides, pages: 60, 61, 62, 151, 156, 157, 158, 178, and 180

Please let me know if you have any questions in advance of our meeting. I look forward to our discussion.



memo

To: NEPOOL Budget & Finance Subcommittee and Participants Committee

From: Bob Ludlow and Cheryl Arnold

Date: September 28, 2022

Subject: Projected 2023 Revenue Requirement for ISO New England Administrative Cost Tariff Schedules

To help our Participants prepare their 2023 budgets and consistent with information provided in previous years, this memo includes a preliminary indication of ISO-NE's 2023 costs and related tariff schedules. Specifically, the memo includes (1) the estimated 2023 Revenue Requirement, including the final true-up for 2021 and a comparison to the 2022 Revenue Requirement (see Exhibit 1 below), (2) the Draft 2023 Revenue Requirement by activity (see Exhibit 2), and (3) the Draft 2023 Rate Components (see Exhibit 3). Exhibits 2 and 3 are attached and, in their final form, will be part of the ISO's budget filing with FERC. The cost assignment and allocation mechanisms that were utilized in the Draft 2023 tariff schedules were established as part of the settlement that has been in effect for the last twenty-one years.

Overall Change in Revenue Requirement

As shown in Exhibit 1 below, the overall Revenue Requirement has increased by \$9.5 million year-over-year, from \$216.1M for 2022 to \$225.6M for 2023.¹ The change includes a \$25.1 million increase in the revenue requirement before taking into account the change in prior year true-ups. Prior year true-ups resulted in a decrease of \$15.7M. The 2022 tariff included a \$1.1M revenue requirement increase for the final 2020 true-up, while the 2023 tariff will include a decrease of \$14.6M as a result of the final 2021 true-up.

| Draft Exhibit 1 | | | | |
|--|--------------------|--------------------|--------------------|---------------------|
| ISO New England Revenue Requirement By Tariff Schedule 2023 Estimated Amount vs. 2022 Filed Amount | | | | |
| | Sch 1 | Sch 2 | Sch 3 | Total |
| 2023 Revenue Requirement Before Prior Year True Ups | \$ 49,273,547 | \$ 118,209,011 | \$ 72,722,598 | \$ 240,205,156 |
| 2022 Revenue Requirement Before Prior Year True Ups | 45,082,953 | 105,115,206 | 64,872,524 | 215,070,683 |
| \$ Increase/(Decrease) from 2022 to 2023 | 4,190,594 | 13,093,805 | 7,850,074 | 25,134,473 |
| % Increase/(Decrease) from 2022 to 2023 | 9.3% | 12.5% | 12.1% | 11.7% |
| 2023 Revenue Requirement Prior Year True Ups-Under/(Over) Collect | \$ (3,063,761) | \$ (7,987,289) | \$ (3,537,695) | \$ (14,588,745) |
| 2022 Revenue Requirement Prior Year True Ups-Under/(Over) Collect | (701,273) | 1,037,876 | 734,687 | 1,071,290 |
| \$ Increase/(Decrease) from 2022 to 2023 | (2,362,488) | (9,025,165) | (4,272,382) | (15,660,035) |
| 2023 Revenue Requirement Including Prior Year True-Ups | \$ 46,209,786 | \$ 110,221,722 | \$ 69,184,903 | \$ 225,616,411 |
| 2022 Revenue Requirement Including Prior Year True-Ups | 44,381,680 | 106,153,082 | 65,607,211 | 216,141,973 |
| \$ Increase/(Decrease) from 2022 to 2023 | 1,828,106 | 4,068,640 | 3,577,692 | 9,474,438 |
| % Increase/(Decrease) from 2022 to 2023 | 4.1% | 3.8% | 5.5% | 4.4% |

¹ Minor variances may appear due to rounding among the various presentations and schedules for the 2023 Budgets.

Change in Revenue Requirement by Schedule

Before true-ups in 2023 and 2022, the 2023 Revenue Requirement reflects an overall increase of \$25.1M or 11.7% over the 2022 Revenue Requirement. By tariff schedule, the changes are Schedule 1, a \$4.2M or 9.3% *increase*; Schedule 2, a \$13.1M or 12.5% *increase*; and Schedule 3, a \$7.9M or 12.1% *increase*.

The Tariff Schedule 1 increase of \$4.2M is attributable to:

- Increases that impact all three schedules including for: compensation, employee benefit costs, recruiting, retention, and succession planning; computer services and systems support, cyber security systems and resources, and power system modeling; resources in Participant Relations & Services, and External Affairs and Corporate Communications; and insurance policy increases.
- Also affecting all three schedules is depreciation expense increases for certain capital projects, including Security Information and Event Management Log Monitoring Replacement, New Security Operations Center, Amazon Web Services Cloud Foundation, E-mail List Server Technology Refresh, and Privileged Account Management Security Enhancements.
- Funding for Transmission Planning and Transmission Services resources to support long-term transmission planning related to the transition to a carbon-free power system, including further 2050 Transmission Study work, for North American Electric Reliability Corporation (NERC) standards compliance, and to support volume increases in the interconnection queue.

The Tariff Schedule 2 increase of \$13.1M is attributable to:

- Funding for items that impact all three schedules as noted above in the explanation for Schedule 1.
- Depreciation expense increases for projects affecting all three schedules as noted above in the explanation for Schedule 1, and depreciation expense increases specifically affecting Schedule 2, related to the mid-2023 go-live of the nGEM platform projects² and the Replacement Locational Marginal Price Monitor project.
- Funding for Market Development resources to integrate renewable resources and new resource types, including large-scale storage resources and batteries into the market designs.
- Funding for work that affects Schedules 2 and 3, including Day-Ahead Ancillary Services market design and development, future grid studies for a clean-energy future, and a Participant Relations & Services resource to integrate several new initiatives and projects into market training and to begin the development of new training delivery methods.

The Tariff Schedule 3 increase of \$7.9M is attributable to:

- Funding for items that impact all three schedules as noted above in the explanation for Schedule 1 and items that impact Schedules 2 and 3, as noted above in the explanation for Schedule 2.
- For Resource Capacity Accreditation (RCA) work to establish improvements to ISO-NE's accreditation processes in the Forward Capacity Market.
- Increases in Northeast Power Coordinating Council (NPCC) and NERC dues.
- Depreciation expense increases for projects affecting all three schedules as noted above in the explanation for Schedule 1, and depreciation expense increases for projects allocated entirely to Schedule 3, including the Forward Capacity Tracking System Infrastructure Conversion Part III and the Forward Capacity Market Cost Allocation & Accelerated Billing projects.

The ISO 2023 Revenue Requirement will be reviewed and voted on at the October 6, 2022 NPC meeting. Should you have any questions regarding the information provided in this memo, do not hesitate to contact us.

² Upon completion of the nGEM Market Clearing Engine Implementation, scheduled for June 2023, the following projects will begin depreciating: CIMNET Simultaneous Feasibility Test with Data Transfer Enhancements, nGEM Value Added Development, nGEM Market Clearing Engine Implementation, nGEM Software Development Parts I and II, and nGEM Hardware Phase I and II.

Exhibit 2
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DRAFT

| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|--|-----------------------|---------------------|--------------|--------------|--------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | <u>Administration-CEO</u> | | | | | |
| 2 | 12651 | Indirect Administrative Support | Total Dir Labor | \$ 10,974,798 | \$ 2,365,069 | \$ 5,679,458 | \$ 2,930,271 |
| 3 | 12652 | NEPOOL Committee Support | Total Dir Labor | 3,045 | 656 | 1,576 | 813 |
| 4 | 12653 | Adm/Finance/HR - Regional Committee Support | Total Dir Labor | 225 | 48 | 116 | 60 |
| 5 | 12654 | National Committee Support | Total Dir Labor | 1,725 | 372 | 893 | 461 |
| 6 | 12657 | Indirect Administrative Support for BCC | Total Dir Labor | 1,195,864 | 257,709 | 618,859 | 319,296 |
| 7 | | Total | | 12,175,657 | 2,623,854 | 6,300,902 | 3,250,900 |
| 8 | | | | | | | |
| 9 | | <u>Finance</u> | | | | | |
| 10 | 11601 | Payroll Administration | Total Dir Labor | 675,092 | 145,482 | 349,360 | 180,249 |
| 11 | 11701 | Accounts Payable | Total Dir Labor | 339,747 | 73,215 | 175,819 | 90,712 |
| 12 | 11702 | Procurement | Total Dir Labor | 467,485 | 100,743 | 241,923 | 124,818 |
| 13 | 11901 | Settle for Power Transactions | Total Dir Labor | 84,837 | 18,282 | 43,903 | 22,651 |
| 14 | 12001 | Budgeting and Forecasting | Total Dir Labor | 551,439 | 118,835 | 285,370 | 147,234 |
| 15 | 12005 | Credit Administration | Total Dir Labor | 466,602 | 100,553 | 241,467 | 124,583 |
| 16 | 12019 | COVID-19 Related Expense | Total Dir Labor | 3,260 | 703 | 1,687 | 871 |
| 17 | 12101 | Ledger Closing, Financial Statements and Tax Reporting | Total Dir Labor | 551,439 | 118,835 | 285,370 | 147,234 |
| 18 | 12201 | Treasury and Cash Management | Total Dir Labor | 2,478,015 | 534,012 | 1,282,373 | 661,630 |
| 19 | 92004 | Depreciation Expense 2004 Assets | Alloc-Fixed | 43,160 | 8,988 | 22,535 | 11,637 |
| 20 | 92005 | Depreciation Expense 2005 Assets | Alloc-Fixed | 773,169 | 163,467 | 402,125 | 207,577 |
| 21 | 92006 | Depreciation Expense 2006 Assets | Total Dir Labor | 568,947 | 122,608 | 294,430 | 151,909 |
| 22 | 92007 | Depreciation Expense 2007 Assets | Total Dir Labor | 156,427 | 33,710 | 80,951 | 41,766 |
| 23 | 92008 | Depreciation Expense 2008 Assets | Total Dir Labor | 1,808 | 390 | 936 | 483 |
| 24 | 92009 | Depreciation Expense 2009 Assets | Total Dir Labor | 1,535 | 331 | 794 | 410 |
| 25 | 92010 | Depreciation Expense 2010 Assets | Total Dir Labor | 2,380 | 513 | 1,232 | 635 |
| 26 | 92011 | Depreciation Expense 2011 Assets | Total Dir Labor | - | - | - | - |
| 27 | 92012 | Depreciation Expense 2012 Assets | Total Dir Labor | 80,432 | 17,333 | 41,624 | 21,475 |
| 28 | 92013 | Depreciation Expense 2013 Assets | Total Dir Labor | 851,098 | 183,412 | 440,443 | 227,243 |
| 29 | 92014 | Depreciation Expense 2014 Assets | Alloc-Fixed | 159,492 | 29,849 | 92,661 | 36,982 |
| 30 | 92015 | Depreciation Expense 2015 Assets | Alloc-Fixed | 11,486 | 2,475 | 5,944 | 3,067 |
| 31 | 92016 | Depreciation Expense 2016 Assets | Alloc-Fixed | 130,355 | 38,974 | 64,702 | 26,680 |
| 32 | 92017 | Depreciation Expense 2017 Assets | Alloc-Fixed | 442,680 | 65,976 | 314,410 | 62,293 |
| 33 | 92018 | Depreciation Expense 2018 Assets | Alloc-Fixed | 1,567,030 | 344,531 | 866,717 | 355,782 |
| 34 | 92019 | Depreciation Expense 2019 Assets | Alloc-Fixed | 3,438,109 | 725,483 | 1,849,458 | 863,168 |
| 35 | 92020 | Depreciation Expense 2020 Assets | Alloc-Fixed | 6,402,987 | 835,577 | 3,732,702 | 1,834,708 |
| 36 | 92021 | Depreciation Expense 2021 Assets | Alloc-Fixed | 7,825,467 | 1,071,096 | 4,644,629 | 2,109,742 |
| 37 | 92022 | Depreciation Expense 2022 Assets | Alloc-Fixed | 7,143,043 | 955,802 | 4,152,391 | 2,034,850 |
| 38 | 92023 | Depreciation Expense 2023 Assets | Alloc-Fixed | 1,276,396 | 137,716 | 700,334 | 438,347 |
| 39 | 99707 | Amortization of Land Recovery | Alloc-Fixed | 39,300 | 2,460 | 24,170 | 12,670 |
| 40 | 99995 | NPCC/NERC Dues | Alloc-Fixed | 7,296,418 | - | - | 7,296,418 |
| 41 | 99996 | Operating Contingency | Total Dir Labor | 700,000 | 150,850 | 362,250 | 186,900 |
| 42 | 99996 | Operating Contingency | Total Dir Labor | 2,000,000 | 431,000 | 1,035,000 | 534,000 |
| 43 | 99998 | Payroll & Other Accruals | Total Dir Labor | 16,040,630 | 3,456,756 | 8,301,026 | 4,282,848 |
| 44 | | Total | | 62,570,264 | 9,989,957 | 30,338,735 | 22,241,573 |
| 45 | | | | | | | |
| 46 | | <u>Facilities & Security</u> | | | | | |
| 47 | 12664 | Building Maintenance | Total Dir Labor | 3,317,276 | 714,873 | 1,716,690 | 885,713 |
| 48 | | Total | | 3,317,276 | 714,873 | 1,716,690 | 885,713 |
| 49 | | | | | | | |
| 50 | | <u>Enterprise Risk Management</u> | | | | | |
| 51 | 22704 | Record Retention Services | Alloc-Fixed | 106,371 | 35,422 | 35,422 | 35,528 |
| 52 | 22705 | Corporate Scorecard | Alloc-Fixed | 55,495 | 18,480 | 18,480 | 18,535 |
| 53 | 22706 | Document Management Services | Alloc-Fixed | 107,324 | 42,929 | 32,197 | 32,197 |
| 54 | 22710 | Employee Development | Total Dir Labor | 21,141 | 4,556 | 10,941 | 5,645 |
| 55 | 22714 | Analysis | Total Dir Labor | 339,347 | 73,129 | 175,612 | 90,606 |
| 56 | 22719 | Human Performance Improvement | Total Dir Labor | 13,392 | 2,886 | 6,930 | 3,576 |
| 57 | 22721 | Corp Strategic Risk | Total Dir Labor | 571,626 | 123,185 | 295,817 | 152,624 |
| 58 | 22726 | Project Risk Mngmt Meeting | Total Dir Labor | 23,784 | 5,125 | 12,308 | 6,350 |
| 59 | 23006 | Business Continuity Planning | Total Dir Labor | 240,553 | 51,839 | 124,486 | 64,228 |
| 60 | 25011 | Corrective Action/Preventive Action | Alloc-Fixed | 327,879 | 109,184 | 109,184 | 109,511 |
| 61 | 25014 | EtQ Tools Dev & Support | Total Dir Labor | 136,275 | 29,367 | 70,523 | 36,386 |
| 62 | 25015 | Coord Tariff Chg Comm (TCC) | Total Dir Labor | 5,285 | 1,139 | 2,735 | 1,411 |
| 63 | | Total | | 1,948,472 | 497,242 | 894,633 | 556,597 |
| 64 | | | | | | | |
| 65 | | <u>Human Resources</u> | | | | | |
| 66 | 12661 | Employee Affairs (Recreation Committee) | Total Dir Labor | 54,948 | 11,841 | 28,436 | 14,671 |
| 67 | 12701 | Recruiting/Interviewing | Total Dir Labor | 1,090,732 | 235,053 | 564,454 | 291,225 |
| 68 | 12702 | Intern Expense | Total Dir Labor | 278,018 | 59,913 | 143,875 | 74,231 |
| 69 | 12801 | Employee Relations | Total Dir Labor | 1,676 | 361 | 868 | 448 |
| 70 | 12901 | Benefit Administration | Total Dir Labor | 1,442,674 | 310,896 | 746,584 | 385,194 |
| 71 | 12951 | Compensation | Total Dir Labor | 557,329 | 120,104 | 288,418 | 148,807 |
| 72 | 12961 | HR - General | Total Dir Labor | 1,307,136 | 281,688 | 676,443 | 349,005 |
| 73 | 12962 | HR - Training | Total Dir Labor | 1,280,546 | 275,958 | 662,682 | 341,906 |
| 74 | 13410 | Power Training & Development | Total Dir Labor | 869,781 | 187,438 | 450,111 | 232,231 |
| 75 | 13411 | Markets Training & Development | Total Dir Labor | 103,543 | 22,313 | 53,583 | 27,646 |
| 76 | 13412 | People Training & Development | Total Dir Labor | 288,964 | 62,272 | 149,539 | 77,153 |
| 77 | 13413 | Business Skills Training & Development | Total Dir Labor | 477,068 | 102,808 | 246,882 | 127,377 |
| 78 | 13414 | Technology Training & Development | Total Dir Labor | 843,082 | 181,684 | 436,295 | 225,103 |
| 79 | 13901 | Performance Eval/Salary Review | Total Dir Labor | 74,241 | 15,999 | 38,420 | 19,822 |
| 80 | | Total | | 8,669,737 | 1,868,328 | 4,486,589 | 2,314,820 |

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| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|---|-----------------------|---------------------|------------|------------|------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | <u>Legal Department</u> | | | | | |
| 2 | 12422 | Interconnection Queue | Alloc-Fixed | 103,141 | - | - | 103,141 |
| 3 | 12502 | Board of Directors | Total Dir Labor | 245,610 | 52,929 | 127,103 | 65,578 |
| 4 | 12508 | Energy Markets / Complaints / Rule Changes | Alloc-Fixed | 1,397,062 | - | 1,397,062 | - |
| 5 | 12513 | Miscellaneous Labor Matters | Total Dir Labor | 119,964 | 25,852 | 62,082 | 32,030 |
| 6 | 12514 | NEPOOL Participants Committee | Total Dir Labor | 135,001 | 29,093 | 69,863 | 36,045 |
| 7 | 12517 | Administrative and Clerical Support | Total Dir Labor | 577,591 | 124,471 | 298,903 | 154,217 |
| 8 | 12543 | Independent Market Advisor | Alloc-Fixed | 1,100,000 | - | 770,000 | 330,000 |
| 9 | 12559 | General Corporate | Total Dir Labor | 1,704,675 | 367,357 | 882,169 | 455,148 |
| 10 | 12587 | Capacity Market Development | Alloc-Fixed | 994,595 | - | - | 994,595 |
| 11 | 12588 | Web Content Management | Total Dir Labor | 727,694 | 156,818 | 376,582 | 194,294 |
| 12 | 12606 | GC - NERC | Alloc-Fixed | 600 | 270 | 60 | 270 |
| 13 | 12619 | Compliance | Alloc-Fixed | 165,026 | 66,010 | 66,010 | 33,005 |
| 14 | 12622 | Open Access Transmission Tariff | Alloc-Fixed | 322,938 | 322,938 | - | - |
| 15 | 12631 | FERC Order 1000 (Legal Only) | Alloc-Fixed | 371,308 | - | - | 371,308 |
| 16 | 12663 | Public Information | Total Dir Labor | 1,952,442 | 420,751 | 1,010,389 | 521,302 |
| 17 | 12669 | Government Affairs | Total Dir Labor | 1,999,182 | 430,824 | 1,034,576 | 533,781 |
| 18 | | Total | | 11,916,830 | 1,997,313 | 6,094,800 | 3,824,716 |
| 19 | | | | | | | |
| 20 | | <u>Internal Audit</u> | | | | | |
| 21 | 15001 | Indirect Management Duties | Total Dir Labor | 209,476 | 45,142 | 108,404 | 55,930 |
| 22 | 15002 | Personnel Management | Total Dir Labor | 60,415 | 13,019 | 31,265 | 16,131 |
| 23 | 15003 | Budget & Forecasting | Total Dir Labor | 36,249 | 7,812 | 18,759 | 9,678 |
| 24 | 15004 | Audit Follow-up Activities | Total Dir Labor | 24,166 | 5,208 | 12,506 | 6,452 |
| 25 | 15005 | Audit & Finance Committee | Total Dir Labor | 113,013 | 24,354 | 58,484 | 30,174 |
| 26 | 15006 | Internal Audit Business Process Update | Total Dir Labor | 24,166 | 5,208 | 12,506 | 6,452 |
| 27 | 15007 | Annual Audit Work Plan | Total Dir Labor | 113,013 | 24,354 | 58,484 | 30,174 |
| 28 | 15011 | Internal Audit Meetings | Total Dir Labor | 36,249 | 7,812 | 18,759 | 9,678 |
| 29 | 15013 | Indirect Administrative Support | Total Dir Labor | 52,598 | 11,335 | 27,220 | 14,044 |
| 30 | 15014 | GRC Tool Admin and Development | Total Dir Labor | 105,985 | 22,840 | 54,847 | 28,298 |
| 31 | 15021 | Performance Measurements | Total Dir Labor | 36,249 | 7,812 | 18,759 | 9,678 |
| 32 | 15022 | Vendor Contracts | Total Dir Labor | 36,249 | 7,812 | 18,759 | 9,678 |
| 33 | 15023 | Wire Transfers | Total Dir Labor | 24,166 | 5,208 | 12,506 | 6,452 |
| 34 | 15028 | Executive Compensation and Expense Reporting | Total Dir Labor | 24,166 | 5,208 | 12,506 | 6,452 |
| 35 | 15110 | Systems Development Reviews | Total Dir Labor | 60,415 | 13,019 | 31,265 | 16,131 |
| 36 | 15133 | Satellite Operations Reviews | Total Dir Labor | 60,415 | 13,019 | 31,265 | 16,131 |
| 37 | 15137 | Satellite IT Reviews | Total Dir Labor | 60,415 | 13,019 | 31,265 | 16,131 |
| 38 | 15161 | External Audit- Pension Audit | Total Dir Labor | 99,509 | 21,444 | 51,496 | 26,569 |
| 39 | 15162 | External Audit- Financial Audit | Total Dir Labor | 156,365 | 33,697 | 80,919 | 41,749 |
| 40 | 15166 | External Audit -Pricing Module Certification | Alloc-Fixed | 24,166 | - | 24,166 | - |
| 41 | 15175 | Ext Audit - Info Technology | Total Dir Labor | 66,526 | 14,336 | 34,427 | 17,763 |
| 42 | 15176 | External Audit - ISO Internet Vulnerability Assessment | Total Dir Labor | 11,372 | 2,451 | 5,885 | 3,036 |
| 43 | 15186 | External Audit - SSAE 18 Direct Support | Total Dir Labor | 36,249 | 7,812 | 18,759 | 9,678 |
| 44 | 25702 | External Audit - SSAE 18 Direct Management | Alloc-Fixed | 518,014 | - | 518,014 | - |
| 45 | 28005 | Fraud, Waste & Abuse Program | Total Dir Labor | 54,563 | 11,758 | 28,236 | 14,568 |
| 46 | 28007 | Contractor/Consultant Review | Total Dir Labor | 26,243 | 5,655 | 13,581 | 7,007 |
| 47 | 28159 | Audit - Oracle Licensing Compl | Total Dir Labor | 113,280 | 24,412 | 58,622 | 30,246 |
| 48 | 28167 | AUDIT-CLOUD COMPUTING | Total Dir Labor | 113,280 | 24,412 | 58,622 | 30,246 |
| 49 | 28176 | CIP Oversight, Monitoring, and Reporting Processes Review | Total Dir Labor | 70,801 | 15,258 | 36,640 | 18,904 |
| 50 | 28179 | NERC CIP V5.0 Mock Audit | Total Dir Labor | 60,415 | 13,019 | 31,265 | 16,131 |
| 51 | | Total | | 2,428,186 | 406,434 | 1,518,188 | 503,564 |
| 52 | | | | | | | |
| 53 | | <u>COO-Adm</u> | | | | | |
| 54 | 19001 | NEPOOL Committee Support | Total OPS Labor | 179,520 | 48,111 | 86,080 | 45,329 |
| 55 | 19002 | Regional Committee Support | Total OPS Labor | 7,550 | 2,023 | 3,620 | 1,906 |
| 56 | 19003 | National Committee Support | Total OPS Labor | 10,904 | 2,922 | 5,228 | 2,753 |
| 57 | 19005 | Indirect Supervision/Clerical Support | Total OPS Labor | 1,776,637 | 476,139 | 851,898 | 448,601 |
| 58 | 19009 | Renewable Resource Integration | Alloc-Fixed | 151,916 | - | - | 151,916 |
| 59 | | Total | | 2,126,526 | 529,196 | 946,826 | 650,505 |
| 60 | | | | | | | |
| 61 | | <u>System Operations & Market Administration</u> | | | | | |
| 62 | 14404 | NEPOOL Committee Support | SOA Labor | 11,395 | 3,936 | 5,290 | 2,170 |
| 63 | 14405 | Indirect Supervision/Clerical Support | SOA Labor | 182,022 | 62,871 | 84,495 | 34,657 |
| 64 | 14407 | Regional Committee Support | SOA Labor | 11,395 | 3,936 | 5,290 | 2,170 |
| 65 | 14408 | National Committee Support | SOA Labor | 16,395 | 5,663 | 7,611 | 3,122 |
| 66 | 19101 | NEPOOL Committee Support | MOA Labor | 80,390 | - | 56,273 | 24,117 |
| 67 | | Total | | 301,598 | 76,405 | 158,958 | 66,235 |

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| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|--|-----------------------|---------------------|------------|------------|------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | <u>Operations</u> | | | | | |
| 2 | 14001 | Generation Dispatch | Alloc-Fixed | 4,153,473 | - | 3,488,917 | 664,556 |
| 3 | 14002 | Transmission Operations | Alloc-Fixed | 2,085,121 | 1,668,097 | 104,256 | 312,768 |
| 4 | 14304 | Advanced Scheduling and Forecasting | Alloc-Fixed | 2,068,352 | 103,418 | 1,633,998 | 330,936 |
| 5 | 14402 | Operations Training | Alloc-Fixed | 2,068,352 | 827,341 | 827,341 | 413,670 |
| 6 | 14413 | Operations Support Training & Development | Alloc-Fixed | 135,000 | 54,000 | 54,000 | 27,000 |
| 7 | 14563 | National Committee Support | OPS Labor | 6,844 | 1,913 | 3,789 | 1,141 |
| 8 | 14565 | Employee Development | OPS Labor | 26,981 | 7,544 | 14,936 | 4,500 |
| 9 | 14702 | Procedure Documentation | Alloc-Fixed | 72,216 | 28,886 | 28,886 | 14,443 |
| 10 | | Total | | 10,616,338 | 2,691,199 | 6,156,124 | 1,769,016 |
| 11 | | | | | | | |
| 12 | | <u>Operational Performance Trng and Integration</u> | | | | | |
| 13 | 14402 | Operations Training | Alloc-Fixed | 424,451 | 169,780 | 169,780 | 84,890 |
| 14 | 14462 | OSS - General Systems Operations Support | TSO Labor | 422,747 | 136,843 | 202,115 | 83,788 |
| 15 | 14564 | Indirect Supervision/Clerical Support | OPS Labor | 988,947 | 276,510 | 547,481 | 164,956 |
| 16 | 14574 | OPTI Continuing Training | Alloc-Fixed | 845,504 | 338,202 | 338,202 | 169,101 |
| 17 | 14581 | Application Testing and Development | Total Dir Labor | 845,497 | 182,205 | 437,545 | 225,748 |
| 18 | 14583 | Ops - Ad Hoc Analysis and Reporting | Total Dir Labor | 422,747 | 91,102 | 218,772 | 112,873 |
| 19 | 14587 | Ops - Other Internal Support Meetings | Total Dir Labor | 422,747 | 91,102 | 218,772 | 112,873 |
| 20 | 15501 | OA - Operations Analysis | Alloc-Fixed | 422,747 | 63,412 | 295,923 | 63,412 |
| 21 | | Total | | 4,795,387 | 1,349,155 | 2,428,589 | 1,017,642 |
| 22 | | | | | | | |
| 23 | | <u>Reliability and Operations Compliance</u> | | | | | |
| 24 | 14803 | Regional Committee Support | OS Labor | 76,576 | 38,288 | - | 38,288 |
| 25 | 14804 | National Committee Support | OS Labor | 100,621 | 50,311 | - | 50,311 |
| 26 | 14806 | Employee Development | Alloc-Fixed | 68,144 | 37,854 | 13,172 | 17,118 |
| 27 | 14807 | NERC RSAW Update and Audit Prep | Alloc-Fixed | 145,017 | 72,508 | - | 72,508 |
| 28 | 14808 | Change Management | Alloc-Fixed | 24,072 | 10,832 | 2,407 | 10,832 |
| 29 | 14809 | Tariff Compliance | Alloc-Fixed | 180,540 | 54,162 | 108,324 | 18,054 |
| 30 | 14812 | NPCC MP Referral | Alloc-Fixed | 60,180 | 24,072 | 24,072 | 12,036 |
| 31 | 14815 | Identifications and Description of Internal Controls | Total Dir Labor | 481,440 | 103,750 | 249,145 | 128,545 |
| 32 | 14816 | Support NE Compliance Groups | Total Dir Labor | 60,180 | 12,969 | 31,143 | 16,068 |
| 33 | 14817 | AskISO Customer or Internal Inquiries | Total Dir Labor | 60,180 | 12,969 | 31,143 | 16,068 |
| 34 | | Total | | 1,256,950 | 417,715 | 459,407 | 379,828 |
| 35 | | | | | | | |
| 36 | | <u>Operations Support Services</u> | | | | | |
| 37 | 14301 | Contract Administration and Scheduling | Alloc-Fixed | (60,000) | (6,000) | (42,000) | (12,000) |
| 38 | 14453 | National Committee Support | TSO Labor | 20,420 | 6,610 | 9,763 | 4,047 |
| 39 | 14454 | Indirect Supervision/Clerical Support | TSO Labor | 22,094 | 7,152 | 10,563 | 4,379 |
| 40 | 14467 | Nuclear Plant Liaison | Alloc-Fixed | 13,687 | - | - | 13,687 |
| 41 | 14475 | OSS - Frequency Response Work | Alloc-Fixed | 16,769 | 16,769 | - | - |
| 42 | 14477 | Participant project and outage coordination support | Alloc-Fixed | 13,687 | 6,844 | - | 6,844 |
| 43 | 18361 | Transmission Studies, Operations, OASIS Support | Alloc-Fixed | 2,957,761 | 2,366,209 | 147,888 | 443,664 |
| 44 | 18381 | Transmission Outage Application - Short Term | Alloc-Fixed | 1,582,227 | 1,265,782 | 79,111 | 237,334 |
| 45 | 18382 | Transmission Outage Application - Long Term | Alloc-Fixed | 527,409 | - | - | 527,409 |
| 46 | | Total | | 5,094,055 | 3,663,365 | 205,326 | 1,225,364 |
| 47 | | | | | | | |
| 48 | | <u>Market Monitoring</u> | | | | | |
| 49 | 16101 | Market Power Monitoring and Mitigation | Alloc-Fixed | 5,253,133 | - | 3,677,193 | 1,575,940 |
| 50 | 16102 | Regulatory Activities | Alloc-Fixed | 1,156 | - | 809 | 347 |
| 51 | 16115 | Analysis & Internal Reports | Alloc-Fixed | 348,871 | - | 244,210 | 104,661 |
| 52 | | Total | | 5,603,160 | - | 3,922,212 | 1,680,948 |
| 53 | | | | | | | |
| 54 | | <u>Market Administration & Auctions</u> | | | | | |
| 55 | 21901 | Day Ahead Price Monitoring | Alloc-Fixed | 333,852 | - | 333,852 | - |
| 56 | 21902 | Real Time Price Verification | Alloc-Fixed | 333,852 | - | 333,852 | - |
| 57 | 21904 | NEPOOL Committee Support | MA Labor | 692 | - | 670 | 22 |
| 58 | 21907 | Indirect Supervision/Clerical Support | MA Labor | 584,503 | - | 566,033 | 18,470 |
| 59 | 21908 | Employee Development | MA Labor | 125,198 | - | 121,241 | 3,956 |
| 60 | 21909 | Customer Support | MA Labor | 429 | - | 416 | 14 |
| 61 | 21913 | MA-Data Collection/Report Writing | Alloc-Fixed | 166,926 | - | 166,926 | - |
| 62 | 21915 | FTR/Auction Administration | Alloc-Fixed | 292,120 | 146,060 | 146,060 | - |
| 63 | 21916 | Forward Reserve Market - Administration | Alloc-Fixed | 41,731 | - | - | 41,731 |
| 64 | 21917 | Real Time Price Finalization | Alloc-Fixed | 250,389 | - | 250,389 | - |
| 65 | 21951 | FCM Annual Reconfiguration Auction Administration | Alloc-Fixed | 83,463 | - | - | 83,463 |
| 66 | 21953 | FCM Monthly Administration | Alloc-Fixed | 125,194 | - | - | 125,194 |
| 67 | | Total | | 2,338,349 | 146,060 | 1,919,438 | 272,851 |

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| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|--|-----------------------|---------------------|------------|------------|------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | <u>Market Analysis & Settlements</u> | | | | | |
| 2 | 1701 | Billing Statements - Energy | Alloc-Fixed | 91,620 | - | 91,620 | - |
| 3 | 1702 | Billing Statements - Transmission | Alloc-Fixed | 109,503 | 109,503 | - | - |
| 4 | 1713 | Billing Statements - ISO Tariff | Total Dir Labor | 12,984 | 2,798 | 6,719 | 3,467 |
| 5 | 1714 | Billable Tariff Re-billings | Total Dir Labor | 1,225 | 1,225 | - | - |
| 6 | 1716 | Winter Reliability Program | Alloc-Fixed | 6,614 | - | - | 6,614 |
| 7 | 1717 | Inventoried Energy Program | Alloc-Fixed | 6,614 | - | - | 6,614 |
| 8 | 1718 | Mystic COS | Alloc-Fixed | 13,474 | - | - | 13,474 |
| 9 | 1719 | FCM Daily | Alloc-Fixed | 173,196 | - | - | 173,196 |
| 10 | 1722 | NCC Trading FA | Alloc-Fixed | 12,249 | - | - | 12,249 |
| 11 | 2047 | Score Card | STLM Labor | 3,185 | 471 | 1,551 | 1,162 |
| 12 | 2048 | FCM | Alloc-Fixed | 74,472 | - | - | 74,472 |
| 13 | 2049 | Product Testing | Alloc-Fixed | 16,658 | - | 13,327 | 3,332 |
| 14 | 2051 | Legal Support | Alloc-Fixed | 7,104 | - | 3,552 | 3,552 |
| 15 | 2005 | Customer Service | STLM Labor | 182,995 | 27,065 | 89,137 | 66,793 |
| 16 | 2007 | Admin support - NEPOOL Committees | STLM Labor | 245 | 36 | 119 | 89 |
| 17 | 2009 | Indirect Supervision/Clerical Support | STLM Labor | 844,597 | 124,916 | 411,403 | 308,278 |
| 18 | 2010 | Employee Development | STLM Labor | 195,319 | 28,888 | 95,140 | 71,291 |
| 19 | 2013 | FTR Administration | Alloc-Fixed | 36,011 | - | 36,011 | - |
| 20 | 2014 | Billing Statements - NCPD | Alloc-Fixed | 376,523 | - | 188,262 | 188,262 |
| 21 | 2020 | Billing Disputes | Total Dir Labor | 19,353 | 4,171 | 10,015 | 5,167 |
| 22 | 2021 | Analysis & Reporting | Total Dir Labor | 431,608 | 93,011 | 223,357 | 115,239 |
| 23 | 2024 | ASM Regulation | Alloc-Fixed | 27,927 | - | - | 27,927 |
| 24 | 2025 | ASM Locational Forward Reserve | Alloc-Fixed | 108,033 | - | - | 108,033 |
| 25 | 2026 | Batch Processing | Total Dir Labor | 33,806 | 7,285 | 17,495 | 9,026 |
| 26 | 2032 | Billing | STLM Labor | 41,155 | 6,087 | 20,047 | 15,022 |
| 27 | 2033 | Market Analysis | Alloc-Fixed | 172,646 | - | 172,646 | - |
| 28 | 2055 | MAS - Market Monitoring Support | Alloc-Fixed | 11,739 | - | 5,870 | 5,870 |
| 29 | | Total | | 3,010,853 | 405,456 | 1,386,269 | 1,219,128 |
| 30 | | | | | | | |
| 31 | | <u>Market Operations Support Services</u> | | | | | |
| 32 | 3000 | Hourly Settlements Support | Alloc-Fixed | 302,125 | - | 151,063 | 151,063 |
| 33 | 3002 | Monthly Settlements Support | Alloc-Fixed | 215,804 | 107,902 | - | 107,902 |
| 34 | 3006 | Customer Service | Alloc-Fixed | 107,902 | - | 107,902 | - |
| 35 | 3008 | Admin Support | Alloc-Fixed | 193,212 | - | 193,212 | - |
| 36 | 3009 | Indirect Supervision (Principal Analysts only) | Alloc-Fixed | 151,063 | - | 151,063 | - |
| 37 | 3010 | Employee Development | Alloc-Fixed | 22,230 | - | 22,230 | - |
| 38 | 3012 | FERC Data Request | Alloc-Fixed | 5,395 | - | 5,395 | - |
| 39 | 3017 | Project MAS (Market Analysis & Settlements) | Alloc-Fixed | 323,706 | 80,926 | 80,926 | 161,853 |
| 40 | | Total | | 1,321,438 | 188,828 | 711,792 | 420,818 |
| 41 | | | | | | | |
| 42 | | <u>Market Services</u> | | | | | |
| 43 | 16001 | Participant/membership support | Alloc-Fixed | 95,745 | - | 47,872 | 47,872 |
| 44 | 16006 | Call Support (Ask ISO) | Alloc-Fixed | 1,498,527 | 389,617 | 989,028 | 119,882 |
| 45 | 16414 | Direct Customer Contact | MS Labor | 26,510 | - | 23,859 | 2,651 |
| 46 | 16419 | Asset Registration Implemented | Alloc-Fixed | 333,852 | - | 333,852 | - |
| 47 | 16420 | Asset Registration Review | Alloc-Fixed | 208,657 | - | 208,657 | - |
| 48 | 16422 | Claimed Capability Audits | Alloc-Fixed | 542,509 | - | 542,509 | - |
| 49 | 16425 | DR Registration Implemented | Alloc-Fixed | 41,731 | - | 41,731 | - |
| 50 | 16432 | New Generation Coordination and Registration | Alloc-Fixed | 208,657 | - | 208,657 | - |
| 51 | 16434 | QMS/CAPA Process and Procedure Updates | Total Dir Labor | 292,120 | 62,952 | 151,172 | 77,996 |
| 52 | | Total | | 3,248,308 | 452,569 | 2,547,338 | 248,402 |
| 53 | | | | | | | |
| 54 | | <u>Participant Training Services</u> | | | | | |
| 55 | 16021 | Training Development | Alloc-Fixed | 925,490 | - | 462,745 | 462,745 |
| 56 | 16024 | Training Delivery | Alloc-Fixed | 2,697 | - | 1,349 | 1,349 |
| 57 | 16436 | Mkt Trng/Cus Serv Indirect Supervision | Total Dir Labor | 450,669 | - | 450,669 | - |
| 58 | | Total | | 1,378,857 | - | 914,763 | 464,094 |
| 59 | | | | | | | |
| 60 | | <u>Planning Services</u> | | | | | |
| 61 | 17101 | Analysis | Alloc-Fixed | 397,752 | - | 278,426 | 119,326 |
| 62 | 17131 | Calculate Objective Capability | Alloc-Fixed | 303,328 | - | - | 303,328 |
| 63 | 17403 | TCA Application Review | Alloc-Fixed | 101,358 | - | - | 101,358 |
| 64 | 17405 | Energy Efficiency Forecast | Alloc-Fixed | 34,195 | - | - | 34,195 |
| 65 | 17409 | Environmental/Emissions Supp | Total Dir Labor | 244,753 | - | - | 244,753 |
| 66 | 17501 | FCA - Evaluate Existing Resource De-list Bids | Alloc-Fixed | 88,283 | - | - | 88,283 |
| 67 | 17503 | FCA - New Resource Qualification Support | Alloc-Fixed | 982,836 | - | - | 982,836 |
| 68 | 17504 | FCA - Perform Transmission / Topology Assessments | Alloc-Fixed | 54,498 | - | - | 54,498 |
| 69 | 17505 | FCA - Perform Existing Resource Qualification | Alloc-Fixed | 108,991 | - | - | 108,991 |
| 70 | 17507 | FCA - Auctions & Filings | Alloc-Fixed | 1,074,696 | - | - | 1,074,696 |
| 71 | 17508 | FCA - Annual Reconfiguration Auction Support/Reliability Reviews | Alloc-Fixed | 163,484 | - | - | 163,484 |
| 72 | 18101 | Develop Load Forecast | Alloc-Fixed | 582,327 | 116,465 | 116,465 | 349,396 |
| 73 | 18121 | Operations Forecast Support | Alloc-Fixed | 239,343 | 47,869 | 47,869 | 143,606 |
| 74 | 18133 | Solar Load Forecast Development | Alloc-Fixed | 102,579 | 20,516 | 20,516 | 61,547 |
| 75 | | Total | | 4,478,423 | 184,850 | 463,276 | 3,830,297 |

Exhibit 2
Page 5 of 7

DRAFT

| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|---|-----------------------|---------------------|------------|------------|------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | <u>System Planning</u> | | | | | |
| 2 | 18150 | Regional Transmission Expansion Plan | Alloc-Fixed | 421,969 | 316,477 | 105,492 | - |
| 3 | 18152 | States Requests | Alloc-Fixed | 223 | 111 | 56 | 56 |
| 4 | 18402 | Transmission Planning/Economic Studies Initiative | Alloc-Fixed | 1,190,521 | - | 595,261 | 595,261 |
| 5 | 18562 | Project Management | Alloc-Fixed | 475,641 | 475,641 | - | - |
| 6 | | Total | | 2,088,354 | 792,229 | 700,808 | 595,316 |
| 7 | | | | | | | |
| 8 | | <u>Transmission Planning</u> | | | | | |
| 9 | 14715 | Non DOE Funded/Unallowable | Alloc-Fixed | 76,322 | - | - | 76,322 |
| 10 | 18201 | Transmission System Assessment | Alloc-Fixed | 3,549,228 | 3,549,228 | - | - |
| 11 | 18301 | NEPOOL Administrative Support - Schedule 1 Tariff | Alloc-Fixed | 129,840 | 129,840 | - | - |
| 12 | 18333 | General SIS/FS | Alloc-Fixed | 1,256,317 | 1,256,317 | - | - |
| 13 | 18334 | Indirect Supervision/Clerical Support | Alloc-Fixed | 799,017 | 799,017 | - | - |
| 14 | 18335 | Regulatory Activities - NPCC | Alloc-Fixed | 270,746 | 270,746 | - | - |
| 15 | 18336 | National Activities | Alloc-Fixed | 177,122 | 177,122 | - | - |
| 16 | 18337 | TR - Regulatory Activities | Alloc-Fixed | 10,826 | 10,826 | - | - |
| 17 | 18341 | NERC Compliance | Alloc-Fixed | 10,826 | 10,826 | - | - |
| 18 | 18344 | TR - Transmission Planning Siting Support | Alloc-Fixed | 10,824 | 10,824 | - | - |
| 19 | 18346 | OATT and Oper. Agreement Dev., Adm. and Support | Alloc-Fixed | 108,987 | 108,987 | - | - |
| 20 | 18350 | States Future Planning Studies | Alloc-Fixed | 190,565 | 190,565 | - | - |
| 21 | | Total | | 6,590,619 | 6,514,297 | - | 76,322 |
| 22 | | | | | | | |
| 23 | | <u>Program Management</u> | | | | | |
| 24 | 801 | Program Management - Administration | Total Dir Labor | 806,813 | 173,868 | 417,526 | 215,419 |
| 25 | 1661 | ISO Program Management | Alloc-Fixed | 440,920 | - | 308,644 | 132,276 |
| 26 | 1665 | Product and Test Mgmt. | Total Dir Labor | 417,495 | 89,970 | 216,054 | 111,471 |
| 27 | 25002 | PMO Support | Alloc-Fixed | 882 | 265 | 309 | 309 |
| 28 | | Total | | 1,666,110 | 264,103 | 942,532 | 459,475 |
| 29 | | | | | | | |
| 30 | | <u>Advanced Technology Solutions</u> | | | | | |
| 31 | 21201 | Advanced Technology Solutions | Total Dir Labor | 4,004,363 | 862,940 | 2,072,258 | 1,069,165 |
| 32 | 21203 | Employee Development | Total Dir Labor | 60,352 | 13,006 | 31,232 | 16,114 |
| 33 | 21207 | Resource Capacity Accreditation | Total Dir Labor | 2,200,267 | - | - | 2,200,267 |
| 34 | | Total | | 6,264,982 | 875,946 | 2,103,490 | 3,285,546 |
| 35 | | | | | | | |
| 36 | | <u>Market Development & Settlements Admin.</u> | | | | | |
| 37 | 16607 | National Committee Support | Total Dir Labor | 87,359 | 18,826 | 45,208 | 23,325 |
| 38 | 19104 | Indirect Supervision/Clerical Support | MOA Labor | 422,767 | - | 295,937 | 126,830 |
| 39 | 21001 | Market Development | Alloc-Fixed | 1,246,821 | - | 623,410 | 623,410 |
| 40 | 21002 | Administration | Total Dir Labor | 562,036 | 121,119 | 290,854 | 150,064 |
| 41 | 21003 | Employee Development | Total Dir Labor | 480,145 | 103,471 | 248,475 | 128,199 |
| 42 | 21007 | Budget/Forecast Support | Total Dir Labor | 292,682 | 63,073 | 151,463 | 78,146 |
| 43 | 21010 | MD - Day-Ahead Reserve Market | Alloc-Fixed | 1,944,041 | - | 1,846,839 | 97,202 |
| 44 | 21011 | Capacity Market | Alloc-Fixed | 513,028 | - | - | 513,028 |
| 45 | 22401 | Administration | Total Dir Labor | 49,370 | 10,639 | 25,549 | 13,182 |
| 46 | 22402 | Working Group Meetings and Support | Alloc-Fixed | 49,373 | - | 24,687 | 24,687 |
| 47 | 22656 | Energy, Reserve, and Regulation Markets | Alloc-Fixed | 251,712 | - | 188,784 | 62,928 |
| 48 | 22658 | Storage | Alloc-Fixed | 239,604 | - | 191,684 | 47,921 |
| 49 | 22660 | Energy Security | Alloc-Fixed | 1,328,241 | - | 664,121 | 664,121 |
| 50 | 22661 | Project: DER Participation | Alloc-Fixed | 156,867 | - | 78,433 | 78,433 |
| 51 | | Total | | 7,624,048 | 317,128 | 4,675,444 | 2,631,476 |
| 52 | | | | | | | |
| 53 | | <u>Participant Relations & Services</u> | | | | | |
| 54 | 22602 | NEPOOL Committee Meetings & Support | Alloc-Fixed | 430,163 | - | 215,082 | 215,082 |
| 55 | 22607 | NEPOOL Committee Administration | Total Dir Labor | 1,642,195 | 353,893 | 849,836 | 438,466 |
| 56 | 22612 | Future Grid Study and Modeling | Total Dir Labor | 1,849,823 | - | 739,929 | 1,109,894 |
| 57 | | Total | | 3,922,182 | 353,893 | 1,804,847 | 1,763,442 |
| 58 | | | | | | | |
| 59 | | <u>IT Management</u> | | | | | |
| 60 | 6517 | Employee Development - Hardware/Software | Total Dir Labor | 138,756 | 29,902 | 71,806 | 37,048 |
| 61 | 6519 | Indirect Supervision and Clerical Support | Total Dir Labor | 4,879,674 | 1,051,570 | 2,525,232 | 1,302,873 |
| 62 | 6552 | Security | Total Dir Labor | 205,746 | 44,338 | 106,474 | 54,934 |
| 63 | 6556 | Budget Preparation, Tracking & Forecast | Total Dir Labor | 169,985 | 36,632 | 87,967 | 45,386 |
| 64 | 6557 | Information Technology Committee | Total Dir Labor | 407 | 88 | 211 | 109 |
| 65 | 22501 | Change Management Support | Alloc-Fixed | 289,276 | 130,174 | 130,174 | 28,928 |
| 66 | 22505 | Administrative | Alloc-Fixed | 460,896 | 156,705 | 152,096 | 152,096 |
| 67 | | Total | | 6,144,740 | 1,449,408 | 3,073,959 | 1,621,373 |

Exhibit 2
Page 6 of 7

DRAFT

| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|--|-----------------------|---------------------|------------|------------|------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | | | | | | |
| 2 | | <u>IT Infrastructure Support</u> | | | | | |
| 3 | 6510 | Desktop Support - Hardware | Total Dir Labor | 489,937 | 105,582 | 253,543 | 130,813 |
| 4 | 6511 | Desktop Support - Software | Total Dir Labor | 958,524 | 206,562 | 496,036 | 255,926 |
| 5 | 6512 | Host Computer - Hardware | Alloc-Fixed | 2,880,590 | - | 2,160,442 | 720,147 |
| 6 | 6513 | Host Computer - Software | Alloc-Fixed | 6,071,084 | - | 4,553,313 | 1,517,771 |
| 7 | 6514 | Networking - Hardware | Total Dir Labor | 144,549 | 31,150 | 74,804 | 38,595 |
| 8 | 6516 | Communications | Total Dir Labor | 3,383,281 | 729,097 | 1,750,848 | 903,336 |
| 9 | 6619 | IT - Infrastructure Coordination | Total Dir Labor | 221,886 | 47,816 | 114,826 | 59,244 |
| 10 | 6602 | Help Desk Support | Total Dir Labor | 251,697 | 54,241 | 130,253 | 67,203 |
| 11 | 6615 | Host Computer Monitoring | Alloc-Fixed | 1,280,713 | - | 640,357 | 640,357 |
| 12 | 6616 | Desktop Support | Total Dir Labor | 432,286 | 93,158 | 223,708 | 115,420 |
| 13 | 6617 | System Administration - Unix | Total Dir Labor | 407,577 | 87,833 | 210,921 | 108,823 |
| 14 | 6618 | System Administration - Windows | Total Dir Labor | 793,262 | 170,948 | 410,513 | 211,801 |
| 15 | 6621 | Network Support | Total Dir Labor | 472,863 | 101,902 | 244,707 | 126,254 |
| 16 | 6622 | CIP & Systems Compliance | Total Dir Labor | 2,313,723 | 498,607 | 1,197,352 | 617,764 |
| 17 | 6623 | Asset Management | Total Dir Labor | 868,718 | 187,209 | 449,561 | 231,948 |
| 18 | 6624 | Infrastructure Review & Planning | Total Dir Labor | 266,251 | 57,377 | 137,785 | 71,089 |
| 19 | 6625 | Infrastructure Patch & Vulnerability Mitigation | Total Dir Labor | 226,777 | 48,870 | 117,357 | 60,549 |
| 20 | 6626 | IT - Infrastructure Break-fix & Troubleshooting | Total Dir Labor | 102,171 | 22,018 | 52,873 | 27,280 |
| 21 | 6627 | IT - Infrastructure Support Request | Total Dir Labor | 303,193 | 65,338 | 156,902 | 80,953 |
| 22 | 6628 | IT - Infrastructure Cyber Security Support | Total Dir Labor | 87,786 | 18,918 | 45,429 | 23,439 |
| 23 | 6629 | IT - Infrastructure Refresh/Upgrade | Total Dir Labor | 89,261 | 19,236 | 46,193 | 23,833 |
| 24 | 6630 | IT - Infrastructure Operation Enhancement Effort | Total Dir Labor | 242,333 | 52,223 | 125,407 | 64,703 |
| 25 | | Total | | 22,288,462 | 2,598,084 | 13,593,131 | 6,097,247 |
| 26 | | | | | | | |
| 27 | | <u>IT Cyber Security</u> | | | | | |
| 28 | 6540 | Security Compliance and Reporting | Total Dir Labor | 3,574,405 | 770,284 | 1,849,755 | 954,366 |
| 29 | 6540A | Controls Assessment | Total Dir Labor | 20,909 | 4,506 | 10,820 | 5,583 |
| 30 | 6540B | Virus/Malware Reporting and Response | Total Dir Labor | 8,157 | 1,758 | 4,221 | 2,178 |
| 31 | 6540D | Intrusion Monitoring and Response | Total Dir Labor | 1,416,998 | 305,363 | 733,297 | 378,339 |
| 32 | 6540E | System Compliance Enhancement | Total Dir Labor | 14,775 | 3,184 | 7,646 | 3,945 |
| 33 | 6541 | Security SW Tools Program | Total Dir Labor | 651,154 | 140,324 | 336,972 | 173,858 |
| 34 | 6543 | Critical Infrastructure Protection WG (NERC) | Total Dir Labor | 55,573 | 11,976 | 28,759 | 14,838 |
| 35 | 6546 | IT Audit Support | Total Dir Labor | 21,969 | 4,734 | 11,369 | 5,866 |
| 36 | 6547 | Cyber Security Training | Total Dir Labor | 1,894 | 408 | 980 | 506 |
| 37 | 6548 | CIP Compliance & Monitoring | Total Dir Labor | 150,175 | 32,363 | 77,715 | 40,097 |
| 38 | | Total | | 5,916,009 | 1,274,900 | 3,061,535 | 1,579,574 |
| 39 | | | | | | | |
| 40 | | <u>IT Database & Analytics</u> | | | | | |
| 41 | 6571 | DBA Support - MOPS | Total Dir Labor | 3,078,037 | 663,317 | 1,592,884 | 821,836 |
| 42 | 6591 | Data Architect - MOPS | Total Dir Labor | 305,606 | 65,858 | 158,151 | 81,597 |
| 43 | 6594 | IT Data Analyst | Total Dir Labor | 617,941 | 133,166 | 319,784 | 164,990 |
| 44 | 6595 | IT WEB Application Support | Total Dir Labor | 543,321 | 117,086 | 281,169 | 145,067 |
| 45 | 6596 | IT Data Governance | Total Dir Labor | 258,711 | 55,752 | 133,883 | 69,076 |
| 46 | 21706 | Enterprise Software Support | Total Dir Labor | 1,902,546 | 409,999 | 984,567 | 507,980 |
| 47 | 21801 | Software Support - Settlements | Alloc-Fixed | 390,149 | - | 312,119 | 78,030 |
| 48 | 21802 | Software Support - Publishing | Alloc-Fixed | 16,375 | - | 13,100 | 3,275 |
| 49 | 21803 | Software Support - Finance | Alloc-Fixed | 425,543 | - | 340,435 | 85,109 |
| 50 | 21804 | Software Support - Mitigation | Alloc-Fixed | 651,928 | - | 521,542 | 130,386 |
| 51 | 21805 | Software Support - TSO | Total Dir Labor | 662,615 | 142,794 | 342,903 | 176,918 |
| 52 | 21806 | Software Support - Enterprise | Total Dir Labor | 1,162,167 | 250,447 | 601,421 | 310,299 |
| 53 | 21807 | Software Support - Planning | Alloc-Fixed | 394,835 | - | 315,868 | 78,967 |
| 54 | 21808 | Training Delivery to NON-IT | Alloc-Fixed | 319,718 | - | 255,774 | 63,944 |
| 55 | 21809 | IT Markets Software Maintenance | Alloc-Fixed | 39,918 | - | 31,934 | 7,984 |
| 56 | 21811 | Single Sign On Support | Alloc-Fixed | 256,580 | - | 205,264 | 51,316 |
| 57 | 21812 | GADS Support | Alloc-Fixed | 116,614 | - | 93,291 | 23,323 |
| 58 | 21814 | Manual Database Edit | Total Dir Labor | 9,862 | 2,125 | 5,104 | 2,633 |
| 59 | 21816 | CMS Support | Total Dir Labor | 163,210 | 35,172 | 84,461 | 43,577 |
| 60 | 21818 | Discoverer Support | Total Dir Labor | 67,949 | 14,643 | 35,164 | 18,142 |
| 61 | 21824 | FCTS Support | Alloc-Fixed | 1,045,447 | - | - | 1,045,447 |
| 62 | 21825 | eTariff Support | Alloc-Fixed | 50,373 | - | 40,298 | 10,075 |
| 63 | 21830 | Annual Software Maintenance for Enterprise Wide Software | Total Dir Labor | 161,668 | 34,839 | 83,663 | 43,165 |
| 64 | 21832 | GDMA/Gateway Support | Alloc-Fixed | 54,218 | - | 43,375 | 10,844 |
| 65 | | Total | | 12,695,330 | 1,925,198 | 6,796,156 | 3,973,977 |
| 66 | | | | | | | |
| 67 | | <u>IT Energy Management Systems</u> | | | | | |
| 68 | 21600 | Indirect Supervision and Administration | Total Dir Labor | 143,669 | 30,961 | 74,349 | 38,360 |
| 69 | 21601 | Power System Modeling | Total Dir Labor | 107,785 | 23,228 | 55,779 | 28,778 |
| 70 | 21602 | Applications Support | Total Dir Labor | 241,374 | 52,016 | 124,911 | 64,447 |
| 71 | 21603 | EMS Power System Applications Support | Total Dir Labor | 649,817 | 140,035 | 336,280 | 173,501 |
| 72 | 21604 | Dispatcher Training Simulatory Support | Alloc-Fixed | 2,350,068 | 1,880,054 | 470,014 | - |
| 73 | 21605 | DAM FTR/ARR Support | Alloc-Fixed | 1,634,294 | 326,859 | 980,577 | 326,859 |
| 74 | 21606 | Real-time Market Support | Alloc-Fixed | 2,858,480 | 571,696 | 1,715,088 | 571,696 |
| 75 | 21607 | Forecast Support | Alloc-Fixed | 178,997 | 35,799 | 107,398 | 35,799 |
| 76 | | Total | | 8,164,484 | 3,060,649 | 3,864,395 | 1,239,440 |

| Line No. | Activity Code | | Allocation Factor (1) | Self-Funding Tariff | | | |
|----------|---------------|--|-----------------------|---------------------|---------------|----------------|---------------|
| | No. | Description | | Total (2) | Schedule 1 | Schedule 2 | Schedule 3 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | | | | | | | |
| 2 | | <u>IT Enterprise Applications Development</u> | | | | | |
| 3 | 6518 | Employee Development - Software | Total Dir Labor | 32,800 | 7,068 | 16,974 | 8,758 |
| 4 | 21707 | Application Analysis and Conceptual Design | Alloc-Fixed | 26,579 | - | 21,263 | 5,316 |
| 5 | 21708 | Application Design Evaluation and Selection | Alloc-Fixed | 584,636 | - | 467,709 | 116,927 |
| 6 | 21709 | Technology Evaluation and Selection | Alloc-Fixed | 851,746 | - | 681,397 | 170,349 |
| 7 | 21710 | Indirect Supervision and Administration | Alloc-Fixed | 1,217,575 | - | 974,060 | 243,515 |
| 8 | 21711 | EWI and CAPA Analysis | Alloc-Fixed | 224,412 | - | 179,530 | 44,882 |
| 9 | | Total | | 2,937,748 | 7,068 | 2,340,933 | 589,747 |
| 10 | | | | | | | |
| 11 | | <u>IT Power System Modeling Management</u> | | | | | |
| 12 | 21650 | Indirect Supervision and Administration | Total Dir Labor | 203,543 | 43,863 | 105,333 | 54,346 |
| 13 | 21651 | Power System Modeling | Alloc-Fixed | 1,879,580 | 751,832 | 751,832 | 375,916 |
| 14 | 21652 | System Application Support | Alloc-Fixed | 314,229 | 125,692 | 125,692 | 62,846 |
| 15 | 21654 | NX9 Administration | Alloc-Fixed | 580,609 | 232,244 | 232,244 | 116,122 |
| 16 | 21655 | ICCP Support | Alloc-Fixed | 1,149,245 | 459,698 | 459,698 | 229,849 |
| 17 | 21656 | Transmission Project Management | Alloc-Fixed | 30,644 | 24,515 | 6,129 | - |
| 18 | 21657 | Model On Demand Admin | Alloc-Fixed | 1,123,660 | - | - | 1,123,660 |
| 19 | 21661 | MAS Software Dev and Support | Alloc-Fixed | 23,915 | - | - | 23,915 |
| 20 | | Total | | 5,305,424 | 1,637,844 | 1,680,927 | 1,986,653 |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | <u>Total ISO</u> | | \$ 240,205,156 | \$ 49,273,547 | \$ 118,209,011 | \$ 72,722,598 |

Exhibit 3

Draft 2023 Rate Components (1)

| Tariff Schedule | Jan. 1, 2023 |
|----------------------------|--------------|
| Schedule 1 | |
| Network Load (per kW-hour) | \$0.00028 |
| Schedule 2 | |
| TU Bids (Virtual Inc/Dec) | |
| Submitted | \$0.00500 |
| Cleared | \$0.06000 |
| FTR Bids | |
| Submitted | \$2.01008 |
| Cleared | \$4.20539 |
| TU's | |
| Block 1 - 1st 12,500 | \$0.69888 |
| Block 2 - Next 27,000 | \$0.63535 |
| Block 3 - Over 39,500 | \$0.57181 |
| Volumetric | |
| Block 1 - 1st 250,000 | \$0.40259 |
| Block 2 - Next 1,250,000 | \$0.36599 |
| Block 3 - Over 1,500,000 | \$0.32940 |
| Schedule 3 | |
| R-T NCP Load Obligation | \$0.26260 |
| Export Rate | \$0.55000 |

(1) From Exh 3, RCL-7, Sch. 3

**NESCOE Pro Forma Budget
Proposed 2023**

| | 2023 |
|--|-------------------------|
| Salaries and Wages | |
| Salaries | 1,311,718 |
| Payroll Taxes | 131,172 |
| Health and Other Benefits | 110,098 |
| Retirement §401(k) | <u>52,469</u> |
| Total, Salaries and Wages | <u>1,605,457</u> |
| Direct Expenses - Consulting | |
| Technical Analysis | 342,932 |
| Legal (FERC) | <u>342,933</u> |
| Total, Direct Expenses, Consulting | <u>685,865</u> |
| General and Administrative | |
| Rent | - |
| Utilities | - |
| Office and Administrative Expenses | 48,956 |
| Professional Services | 41,200 |
| Travel/Lodging/Meetings | <u>56,650</u> |
| Total General and Administrative | <u>146,806</u> |
| Capital Expend. & Contingencies | |
| Computer Equipment | 8,695 |
| Contingencies | <u>244,682</u> |
| Capital Expend. & Contingencies | <u>253,377</u> |
| TOTAL EXPENSES | <u>2,691,505</u> |
| BUDGET | 2,696,171 |

New England States Committee on Electricity

2023 Budget Presentation

NEPOOL Budget & Finance Subcommittee

August 11, 2022



REVISED October 2022 Participants Committee material.

Only changes to August material, noted as such, are as follows:

p. 12 to reflect actual 2023 Network Load factor and 2023 Schedule 5 Rate

p. 2 to reflect Participants Committee support and FERC filing of 5-year pro forma

Background: Budget Review

Term Sheet Provision: “... the annual review of its [NESCOE’s] proposed budgets by at least the NEPOOL Participants Committee will be limited to considerations of accounting and reconciliation, so long as spending remains within the boundaries established by those frameworks..... NESCOE will develop an operating budget recommendation for each year in consultation with NEPOOL, the PTO Administrative Committee and ISO-NE within the boundaries of the then-approved five year budget framework ...”

- ✓ Proposed 2023 budget conforms to:
 - Boundaries of 5-year pro forma (2023 - 2027) [new →] reviewed by Budget & Finance, supported by NPC on Sept. 1, 2022, and filed with the FERC (ER22-2812)
 - NESCOE commitment not to seek an increase over pro forma budget of more than 10% in any 1 year: 2023 proposed budget is less than 2023 5-year pro forma budget
- ✓ Following calendar year 2021, independent auditor concluded NESCOE books conform to generally accepted accounting principles

Background: Policy Priorities

Term Sheet Provision Governing Identification of Policy Priorities:

“Each year NESCOE will produce a ***Report to the New England Governors*** that will document its accomplishments from the preceding year and its projected policy priorities for the coming two years. This report will include a full accounting of spending by NESCOE during the preceding year and proposed budgets for each of the upcoming two years.”

Consistent with Term Sheet, 2021 *Report to the New England Governors*:

- ✓ Reviewed work in 2021
- ✓ Projected policy priorities
- ✓ Provided spending from prior year
- ✓ Projected budget information for upcoming two years

Projected Policy Priorities

- ✓ NESCOE provided to the Governors the **2021 Annual Report to New England Governors**
- ✓ Report simultaneously released to NEPOOL & ISO-NE & circulated to the Participants Committee
- ✓ NESCOE identified forward looking policy priorities at Section V, pages 15

Report in “Resource Center”

www.nescoe.com

REPORT TO THE NEW
ENGLAND GOVERNORS
2021

New England States
Committee on Electricity

NESCOE
www.nescoe.com

Projected Policy Priorities

- ✓ **Future Grid.** With ISO-NE and stakeholders, consider the contemplated Phase 2 Future Grid analysis to assess revenue sufficiency and system security in a gap analysis; advance the Pathways process, including governance approaches that provide an appropriate role for states.
- ✓ **Transmission.** Work with ISO-NE and stakeholders on tariff changes to enable states to consider options to address issues identified in the longer-term public policy-related transmission analysis; engage in FERC's reform of transmission planning, generator interconnection, and cost allocation processes, highlighting the critical need for states' appropriate, meaningful role in public-policy transmission planning and cost allocation.
- ✓ **Winter.** Continue to seek and assess timely analysis and recommendations from ISO-NE on near-term winter risks; assess means to value the contribution of resources needed for regional energy security/winter reliability; participate in ISO-NE's effort to assess potential operational implications of low probability/high impact extreme weather events and to identify a cost-effective approach to any mitigation; ensure consumer interests are chief among the metrics by which winter proposals are evaluated.

NESCOE Organization & Misc.

Employees

- ✓ Retain and attract diversity in academic training, skills; blend of private & public sector experience
- ✓ Assumes return to NESCOE's prior steady state employee level of six in light of sustained increase in workload volume; legal staff solicitation issued 2022

Office Space

- ✓ Terminated office space in Westborough, MA

Other Organization Matters

Technical Consultants

Technical consultants assist NESCOE in the regular course of business in analyzing ISO-NE studies and data.

Continue work with technical consultants to conduct independent analysis to inform state officials' decisions on key issues, including, for example:

- ✓ Wilson Energy Economics
- ✓ PeterGFlynn, LLC
- ✓ NewGen
- ✓ Supplement with other expertise, as needed

Legal Counsel

Litigation is not the primary means by which NESCOE seeks to accomplish its objectives & thus, greater resource and focus has historically, and thus far in 2022, been on technical consulting. Further, while NESCOE produces most legal pleadings and analysis internally, the frequency and type of litigation brought by others influences the extent to which NESCOE engages outside counsel.

- ✓ FERC Counsel: Phyllis G. Kimmel Law Office PLLC

5-Year Pro Forma

Proposed 2023 budget conforms to 2023 budget in 5-year Pro Forma Framework

| | |
|--|-------------|
| ✓ 2023 Projected Budget in 5-Year Pro Forma: | \$2,696,171 |
| ✓ 2023 Proposed Budget: | \$2,691,505 |
| ✓ 2022 Budget, for reference: | \$2,485,156 |

In relation to 2022 Budget, 2023 Proposed Budget reflects:

- ✓ Return to prior steady state of six employees
- ✓ Inflationary pressures
- ✓ No office rent

5-Year Pro Forma, for reference



NESCOE PRO FORMA BUDGET 2023-2027*

| Expense Category | Year 16 (2023) | Year 17 (2024) | Year 18 (2025) | Year 19 (2026) | Year 20 (2027) |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| Salaries and Wages | | | | | |
| Salaries | 1,311,718 | 1,377,304 | 1,446,169 | 1,518,478 | 1,594,401 |
| Payroll Taxes | 131,172 | 137,731 | 144,617 | 151,848 | 159,440 |
| Health and Other Benefits | 110,098 | 115,603 | 121,383 | 127,452 | 133,825 |
| Retirement \$401(k) | 52,469 | 55,092 | 57,847 | 60,739 | 63,776 |
| Total, Salaries and Wages | 1,605,457 | 1,685,730 | 1,770,016 | 1,858,517 | 1,951,443 |
| Direct Expenses - Consulting | | | | | |
| Technical Analysis | 342,933 | 353,221 | 363,818 | 374,732 | 385,974 |
| Legal (FERC) | 342,933 | 353,221 | 363,818 | 374,732 | 385,974 |
| Total, Direct Expenses, Consulting | 685,866 | 706,442 | 727,635 | 749,464 | 771,948 |
| General and Administrative | | | | | |
| Rent | | 12,000 | 12,360 | 12,731 | 13,113 |
| Utilities | | 2,500 | 2,575 | 2,652 | 2,732 |
| Office and Administrative Expenses | 50,000 | 51,500 | 53,045 | 54,636 | 56,275 |
| Professional Services | 41,500 | 42,745 | 44,027 | 45,348 | 46,709 |
| Travel/Lodging/Meetings | 60,000 | 61,800 | 63,654 | 65,564 | 67,531 |
| Total General and Administrative | 151,500 | 170,545 | 175,661 | 180,931 | 186,359 |
| Capital Expenditures & Contingencies | | | | | |
| Computer Equipment | 8,666 | 8,926 | 9,194 | 9,470 | 9,754 |
| Contingencies | 244,682 | 252,022 | 259,583 | 267,371 | 275,392 |
| Capital Expenditures & Contingencies | 253,348 | 260,948 | 268,777 | 276,840 | 285,145 |
| TOTAL EXPENSES** | 2,696,171 | 2,823,665 | 2,942,090 | 3,065,753 | 3,194,896 |

*Projected 5% salaries and wages annual adjustment, and projected 3% annual adjustment on all other items. Line items and categories subject to increase greater than, or decrease from, amounts projected.

Any such changes will be subject to review, input, and recommendations by the NEPOOL Participants Committee (and/or its designees).

**At no time during this 5-year period will NESCOE seek a budget increase of more than 10% in any 1 year of more than 30% on a cumulative basis.

2023 Proposed Budget

| | |
|--|-------------------------|
| | 2023 |
| Salaries and Wages | |
| Salaries | 1,311,718 |
| Payroll Taxes | 131,172 |
| Health and Other Benefits | 110,098 |
| Retirement §401(k) | <u>52,469</u> |
| Total, Salaries and Wages | <u>1,605,457</u> |
| Direct Expenses - Consulting | |
| Technical Analysis | 342,932 |
| Legal (FERC) | <u>342,933</u> |
| Total, Direct Expenses, Consulting | <u>685,865</u> |
| General and Administrative | |
| Rent | - |
| Utilities | - |
| Office and Administrative Expenses | 48,956 |
| Professional Services | 41,200 |
| Travel/Lodging/Meetings | <u>56,650</u> |
| Total General and Administrative | <u>146,806</u> |
| Capital Expend. & Contingencies | |
| Computer Equipment | 8,695 |
| Contingencies | <u>244,682</u> |
| Capital Expend. & Contingencies | <u>253,377</u> |
| TOTAL EXPENSES | <u>2,691,505</u> |
| BUDGET | 2,696,171 |

2021 & 2022 Spending & Implications for 2023

Unspent funds in any year credited toward future year

2021 Total Spending: \$1,379,375*

2022 Spending to end of June: \$740,914

2022 Projected Year End: \$1,942,044 *

* Cumulative prior years' true up, including 2020, was reflected in the 2022 revenue requirement and rates. The 2021 true up will be reflected in the 2023 revenue requirement and rates (see next slide). Any 2022 true up will be reflected in the 2024 revenue requirements and rates.

2023 Projected Billing Rate

With thanks to ISO-NE for calculations -

2023 Budget: \$2,691,505

Less 2021 True Up: (\$1,108,802)

Total Revenue Recovery: \$1,582,703

Updated September 2023 based on *actual* 2023 load factor:

Divided by Total Network Load: ~~231,453,876~~ 225,688,515

~~—(total network load from 2022 ISO-NE tariff; no escalation or reduction used in calculation)~~

2023 Schedule 5 Rate ~~\$0.00684~~ \$0.00701 per kW-month

Thank you.

Questions?

The Nescoe logo is centered within a white circle that has a thin blue border. The circle is positioned on the right side of the slide, overlapping a solid blue vertical bar that runs from the top to the bottom of the frame. The logo itself consists of the word "NESCOE" in a bold, orange, sans-serif font. The letter "O" is replaced by a stylized lightning bolt icon, also in orange.

NESCOE

MEMORANDUM

TO: NEPOOL Participants Committee Members and Alternates

FROM: Eric Runge, NEPOOL Counsel

DATE: September 29, 2022

RE: Vote on HQICC and ICR Values for FCA17

At the October 6, 2022 Participants Committee meeting, you will be asked to support the following proposed sets of values: (i) Hydro-Quebec Interconnection Capability Credit values (the “HQICC Values”); and (ii) Installed Capacity Requirement (“ICR”) values, and the related demand curves (collectively, the “ICR Values”) to be used for Forward Capacity Auction 17 (“FCA17”).¹ The Reliability Committee has recommended Participants Committee support for both sets of values with separate votes each at 63.95% in favor.

The HQICC Values and ICR Values for FCA17 were developed by the ISO, reviewed with the Power Supply Planning Committee, and reviewed with and voted on by the Reliability Committee. At its September 21, 2022 meeting, the Reliability Committee recommended in separate roll call votes that the Participants Committee support the HQICC Values and the ICR Values, with several opposing votes and abstentions.²

None of those opposed asserted that the ISO had failed to calculate the values in accordance with the existing Tariff provisions. Instead, most of the opposition seemed to be based on a concern that the existing methodology for calculating ICR and its components, including tie benefits, load reconstitution and the resulting HQICCs and Net ICR Values, might be defective and in need of reconsideration in the future. Some of those opposed suggested that the current methodology appears to be producing results that are not realistic or fully explicable. Additionally, Cross-Sound Cable Company opposed based on its long-standing objection to the lack of recognition of reliability value of Cross-Sound Cable in calculating tie benefits and the ICR.

¹ Background materials have been included with this memorandum. While the HQICC Values and ICR Values are interrelated, in the past separate issues have been raised with respect to one or the other, and accordingly they have been voted separately. The voting threshold for passing ICR-related resolutions is 60%.

² The individual Sector votes for the HQICC and ICR Values were Generation (8.35% in favor, 8.35% opposed, 2 abstentions), Transmission (16.70% in favor, 0.00% opposed, 0 abstentions), Supplier (0.00% in favor, 16.70% opposed, 8 abstentions), Publicly Owned Entity (16.70% in favor, 0.00% opposed, 0 abstentions), Alternative Resources (5.50% in favor, 11.00% opposed, 1 abstention), and End User (16.70% in favor, 0.00% opposed, 1 abstention).

The HQICC Values for FCA17 proposed by the ISO and recommended by the Reliability Committee are 1,001 MW for each month of the 2026-2027 Capacity Commitment Period (June through May).

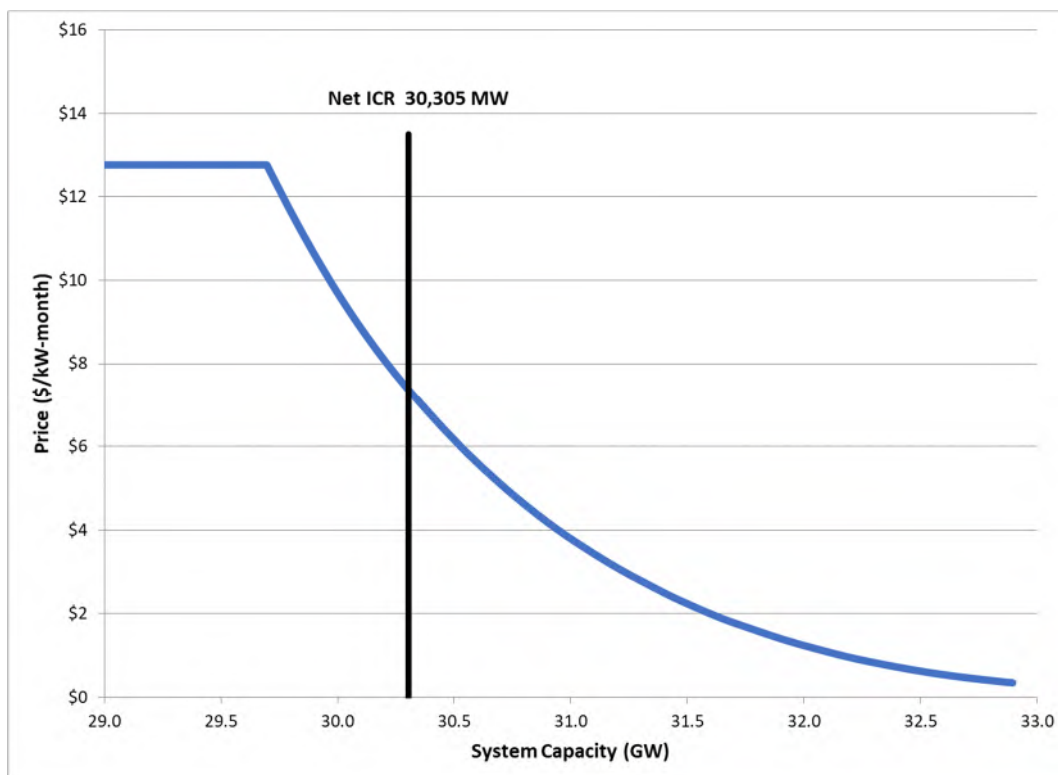
The ICR Values for FCA17 proposed by the ISO and recommended by the Reliability Committee are as follows:

ICR/LSR/MCL

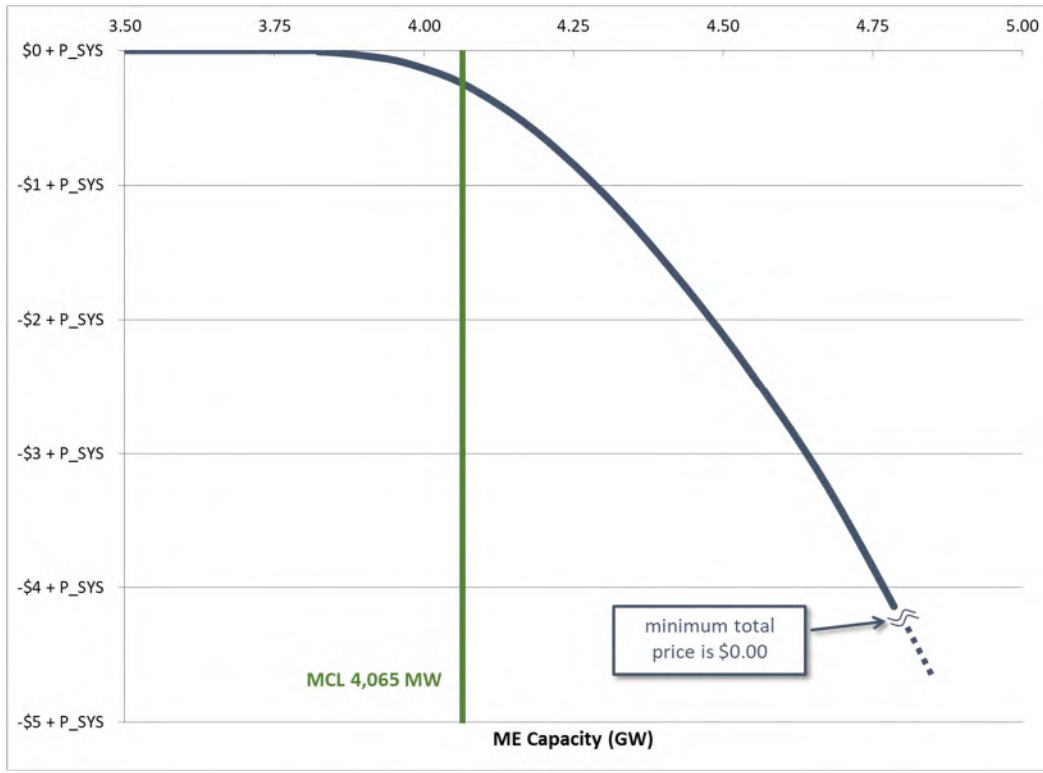
| | 2026-2027 Capacity Commitment Period ICR Values (MW) |
|---|---|
| Installed Capacity Requirement | 31,306 |
| Net Installed Capacity Requirement | 30,305 |
| Maine Maximum Capacity Limit | 4,065 |
| Northern New England Maximum Capacity Limit | 8,595 |

Demand Curves

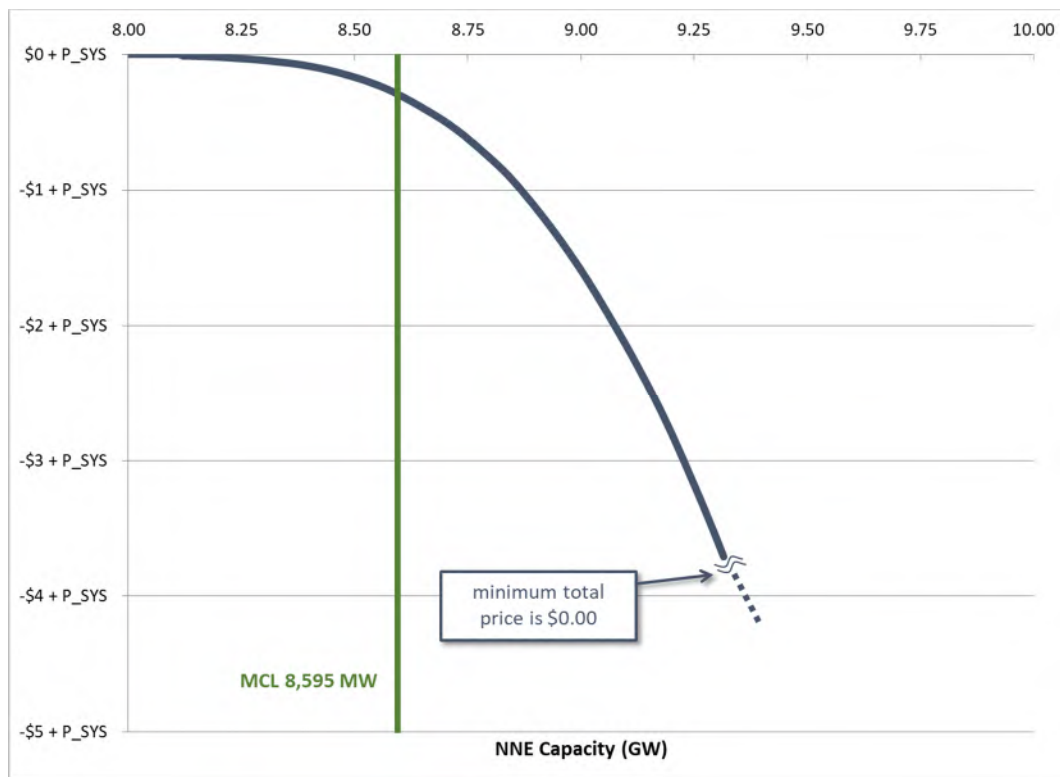
**2026-2027 Capacity Commitment Period
System-Wide Demand Curve:**



2026-2027 Capacity Commitment Period
Maine Capacity Zone Demand Curve:



2026-2027 Capacity Commitment Period
Northern New England Capacity Zone Demand Curve:



The following resolutions, which require a minimum 60% Vote for approval, could be used for Participants Committee consideration of these items:

RESOLVED, that the Participants Committee supports the FCA17 HQICC Values, as recommended by the Reliability Committee and as reflected in the materials distributed to the Participants Committee for its October 6, 2022 meeting, together with [any changes agreed to at the meeting and] such 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 FCA 17ICR Values, as proposed by the ISO and recommended by the Reliability Committee and as reflected in the materials distributed to the Participants Committee for its October 6, 2022 meeting, together with [any changes agreed to at the meeting and] such non-substantive changes as may be agreed to after the meeting by the Chair and Vice-Chair of the Reliability Committee.

SEPTEMBER 20, 2022 | NEPOOL RELIABILITY COMMITTEE |
COURTYARD BOSTON, MARLBOROUGH, MA

Installed Capacity Requirement (ICR)- Related Values for Capacity Commitment Period 2026-2027 Seventeenth Forward Capacity Auction (FCA 17)



NEPOOL Reliability Committee

Manasa Kotha and Fei Zeng

RESOURCE STUDIES AND ASSESSMENTS



Today's Presentation

- Review the ICR-Related Values for FCA 17
- Answer any remaining questions that RC members may have regarding these values
- Request RC action on HQICC values and ICR-Related Values for FCA 17

Notes:

- The ICR, net ICR, Maximum Capacity Limit (MCL), the Marginal Reliability Impact (MRI) system and zonal Demand Curves, and the Hydro Quebec Interconnection Capability Credits (HQICCs) are collectively called the ICR-Related Values
- Transmission Security Analysis (TSA), Local Resource Adequacy Requirement (LRA) and Local Sourcing Requirement (LSR) will not be developed because there is no import-constrained Capacity Zone for FCA 17. For more information, please refer to the development of [FCA 17 Capacity Zones](#) presentation
- For details on ICR-Related Values development, please see [ICR Reference Guide](#)
- Assumptions that are used to calculate the FCA 17 ICR-Related Values are detailed in the [September 7, 2022 ICR-Related Values presentation](#) to the Reliability Committee
- Acronyms not defined are spelled out in the Appendix



FCA 17 ICR-Related Values Development Schedule

| Date | Topic* |
|---------------|--|
| June 1 | PSPC review of ICR-Related Values schedule |
| June 29 | PSPC review of Capacity Zone determination and ICR-Related Values assumptions including assumptions for tie benefits study |
| July 28 | PSPC review of tie benefits study results |
| August 25 | PSPC review of proposed ICR-Related Values |
| September 7 | RC initial review of proposed ICR-Related Values |
| September 20 | RC review/vote of proposed ICR-Related Values |
| October 6 | PC review/vote of proposed ICR-Related Values |
| By November 8 | File ICR-Related Values with FERC |



PROPOSED FCA 17 ICR-RELATED VALUES



Summary of FCA 17 Tie Benefits Study Results

| Interface | FCA 17 Tie Benefits Amount (MW) |
|---------------------------|---------------------------------|
| Maritimes | 523 |
| HQ Phase II (HQICCs) | 1,001 |
| Highgate | 150 |
| New York AC ties | 426 |
| Cross Sound Cable (CSC) | 0 |
| Total Tie Benefits | 2,100 |

Results of the FCA 17 Tie Benefits Study are located at: https://www.iso-ne.com/static-assets/documents/2022/08/a02_review_of_fca17_tie_benefits_study_results.pptx



Comparison of FCA 17 & FCA 16 Tie Benefits

| Interconnection | FCA 17 (MW) | FCA 16 (MW) | DELTA (MW) (FCA 17 minus FCA 16) |
|---------------------------|--------------|--------------|-------------------------------------|
| Maritimes | 523 | 478 | 45 |
| HQ Phase II | 1,001 | 923 | 78 |
| Highgate | 150 | 142 | 8 |
| New York AC ties | 426 | 287 | 139 |
| CSC | 0 | 0 | 0 |
| Total Tie Benefits | 2,100 | 1,830 | 270 |

Note: FERC accepted the tie benefits for the 2025-2026 CCP associated with FCA 16 on December 21, 2021. See:
<https://www.iso-ne.com/static-assets/documents/2021/12/er22-378-000.pdf>



Sensitivity Analysis and Observations

- The ISO identified several relevant assumption updates/changes in New York system, and conducted additional simulations to quantify their impacts on the tie benefits results
- The New York system relevant assumption updates/changes include:
 - An increase of import capability to New York Zone D from Chateauguay (Quebec) from 1,500 MW to 1,770 MW to reflect the Cedar Transmission Upgrade, which is expected to increase the tie benefits available to both New York and New England
 - Modifications in modeling certain resources
 - Modeling changes for some large energy limited hydro resources
 - Updated hourly profiles for wind and solar resources



Sensitivity Analysis and Observations, cont.

- A sensitivity analysis was conducted using:
 - FCA 16 tie benefit study New York's resource model
 - 1,500 MW for the import capability to Zone D from Chateauguay
- The total tie benefits of this sensitivity analysis is 1,830 MW, identical to the FCA 16 tie benefits
- In summary, the 270 MW increase of total tie benefits in FCA 17 is mainly attributed to the resource model changes of the New York system, and the increased import capability to Zone D from Chateauguay (~90 MW)



ISO Proposed FCA 17 ICR-Related Values for CCP 2026-2027 (MW)

| 2026-2027 FCA 17 | New England | Maine | Northern New England |
|---------------------------------|-------------|-------|----------------------|
| Peak Load (50/50) net of BTM PV | 27,298 | 2,126 | 5,522 |
| Peak Load (90/10) net of BTM PV | 29,066 | 2,244 | 5,799 |
| Existing Capacity Resources | 32,797 | 3,642 | 8,308 |
| ICR | 31,306 | | |
| HQICCs | 1,001 | | |
| Net ICR (ICR minus HQICCs) | 30,305 | | |
| Maximum Capacity Limit | | 4,065 | 8,595 |

Notes:

- Details relating to the development of the FCA 17 ICR-Related Values are located at: https://www.iso-ne.com/static-assets/documents/2022/08/a02_proposed_icr_related_values_for_fca17.pptx
- The Existing Capacity Resources value reflects the existing resources with Qualified Capacity for FCA 17 at the time of the ICR calculation and reflects applicable retirements and terminations
- 50/50 and 90/10 peak loads which are net of behind-the-meter photovoltaic (BTM PV) include both transportation and heating electrification forecasts and are shown for informational purposes



Effect of Updated FCA 17 Assumptions on Net ICR

| Assumption | 2026-2027 FCA 17 | | 2025-2026 FCA 16 | | Effect on Net ICR (MW) |
|--------------------------------|----------------------------|-------------|----------------------------|-------------|------------------------|
| Tie Benefits | 426 MW New York | | 287 MW New York | | -240 |
| | 523 MW Maritimes | | 478 MW Maritimes | | |
| | 1,001 MW Quebec (HQICCs) | | 923 MW Quebec (HQICCs) | | |
| | 150 MW Quebec via Highgate | | 142 MW Quebec via Highgate | | |
| Total MW | 2,100 | | 1,830 | | |
| | MW | WAEFORD (%) | MW | WAEFORD (%) | |
| Generation Resources | 29,383 | 6.2% | 29,855 | 6.2% | 30 |
| Demand Resources | 3,331 | 3.4% | 3,667 | 2.3% | |
| Imports | 84 | 0.3% | 0 | 0.0% | |
| | 50/50 | 90/10 | 50/50 | 90/10 | |
| Gross Load Forecast net BTM PV | 27,298 | 29,066 | 28,025 | 29,988 | -1,130 |
| BTM PV forecast change | | | | | -145 |
| Load forecast uncertainty | | | | | -165 |
| | MW | | MW | | |
| Net ICR | 30,305 | | 31,645 | | -1,340 |

Notes:

- Methodology: Using the model associated with the 2025-2026 FCA 16 ICR calculation, change one assumption at a time and note the change in net ICR
- The impact of each assumption change on Net ICR is not additive since they are evaluated one assumption at a time. The approach would not capture the compound effects of these assumption changes when modeled together
- Generation forced outage assumption is a weighted average (WA) of individual generator's 5-year average Equivalent Forced Outage Rate on Demand (EFORD) and Intermittent Power Resources assumed 100% available



Load Forecast Impact Follow-up from the September 7th RC

- The methodology used to reconstitute passive demand resources* (PDR), as defined in the Tariff (Section III.12.8), is working as expected, and is effectively capturing a recent trend of PDR taking on fewer obligations in recent FCAs
- The final 2022 load forecast was discussed at the [May 17, 2022 RC meeting](#)
 - Final PDR reconstitution is illustrated on slide 7
- The recent decreasing PDR trend is likely attributable to a combination of the following factors:
 - Increased expiration of EE in more recent FCA Capacity Commitment Periods
 - Declining claimable lighting savings (i.e., installations of CLFs and LEDs)
 - Due to both market saturation and rising lighting baselines
 - Growing focus on electrification as part of EE programs

* Historically, energy efficiency (EE) has comprised the vast majority of PDR

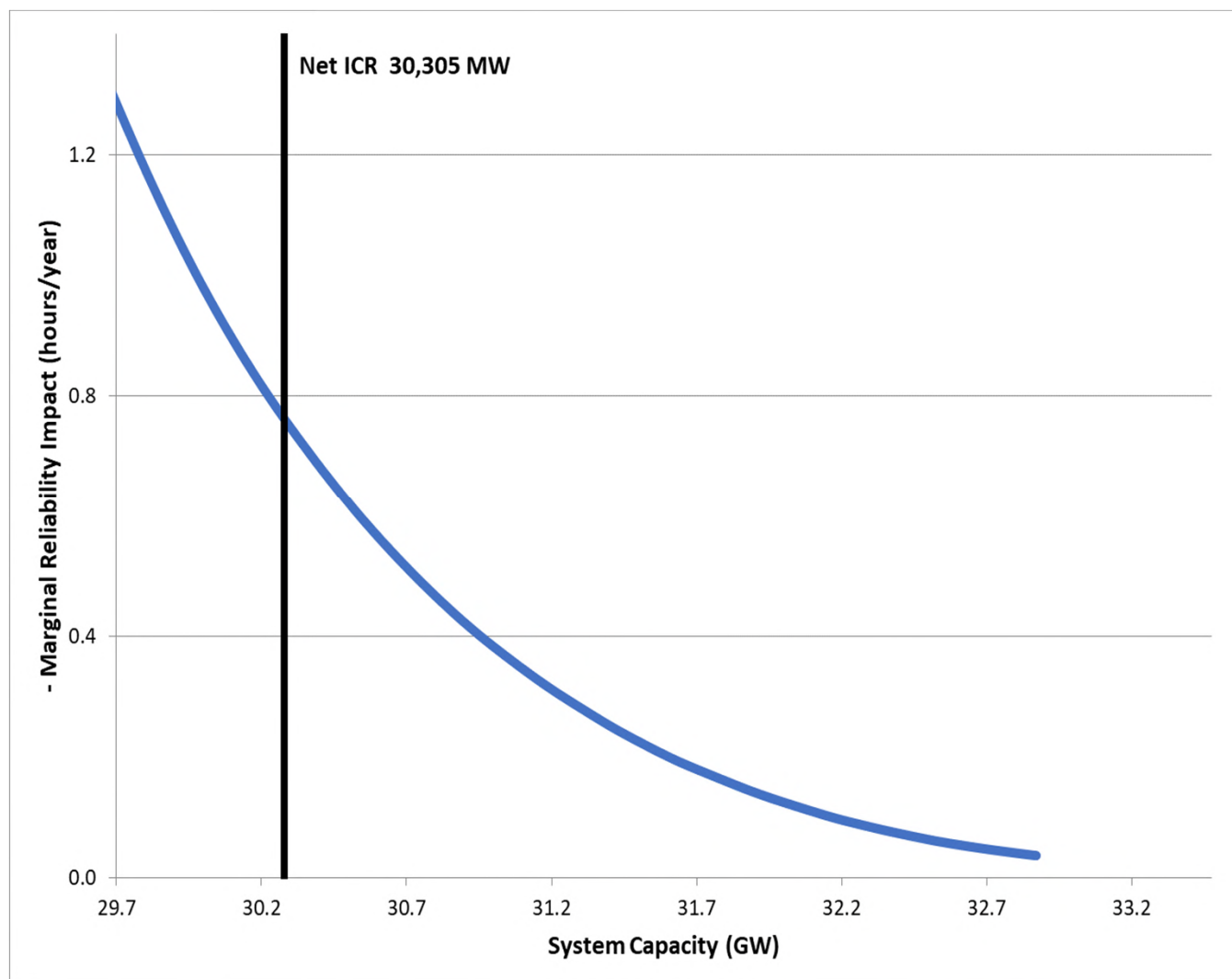


FCA 17 DEMAND CURVES

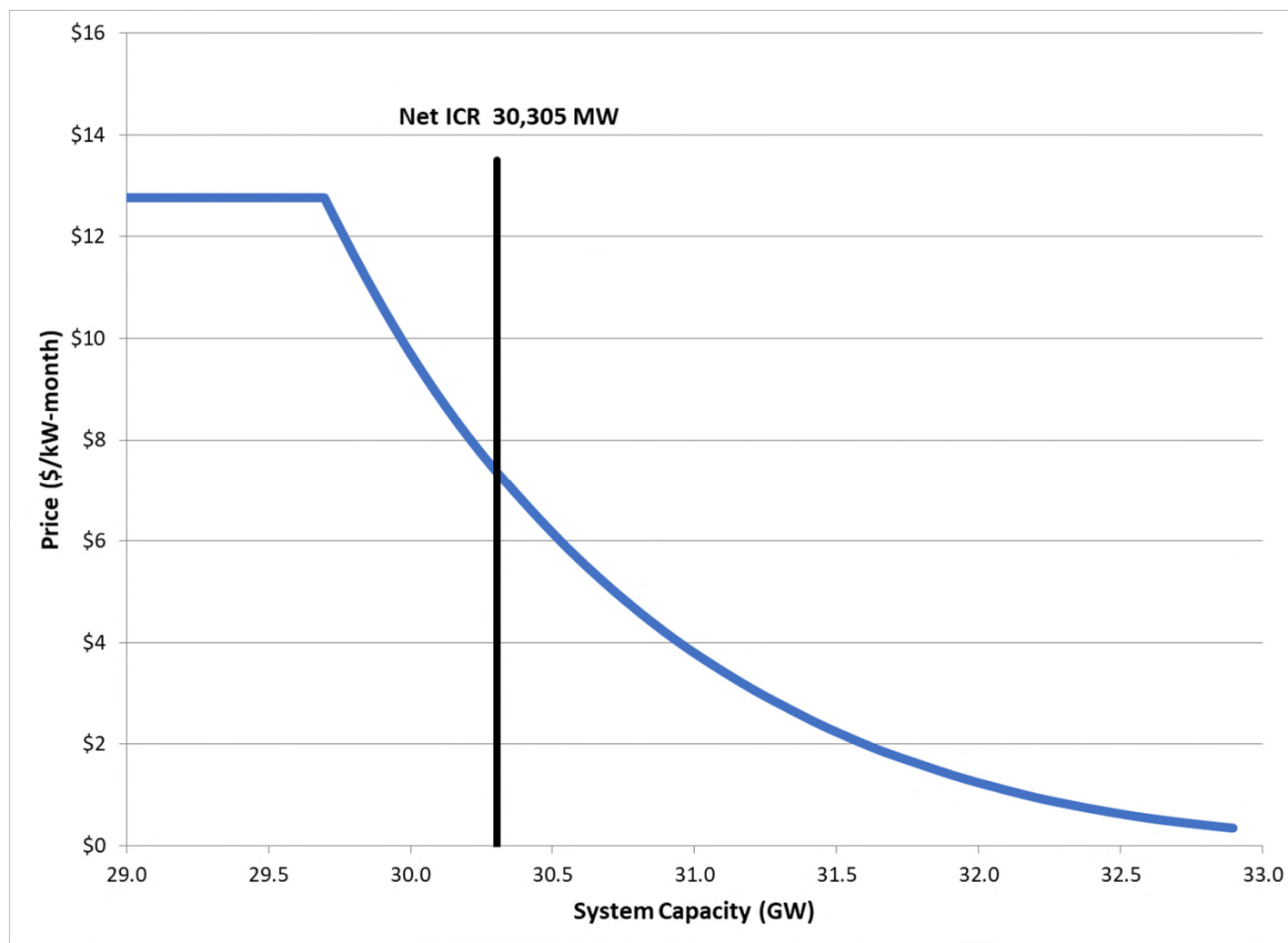
The FCA 17 MRI based Demand Curve Values are located at: https://www.iso-ne.com/static-assets/documents/2022/08/a02_fca_17_demand_curves.xlsx



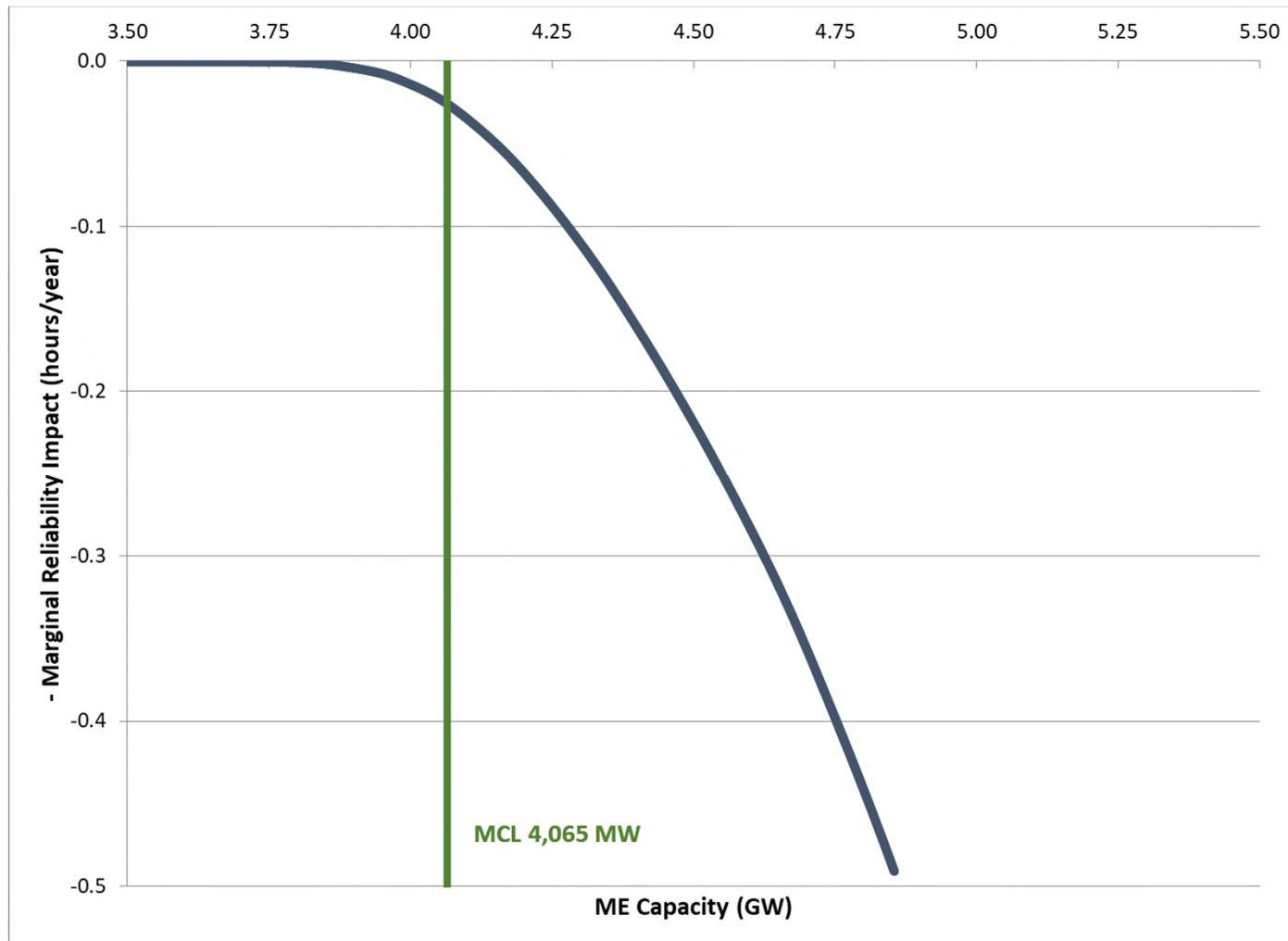
FCA 17 System-wide MRI Curve



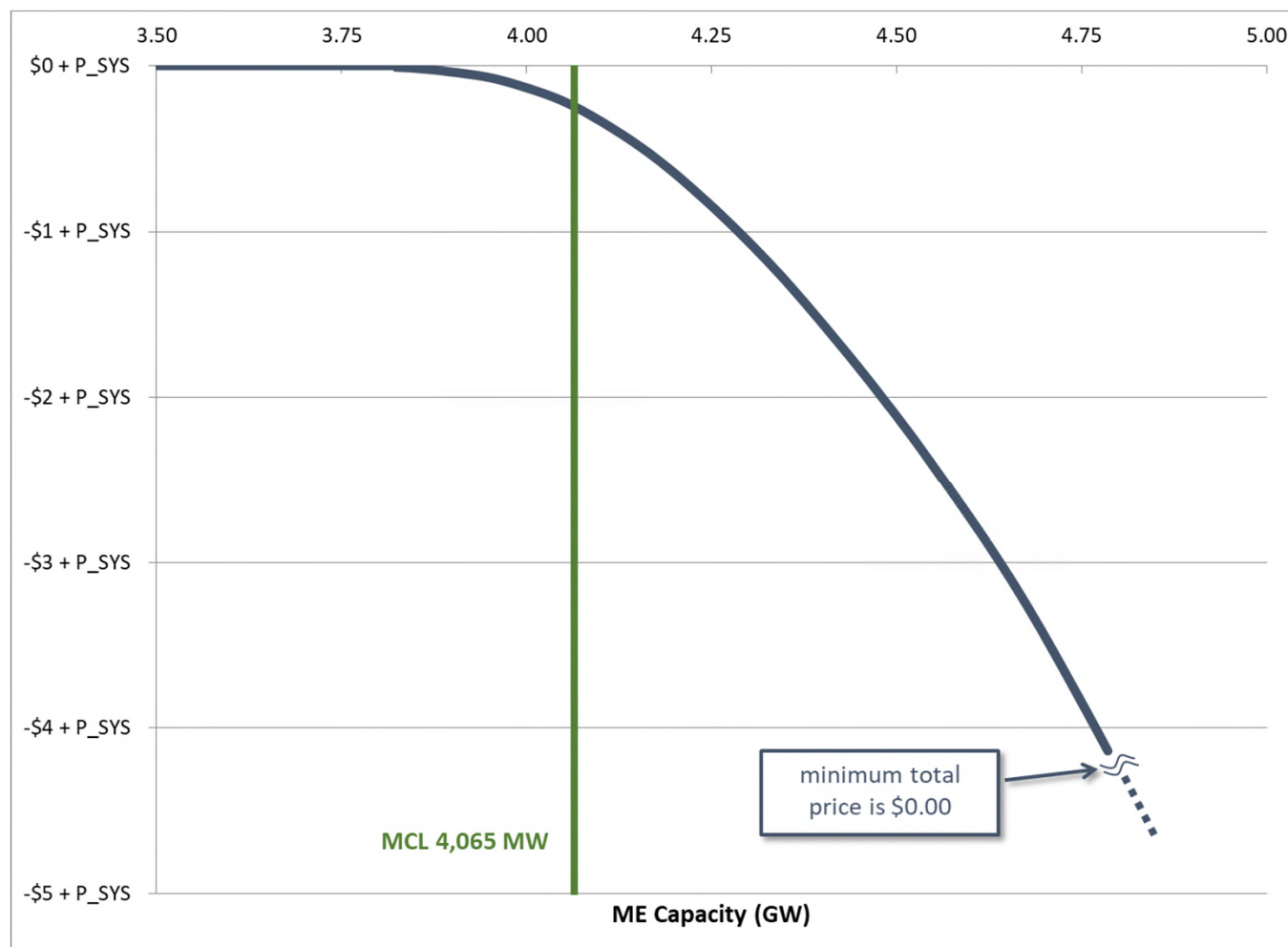
FCA 17 System-wide Demand Curve



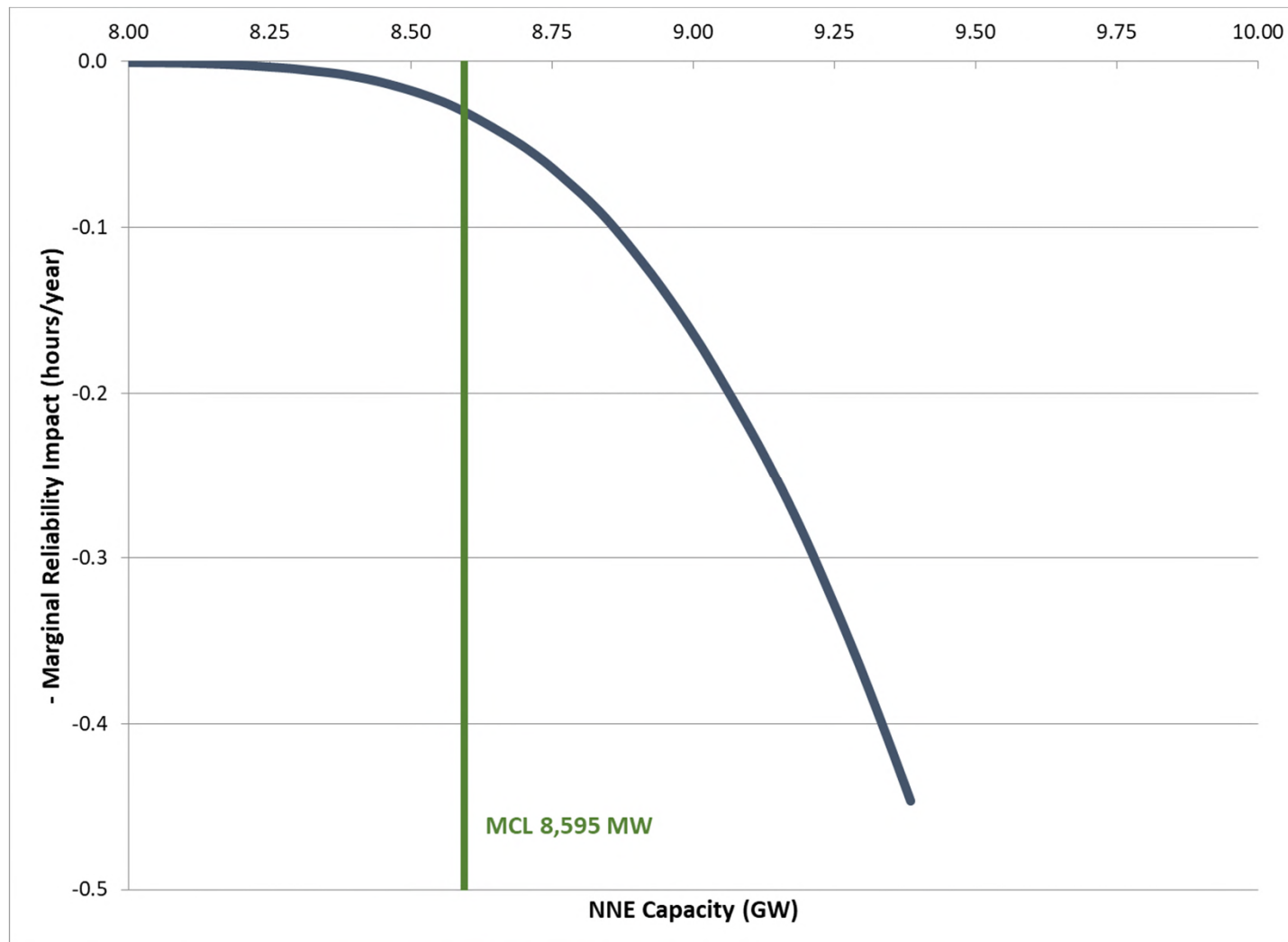
FCA 17 Maine MRI Curve



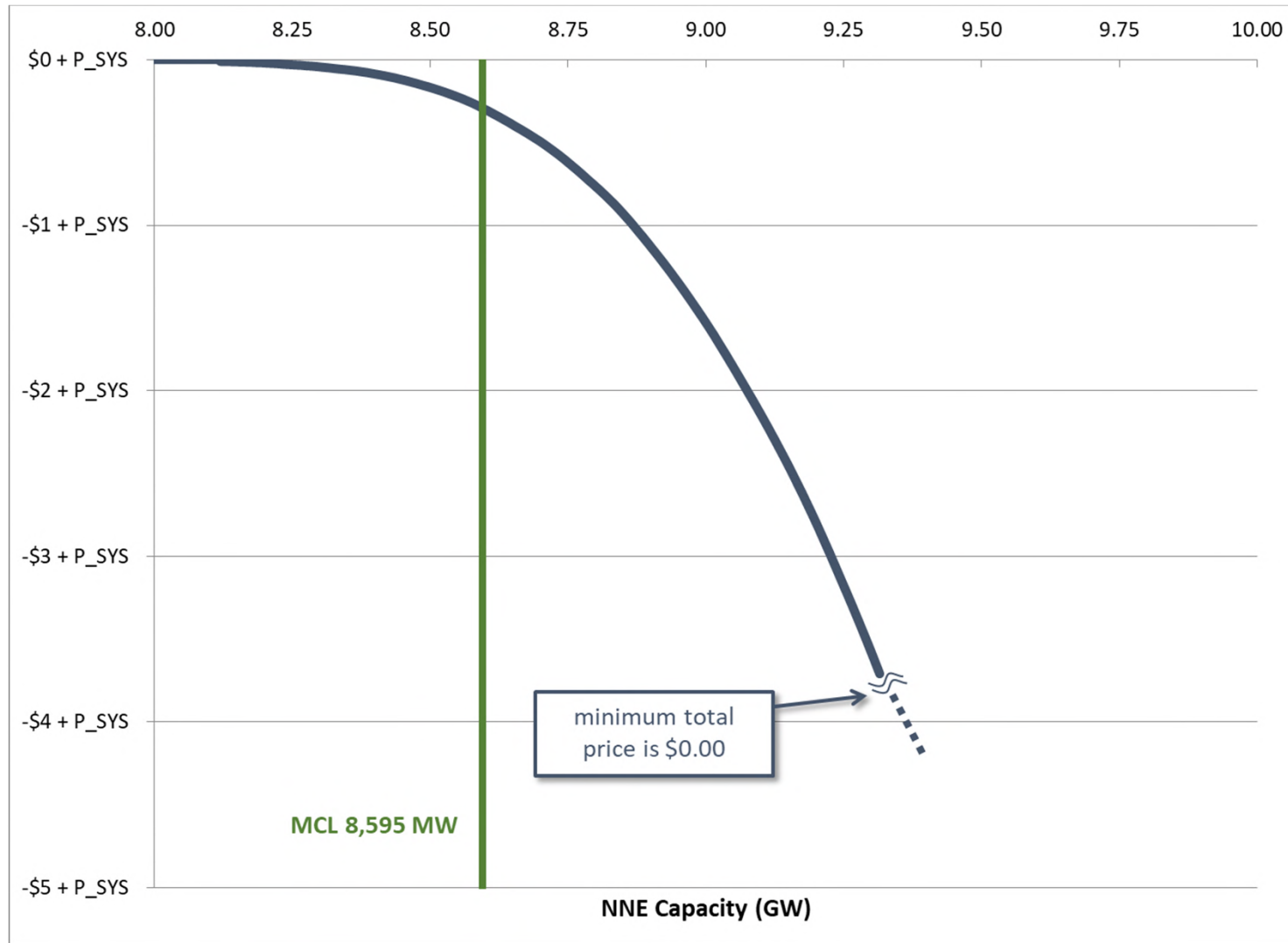
FCA 17 Maine Demand Curve



FCA 17 NNE MRI Curve



FCA 17 NNE Demand Curve



RELIABILITY COMMITTEE MOTIONS

FCA 17 ICR-RELATED VALUES



HQICC Motion

Resolved, the Reliability Committee recommends Participants Committee support for the following megawatt values that represent the Hydro-Québec Interconnection Capability Credit (HQICC) values for the seventeenth Forward Capacity Auction, which is associated with the 2026-2027 Capacity Commitment Period:

| 2026-2027 Capacity Commitment Period Month | HQICC Values (MW) |
|--|----------------------|
| June | 1,001 |
| July | 1,001 |
| August | 1,001 |
| September | 1,001 |
| October | 1,001 |
| November | 1,001 |
| December | 1,001 |
| January | 1,001 |
| February | 1,001 |
| March | 1,001 |
| April | 1,001 |
| May | 1,001 |



ICR/MCL/Demand Curves Motion

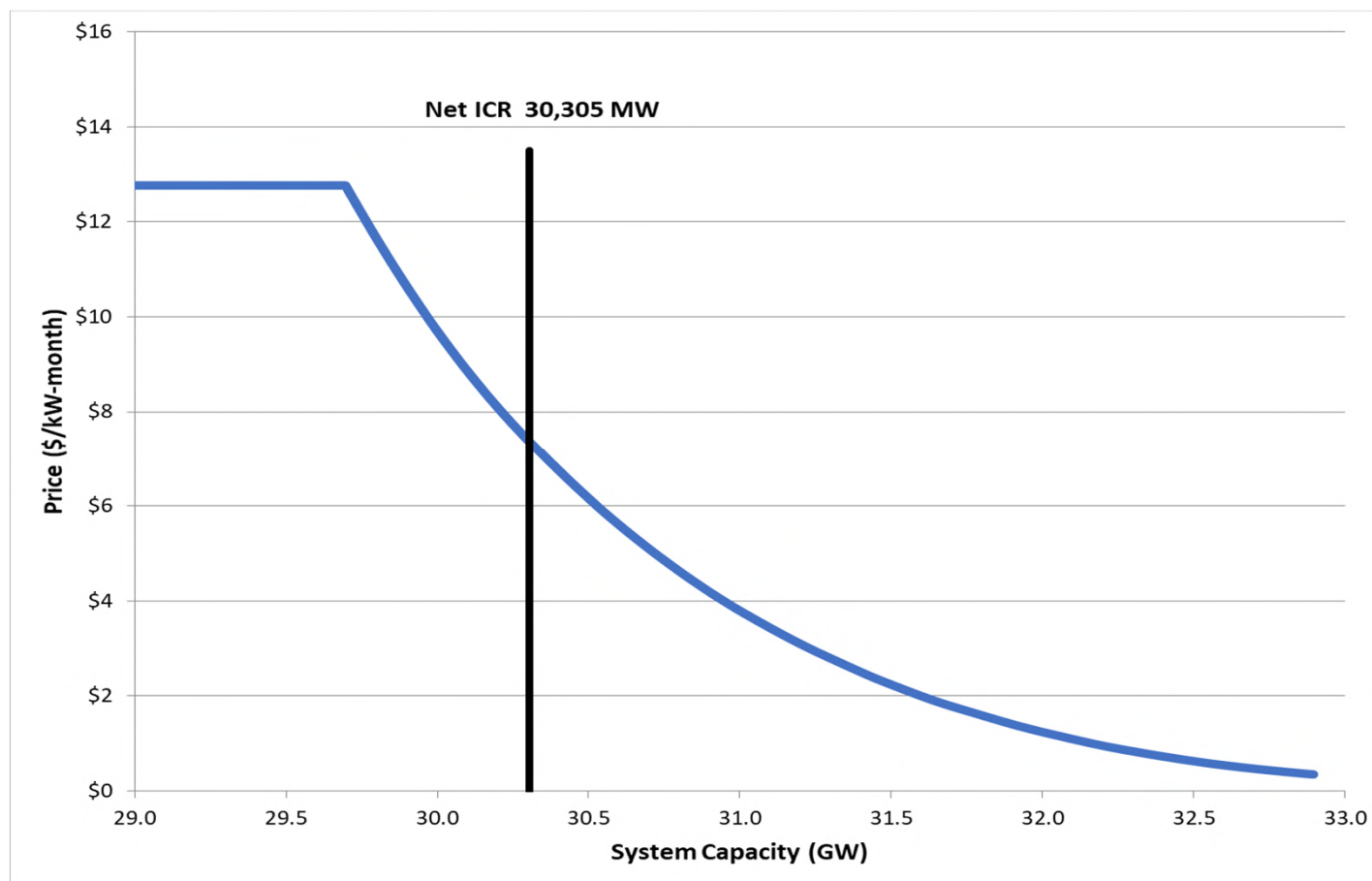
Resolved, the Reliability Committee recommends Participants Committee support for the following megawatt values that represent the New England Installed Capacity Requirement (ICR), Net Installed Capacity Requirement (Net ICR), Maine Maximum Capacity Limit (MCL), Northern New England MCL, and Capacity Demand Curves for the System and Capacity Zones based on the Marginal Reliability Impact (MRI) methodology for the seventeenth Forward Capacity Auction, which is associated with the 2026-2027 Capacity Commitment Period:

| | 2026-2027 Capacity Commitment Period ICR Values (MW) |
|---|---|
| Installed Capacity Requirement | 31,306 |
| Net Installed Capacity Requirement | 30,305 |
| Maine Maximum Capacity Limit | 4,065 |
| Northern New England Maximum Capacity Limit | 8,595 |



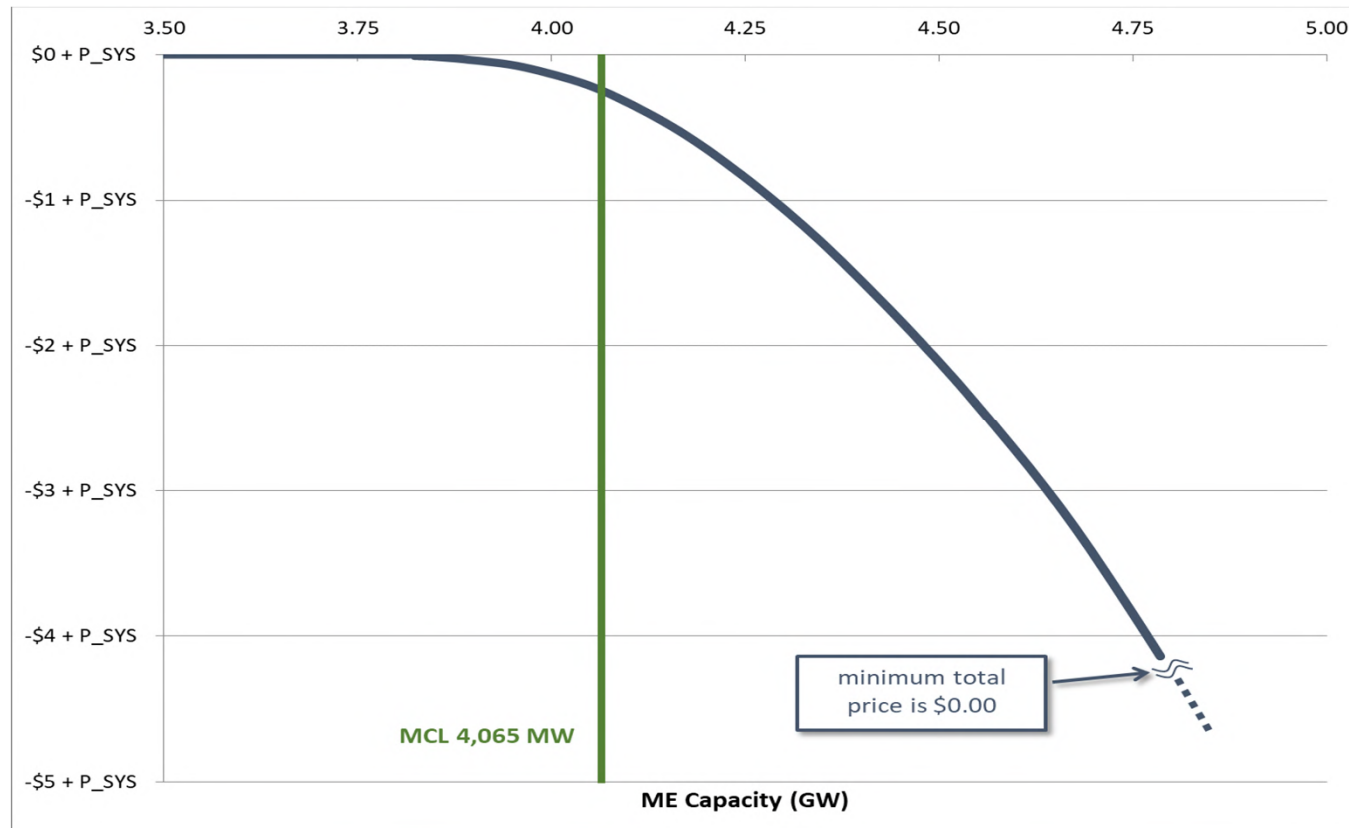
ICR/MCL/Demand Curves Motion, cont.

2026-2027 Capacity Commitment Period System-wide Demand Curve:



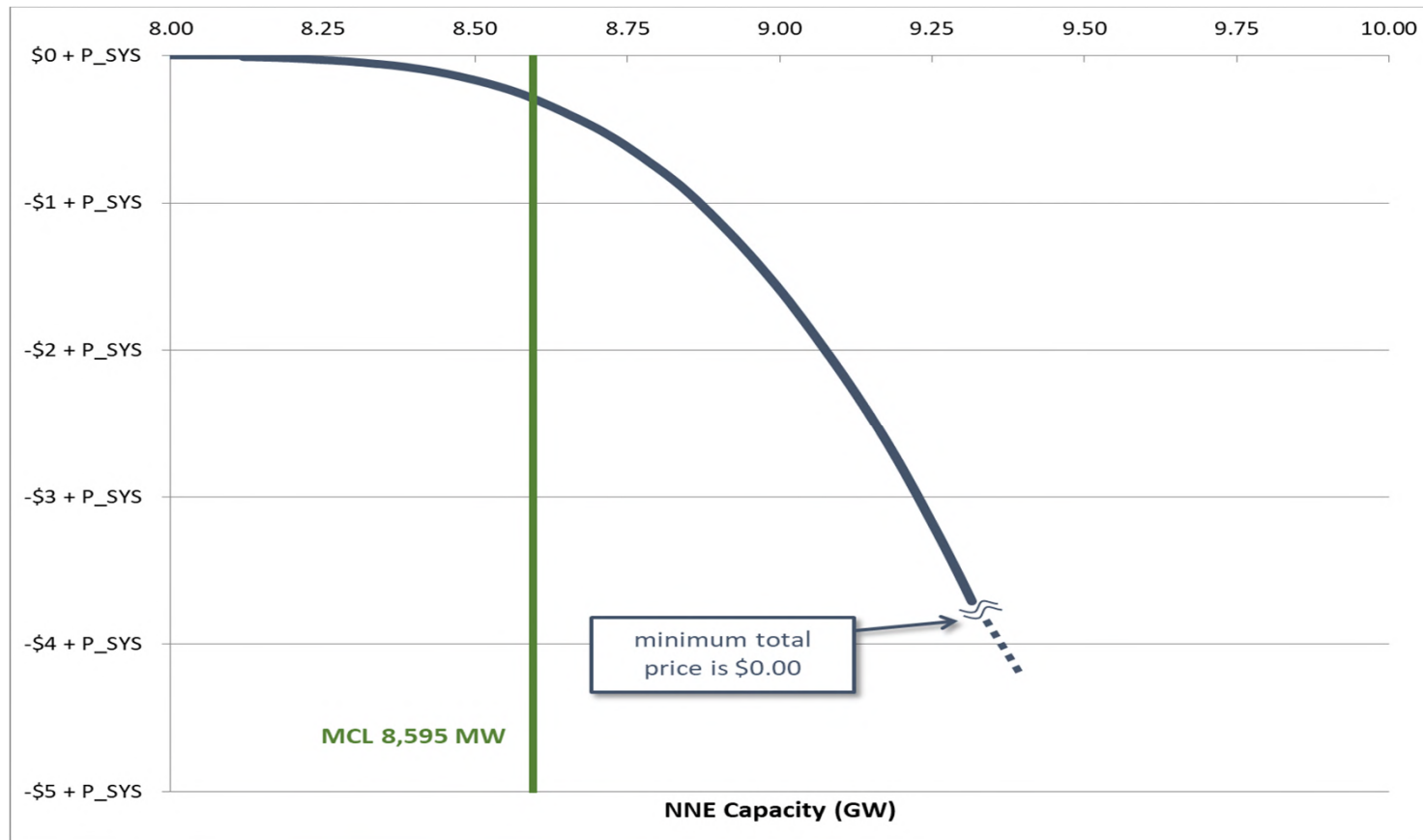
ICR/MCL/Demand Curves Motion, cont.

2026-2027 Capacity Commitment Period Maine Capacity Zone Demand Curve:



ICR/MCL/Demand Curves Motion, cont.

2026-2027 Capacity Commitment Period Northern New England Capacity Zone
Demand Curve:



Questions



APPENDIX

*Acronyms for ICR-Related Values**

*Not all acronyms are used in this presentation



Acronyms

- ADCR – Active Demand Capacity Resource
- ALCC – Additional Load Carrying Capability
- APk – Gross peak load net of BTM PV
- ARA – Annual Reconfiguration Auction
- ART – Annual Reconfiguration Transaction
- BTM PV – Behind-the-meter Photovoltaic
- CCP – Capacity Commitment Period
- CDD – Cooling Degree Days
- CELT – Capacity, Energy, Loads and Transmission
- CSC – Cross Sound Cable
- CSO – Capacity Supply Obligation
- CT – Connecticut
- DR – Demand Resource



Acronyms, cont.

- EE – Energy Efficiency
- EFORd – Equivalent Forced Outage Rate on Demand
- FCA – Forward Capacity Auction
- FCM – Forward Capacity Market
- FERC – Federal Energy Regulatory Commission
- HQICCs – Hydro-Quebec Interconnection Capability Credits
- ICR – Installed Capacity Requirement
- ISO – ISO New England
- LRA – Local Resource Adequacy
- LSR – Local Sourcing Requirement
- MARS – Multi-Area Reliability Simulation
- MCL – Maximum Capacity Limit
- MRI – Marginal Reliability Impact
- NEMA – Northeast Massachusetts
- NEPOOL – New England Power Pool
- Net ICR – ICR minus HQICCs



Acronyms, cont.

- NNE – Northern New England
- NPCC – Northeast Power Coordinating Council
- OP-4 – Operating Procedure No. 4, Action During a Capacity Deficiency
- PAC – Planning Advisory Committee
- PC – Participants Committee
- PK – Peak (gross load forecast)
- PSPC – Power Supply Planning Committee
- RC – Reliability Committee
- RI – Rhode Island
- SEMA – Southeast Massachusetts
- SENE – Southeast New England
- SWCT – Southwest Connecticut
- TSA – Transmission Security Analysis
- VR – Voltage Reduction
- WEFORd – Weighted Equivalent Forced Outage Rated on Demand





memo

To: Participants Committee
From: Nicholas Gangi, Secretary, Reliability Committee
Date: September 21, 2022
Subject: Actions of the Reliability Committee from the September 20, 2022 Meeting

This memo is to notify the Participants Committee (“PC”) of the actions taken by the Reliability Committee (“RC”) at its September 20, 2022 meeting of the Reliability Committee. A quorum was established.

(Agenda Item 2.0) (66.67% Vote) Meeting Minutes

ACTION: APPROVED

Resolved, that the Reliability Committee approves the minutes of the following RC meeting as distributed to the committee for the September 20, 2022 meeting together with any changes agreed to at the meeting and such non-substantive changes as may be agreed to after the meeting by the Chair and Vice-Chair of the Reliability Committee:

- August 16-17, 2022 RC/TC Summer Meeting

Based on a voice vote, the motion passed with none opposed and no abstentions.

(Agenda Item 4.1) (66.67% Vote) 100 MW Orrington II BESS Project (QP 1015)

ACTION: APPROVED

Resolved, the Reliability Committee recommends that ISO New England Inc. determine that implementation of the 100 MW Orrington II BESS Project (QP 1015) - Proposed Plan Applications (PPAs) JUP-22-G03 and JUP-22-T03 from Jupiter Power (JUP) and VP-22-T05 from Versant Power (VP) as detailed in their August 16, 2022 and August 29, 2022 transmittals to ISO New England and distributed to the committee for the September 20, 2022 meeting, together with a recommendation letter from ISO New England, will not have a significant adverse effect on the stability, reliability or operating characteristics of the transmission

receiving regional support and inclusion in Pool-Supported PTF Rates, the requested \$24.992 million as eligible for Pool-Supported PTF cost recovery and with none of the costs associated with such upgrades being considered Localized Costs.

Based on a voice vote, the motion passed with none opposed and no abstentions.

(Agenda Item 7.0) (60.0% Vote) HQICCs and Installed Capacity Requirement and Related Values for Capacity Commitment Period (CCP) 2026/2027 (FCA 17)

ACTION: APPROVED

Resolved, the Reliability Committee recommends Participants Committee support for the following megawatt values that represent the Hydro-Québec Interconnection Capability Credit (HQICC) values for the seventeenth Forward Capacity Auction, which is associated with the 2026-2027 Capacity Commitment Period:

| 2026-2027 Capacity Commitment Period Month | HQICC Values (MW) |
|---|------------------------------|
| June | 1,001 |
| July | 1,001 |
| August | 1,001 |
| September | 1,001 |
| October | 1,001 |
| November | 1,001 |
| December | 1,001 |
| January | 1,001 |
| February | 1,001 |
| March | 1,001 |
| April | 1,001 |
| May | 1,001 |

Based on a roll call vote, the motion passed with a vote of 63.95% in favor. The individual Sector votes were Generation (8.35% in favor, 8.35% opposed, 2 abstentions), Transmission (16.70% in favor, 0.00% opposed, 0 abstentions), Supplier (0.00% in favor, 16.70% opposed, 8 abstentions), Publicly Owned Entity (16.70% in favor, 0.00% opposed, 0 abstentions),

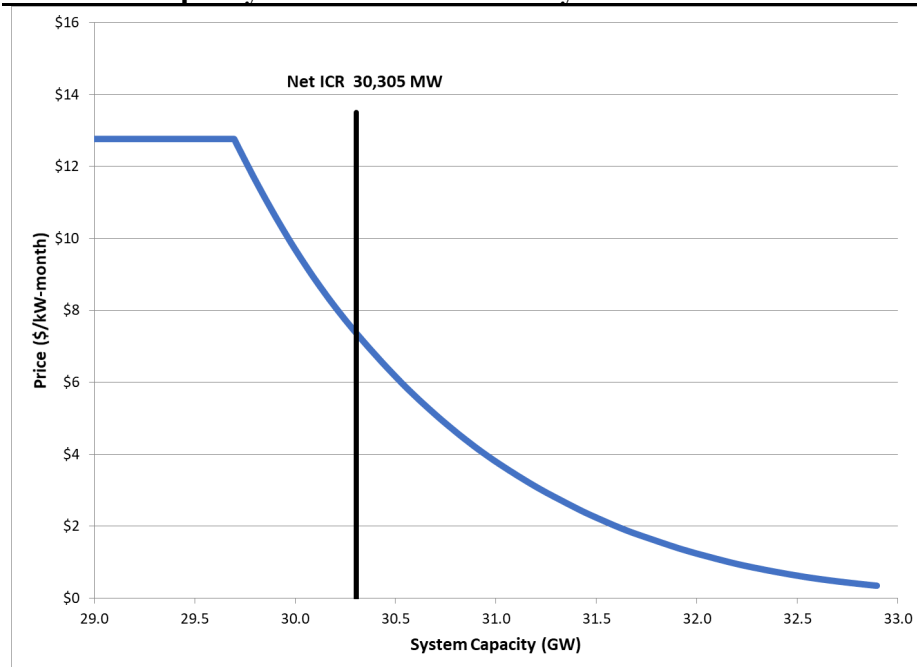
Alternative Resources (5.50% in favor, 11.00% opposed, 1 abstention), and End User (16.70% in favor, 0.00% opposed, 1 abstention).

ACTION: APPROVED

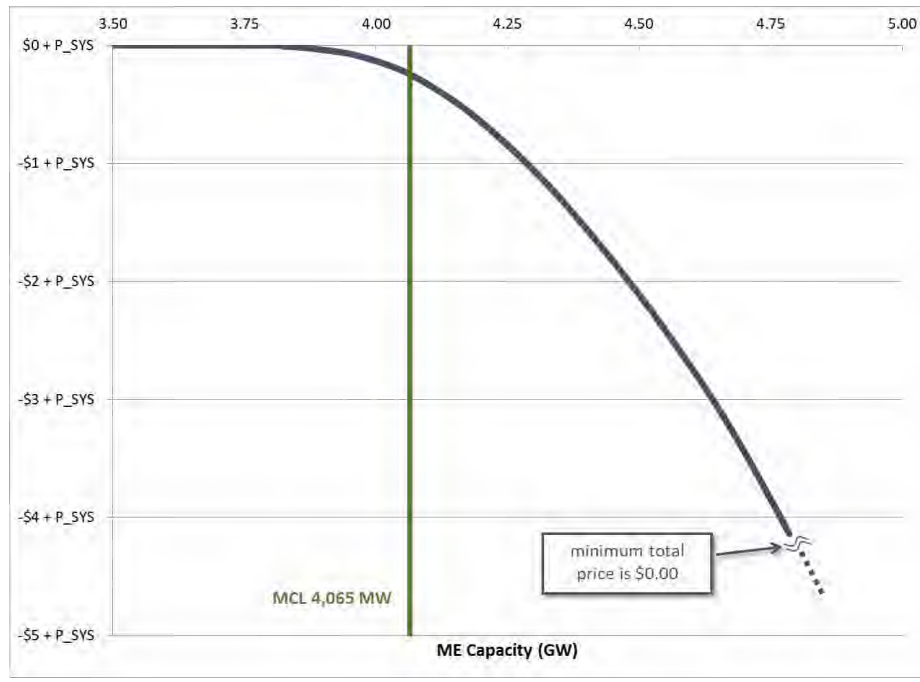
Resolved, the Reliability Committee recommends Participants Committee support for the following megawatt values that represent the New England Installed Capacity Requirement (ICR), Net Installed Capacity Requirement (Net ICR), Maine Maximum Capacity Limit (MCL), Northern New England MCL, and Capacity Demand Curves for the System and Capacity Zones based on the Marginal Reliability Impact (MRI) methodology for the seventeenth Forward Capacity Auction, which is associated with the 2026-2027 Capacity Commitment Period:

| | 2026-2027 Commitment ICR (MW) | Capacity Period Values |
|---|--|------------------------------|
| Installed Capacity Requirement | 31,306 | |
| Net Installed Capacity Requirement | 30,305 | |
| Maine Maximum Capacity Limit | 4,065 | |
| Northern New England Maximum Capacity Limit | 8,595 | |

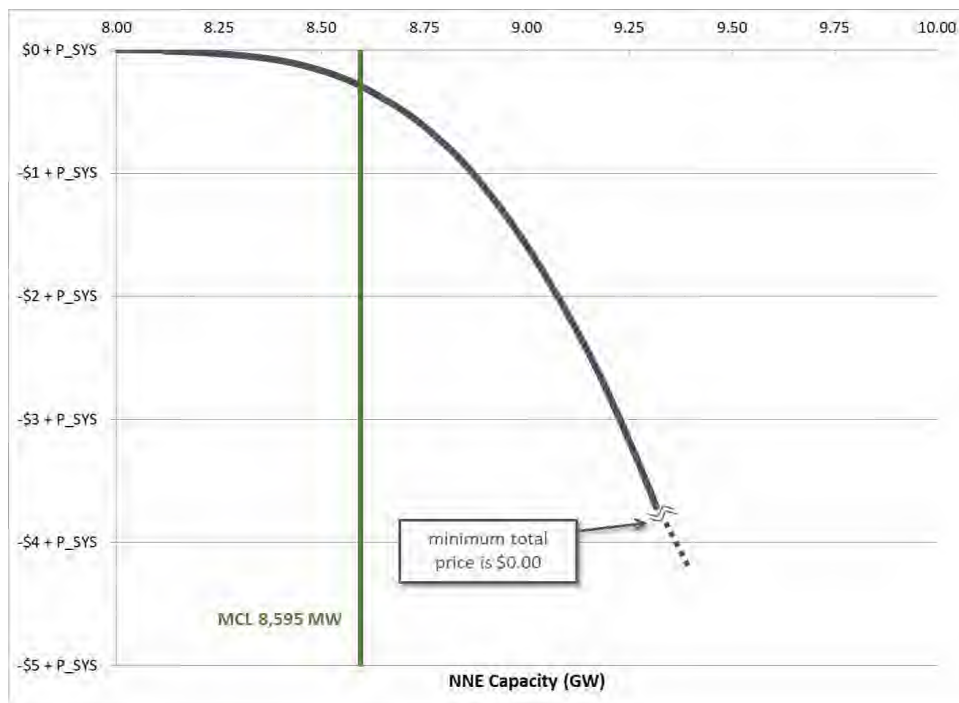
2026-2027 Capacity Commitment Period System-Wide Demand Curve:



2026-2027 Capacity Commitment Period Maine Capacity Zone Demand Curve:



2026-2027 Capacity Commitment Period Northern New England Capacity Zone Demand Curve:



Based on a roll call vote, the motion passed with a vote of 63.95% in favor. The individual Sector votes were Generation (8.35% in favor, 8.35% opposed, 2 abstentions), Transmission (16.70% in favor, 0.00% opposed, 0 abstentions), Supplier (0.00% in favor, 16.70% opposed, 8 abstentions), Publicly Owned Entity (16.70% in favor, 0.00% opposed, 0 abstentions), Alternative Resources (5.50% in favor, 11.00% opposed, 1 abstention), and End User (16.70% in favor, 0.00% opposed, 1 abstention).

MEMORANDUM

TO: NEPOOL Participants Committee Members and Alternates
FROM: Eric Runge and Rosendo Garza, NEPOOL Counsel
DATE: September 29, 2022
RE: ISO-NE's Storage as a Transmission-Only Asset (SATO) Proposal

At the October 6, 2022 Participants Committee meeting, you will be asked to vote on a proposal to permit energy storage devices to participate as transmission-only assets, referred to herein as the "SATO Proposal." Because the proposal revises Section I of the Tariff, Section II of the Open Access Transmission Tariff (OATT), the Transmission Operating Agreement (TOA), and Market Rule 1, the Transmission Committee (TC) and the Markets Committee (MC) vetted the SATO Proposal. As more fully explained below, both the TC and MC have recommended that the Tariff changes under their jurisdiction be approved by the Participants Committee. Because there were many abstentions and some opposition to the SATO Proposal by members of both Committees, this item has been included in the discussion agenda for the October 6 Participants Committee meeting.

This memorandum summarizes the SATO Proposal and the stakeholder process to date, and includes the following materials:

- Attachment A1: Proposed Section I sheets
- Attachment A2: Proposed OATT sheets
- Attachment A3: Proposed TOA sheets
- Attachment A4: Proposed Market Rule 1 sheets
- Attachment B1: ISO-NE's TC voting memorandum (dated Aug. 10, 2022)
- Attachment B2: ISO-NE's MC voting memorandum (dated Sep. 7, 2022)
- Attachment C1: ISO's PowerPoint presentation provided at the August 16, 2022 TC meeting
- Attachment C2: ISO's PowerPoint presentation provided at the September 13–14, 2022 MC meeting

OVERVIEW OF THE SATO PROPOSAL

The SATO Proposal was developed by the ISO in response to some stakeholders' request to permit energy storage devices¹ to be considered as transmission-only assets. The ISO explained that it had two design principles in developing its proposal: (1) introduction of a SATO cannot compromise reliability by inserting unmanageable operating burdens into the

¹ As the ISO explained, the proposal is technology neutral. See Att. C1 at Slide 4.

control room; and (2) a SATOA cannot have a significant impact on the markets. The ISO proposed three requirements for any SATOA: (1) it must or will be connected to a Pool Transmission Facility (PTF) at a voltage level of 115KV or higher; (2) the ISO must approve the energy storage device for inclusion in the Regional System Plan (RSP) and RSP Project List as both a regulated transmission solution and a PTF pursuant to the regional system planning process in the OATT's Attachment K; and (3) the energy storage device can receive energy only from the PTF and store the energy for later injection to the PTF.

The SATOA Proposal provides that a SATOA may be evaluated and selected to address the needs of the system as identified in a Needs Assessment or Public Policy Transmission Study, among other things. The proposal also delineates the SATOA's evaluation and selection criteria. As explained in the ISO's materials, the SATOA would only operate, i.e., charge or discharge, under specified conditions to avoid or mitigate load-shedding when all available market actions have been exhausted.² The conditions the ISO could direct a SATOA to discharge will be detailed in operating procedures.³

As proposed, SATOAs would only be settled in the Real-Time Energy Market and not participate in any other settlements, making them ineligible to receive payments or charges related to Day-Ahead Energy, reserves, black start, or capacity (among others). The SATOA's energy produced while discharging or consumed while charging will be paid or charged at the Real-Time Locational Marginal Price. Thus, a SATOA will have a separate pricing node (or p-node) to minimize market impacts. The ISO indicated that no other market activity will be permitted on the SATOA's p-node.

Section I of the Tariff Additions

As part of the package of reforms, the SATOA Proposal would include two new defined terms in Section I, namely "Real-Time SATOA Obligation" and "Storage as Transmission-Only Asset." The proposed definitions can be reviewed in Attachment A1.

OATT and TAO Revisions

The SATOA Proposal would add a new subsection to Section II of the OATT. Specifically, the new subsection would detail the treatment of SATOAs, such as how the ISO would evaluate and select SATOAs, when a SATOA would operate, and the transmission service charges associated with SATOA operations. The remaining revisions proposed to Section II, including to several schedules and attachments, and to the TOA would be conforming changes.

More details concerning the changes to the OATT and TOA can be reviewed in Attachment A2, Attachment A3, Attachment B1, and Attachment C1.

² See also Att. A2, Proposed Section II.51.2 (identifying the six reasons a SATOA would operate).

³ The ISO indicated that it expects to revise aspects of Operating Procedures 4, 7, and 19, which will be brought through the stakeholder process at a later time. Att. C2 at Slide 6.

Market Rule 1 Changes

The SATOA Proposal also includes revisions to the energy settlement rules in Market Rule 1. Specifically, this package of revisions proposes a new section to define a SATOA's participation in the markets, includes changes to ensure that real-time supply and demand are addressed when determining a Real-Time Locational Adjusted Net Interchange, adds new language to ensure that each Participant Transmission Owner accounts for a SATOA's charging and discharging, and provides metering requirements for SATOAs.

Attachment A4, Attachment B2, and Attachment C2 offer additional explanation to the proposed changes to Market Rule 1.

STAKEHOLDER PROCESS TO DATE

Because the SATOA Proposal included changes to Section I, Section II, the TOA, and Market Rule 1, the TC and MC reviewed and offered input to that Proposal. Additional information is provided herein regarding the outcome of each of the Committees' respective deliberations.

TC Review (Agenda Item 6.a)

The TC considered and provided feedback on the SATOA Proposal over the course of five meetings. At its August 17 meeting, the TC voted to recommend Participants Committee support for the SATOA-related revisions subject to its review, with 80.19% in favor and none opposed.⁴ Although there was no opposition, there were numerous abstentions and some concerns raised generally about the potential for market impacts from the use of SATOAs.

MC Review (Agenda Item 6.b)

The MC considered and provided feedback on the SATOA Proposal over the course of three meetings. At its September 13, 2022 meeting, the MC considered the SATOA Proposal's revisions to Section I and Market Rule 1. Some members expressed concerns related to the potential for market impacts from use of SATOAs, but no amendments were offered. The motion to recommend Participants Committee support passed by show of hands vote, with four members opposed.⁵

⁴ Based on a roll call vote, the motion passed with a vote of 80.19% in favor. The individual Sector votes were Generation (19.81% in favor, 0.00% opposed, 2 abstentions), Transmission (19.81% in favor, 0.00% opposed, 0 abstentions), Supplier (19.81% in favor, 0.00% opposed, 3 abstentions), Publicly Owned Entity (0.00% in favor, 19.81% not in favor, 49 abstentions), Alternative Resources (19.58% in favor, 0.00% opposed, 1 abstention), and End User (1.17% in favor, 0.00% opposed, 1 abstention).

⁵ At the September 13 MC meeting, the following oppositions and abstentions were recorded: two oppositions and two abstentions in the Generation Sector; two oppositions and four abstentions in the Supplier Sector; two abstentions in the Alternative Resources Sector; and three abstentions in the Publicly Owned Entity Sector.

Participants Committee Review

The SATOA Proposal's changes to Section I, Section II, including the schedules and attachments, and the TOA that the TC recommended the Participants Committee support require a 66.67% Vote. The revisions to Section I.2.2 and Market Rule 1 that the MC recommended the Participants Committee support require a 60% Vote. Accordingly, the following forms of resolutions may be used for Participants Committee action, voted either individually or in a single combined vote:

RESOLVED, that the Participants Committee supports the SATOA Proposal as reflected in revisions to Section I, Section II of the Transmission, Markets and Services Tariff, and the Transmission Operating Agreement, as circulated to this Committee in advance of this meeting, together with [any changes agreed to by the Participants Committee at this meeting and] such non-substantive changes as may be approved by the Chair and Vice-Chair of the Transmission Committee.

FURTHER RESOLVED, that the Participants Committee supports the SATOA Proposal as reflected in revisions to Section I.2.2 and Market Rule 1, as circulated to this Committee in advance of this meeting, together with [any changes agreed to by the Participants Committee at this meeting and] such non-substantive changes as may be approved by the Chair and Vice-Chair of the Markets Committee.

I.2 Rules of Construction; Definitions

I.2.1 Rules of Construction:

In this Tariff, unless otherwise provided herein:

- (a) words denoting the singular include the plural and vice versa;
- (b) words denoting a gender include all genders;
- (c) references to a particular part, clause, section, paragraph, article, exhibit, schedule, appendix or other attachment shall be a reference to a part, clause, section, paragraph, or article of, or an exhibit, schedule, appendix or other attachment to, this Tariff;
- (d) the exhibits, schedules and appendices attached hereto are incorporated herein by reference and shall be construed with an as an integral part of this Tariff to the same extent as if they were set forth verbatim herein;
- (e) a reference to any statute, regulation, proclamation, ordinance or law includes all statutes, regulations, proclamations, amendments, ordinances or laws varying, consolidating or replacing the same from time to time, and a reference to a statute includes all regulations, policies, protocols, codes, proclamations and ordinances issued or otherwise applicable under that statute unless, in any such case, otherwise expressly provided in any such statute or in this Tariff;
- (f) a reference to a particular section, paragraph or other part of a particular statute shall be deemed to be a reference to any other section, paragraph or other part substituted therefor from time to time;
- (g) a definition of or reference to any document, instrument or agreement includes any amendment or supplement to, or restatement, replacement, modification or novation of, any such document, instrument or agreement unless otherwise specified in such definition or in the context in which such reference is used;
- (h) a reference to any person (as hereinafter defined) includes such person's successors and permitted assigns in that designated capacity;
- (i) any reference to "days" shall mean calendar days unless "Business Days" (as hereinafter defined) are expressly specified;
- (j) if the date as of which any right, option or election is exercisable, or the date upon which any amount is due and payable, is stated to be on a date or day that is not a Business Day, such right, option or election may be exercised, and such amount shall be deemed due and payable, on the next succeeding Business Day with the same effect as if the same was exercised or made on such date or day (without, in the case of any such payment, the payment or accrual of any interest or

other late payment or charge, provided such payment is made on such next succeeding Business Day);

- (k) words such as “hereunder,” “hereto,” “hereof” and “herein” and other words of similar import shall, unless the context requires otherwise, refer to this Tariff as a whole and not to any particular article, section, subsection, paragraph or clause hereof; and a reference to “include” or “including” means including without limiting the generality of any description preceding such term, and for purposes hereof the rule of *ejusdem generis* shall not be applicable to limit a general statement, followed by or referable to an enumeration of specific matters, to matters similar to those specifically mentioned.

I.2.2. Definitions:

In this Tariff, the terms listed in this section shall be defined as described below:

Active Demand Capacity Resource is one or more Demand Response Resources located within the same Dispatch Zone, that is registered with the ISO, assigned a unique resource identification number by the ISO, and participates in the Forward Capacity Market to fulfill a Market Participant’s Capacity Supply Obligation pursuant to Section III.13 of Market Rule 1.

Actual Capacity Provided is the measure of capacity provided during a Capacity Scarcity Condition, as described in Section III.13.7.2.2 of Market Rule 1.

Actual Load is the consumption at the Retail Delivery Point for the hour.

Additional Resource Blackstart O&M Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Additional Resource Specified-Term Blackstart Capital Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Additional Resource Standard Blackstart Capital Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Administrative Costs are those costs incurred in connection with the review of Applications for transmission service and the carrying out of System Impact Studies and Facilities Studies.

Real-Time Loss Revenue Charges or Credits are defined in Section III.3.2.1(m) of Market Rule 1.

Real-Time NCP Load Obligation is the maximum hourly value, during a month, of a Market Participant's Real-Time Load Obligation summed over all Locations, excluding exports, in kilowatts.

Real-Time Offer Change is a modification to a Supply Offer pursuant to Section III.1.10.9(b).

Real-Time Posturing NCPC Credit for Generators (Other Than Limited Energy Resources) Postured for Reliability is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

Real-Time Posturing NCPC Credit for Limited Energy Resources Postured for Reliability is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

Real-Time Prices means the Locational Marginal Prices resulting from the ISO's dispatch of the New England Markets in the Operating Day.

Real-Time Reserve Charge is a Market Participant's share of applicable system and Reserve Zone Real-Time Operating Reserve costs attributable to meeting the Real-Time Operating Reserve requirement as calculated in accordance with Section III.10 of Market Rule 1.

Real-Time Reserve Clearing Price is the Real-Time TMSR, TMNSR or TMOR clearing price, as applicable, for the system and each Reserve Zone that is calculated in accordance with Section III.2.7A of Market Rule 1.

Real-Time Reserve Credit is a Market Participant's compensation associated with that Market Participant's Resources' Reserve Quantity For Settlement as calculated in accordance with Section III.10 of Market Rule 1.

Real-Time Reserve Designation is the amount, in MW, of Operating Reserve designated to a Resource in Real-Time by the ISO as described in Section III.1.7.19 of Market Rule 1.

Real-Time Reserve Opportunity Cost is defined in Section III.2.7A(b) of Market Rule 1.

Real-Time SATOA Obligation is defined in Section III.3.2.1(b) of Market Rule 1.

Real-Time Synchronous Condensing NCPC Credit is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

Real-Time System Adjusted Net Interchange means, for each hour, the sum of Real-Time Locational Adjusted Net Interchange for a Market Participant over all Locations, in kilowatts.

Receiving Party is the entity receiving the capacity and/or energy transmitted to Point(s) of Delivery under the OATT.

Reference Level is defined in Section III.A.5.7 of Appendix A of Market Rule 1.

Regional Benefit Upgrade(s) (RBU) means a Transmission Upgrade that: (i) is rated 115kV or above; (ii) meets all of the non-voltage criteria for PTF classification specified in the OATT; and (iii) is included in the Regional System Plan as either a Reliability Transmission Upgrade or a Market Efficiency Transmission Upgrade identified as needed pursuant to Attachment K of the OATT. The category of RBU shall not include any Transmission Upgrade that has been categorized under any of the other categories specified in Schedule 12 of the OATT (e.g., an Elective Transmission Upgrade shall not also be categorized as an RBU). Any upgrades to transmission facilities rated below 115kV that were PTF prior to January 1, 2004 shall remain classified as PTF and be categorized as an RBU if, and for so long as, such upgrades meet the criteria for PTF specified in the OATT.

Regional Network Load is the load that a Network Customer designates for Regional Network Service under Part II.B of the OATT. The Network Customer's Regional Network Load shall include all load designated by the Network Customer (including losses). A Network Customer may elect to designate less than its total load as Regional Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Transmission Customer has elected not to designate a particular load at discrete Points of Delivery as Regional Network Load, the Transmission Customer is responsible for making separate arrangements under Part II.C of the OATT for any Point-To-Point Service that may be necessary for such non-designated load. A Network Customer's Monthly Regional Network Load shall be calculated in accordance with Section II.21.2 of the OATT.

remove itself from the capacity market for a one year period, as described in Section III.13.1.2.3.1.1 of Market Rule 1.

Station is one or more Existing Generating Capacity Resources consisting of one or more assets located within a common property boundary.

Station Going Forward Common Costs are the net costs associated with a Station that are avoided only by the clearing of the Static De-List Bids, the Permanent De-List Bids or the Retirement De-List Bids of all the Existing Generating Capacity Resources comprising the Station.

Station-level Blackstart O&M Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Station-level Specified-Term Blackstart Capital Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Station-level Standard Blackstart Capital Payment is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

Storage as Transmission-Only Asset (SATO) is electric storage equipment that: (1) is connected to or to be connected to Pool Transmission Facilities in the New England Transmission System at a voltage level of 115 kV or higher; (2) the ISO approved to be included in the Regional System Plan and RSP Project List as a regulated transmission solution and Pool Transmission Facility pursuant to the regional system planning processes in Attachment K of the OATT; and (3) is capable of receiving energy only from the Pool Transmission Facilities and storing the energy for later injection to the Pool Transmission Facilities.

Storage DARD is a DARD that participates in the New England Markets as part of an Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

Summer ARA Qualified Capacity is described in Section III.13.4.2.1.2.1.1.1 of Market Rule 1.

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II.49 Definition of PTF

PTF or Pool Transmission Facilities are the transmission facilities owned by PTOs, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in the TOA, rated 69 kV or above required to allow energy from significant power sources to move freely on the New England Transmission System, and include:

1. All transmission lines and associated facilities owned by PTOs rated 69 kV and above, except for lines and associated facilities that (i) were not built as Public Policy Transmission Upgrades and (ii) contribute little or no parallel capability to the PTF. The following do not constitute PTF:
 - (a) Unless they were built as part of a Public Policy Transmission Upgrade,
 - i. Those lines and associated facilities which are required to serve local load only,
 - ii. Generator leads, which are defined as radial transmission from a generation bus to the nearest point on the PTF; or
 - iii. Lines that are normally operated open.
 - (b) Lines and associated facilities that are classified as MTF or OTF.
2. All Public Policy Transmission Upgrades that are comprised of transmission lines rated 115 kV or above, and associated facilities rated 115kV or above, owned by PTOs, and identified pursuant to Attachment K to the OATT shall constitute PTF.
3. Parallel linkages in network stations owned by PTOs (including substation facilities such as transformers, circuit breakers and associated equipment) interconnecting the lines which constitute PTF.
4. If a PTOs with significant generation in its transmission and distribution system (initially 25 MW) is connected to the New England Transmission System and none of the transmission facilities owned by the PTO qualify to be included in PTF as defined in (1), (2) and (3) above, then such PTO's connection to PTF will constitute PTF if both of the following requirements are met for this connection:

- (a) The connection is rated 69 kV or above.
 - (b) The connection is the principal transmission link between the PTO and the remainder of the PTF network.
5. Rights of way and land owned by PTOs required for the installation of facilities that constitute PTF under (1), (2), (3) or (4) above.

The ISO shall review at least annually the status of transmission lines and associated facilities and determine whether such facilities constitute PTF and shall prepare and keep current a schedule or catalogue of PTF facilities.

The following examples indicate the intent of the above definitions:

Unless they were built as part of a Public Policy Transmission Upgrade, radial tap lines to local load are excluded.

Lines which loop, from two geographically separate points on the PTF, the supply to a load bus from the PTF are included.

Lines which loop, from two geographically separate points on the PTF, the connections between a generator bus and the PTF are included.

Radial connections or connections from a generating station to a single substation or switching station on the PTF are excluded, unless the requirements of paragraph (2) or (4) above are met.

Transmission facilities owned or supported by a Related Person of a PTO which are rated 69 kV or above and are required to allow Energy from significant power sources to move freely on the New England Transmission System shall also constitute PTF provided (i) such Related Person files with the ISO its consent to such treatment; and (ii) the ISO determines that treatment of the facilities as PTF will facilitate accomplishment of the ISO's objectives. If such facilities constitute PTF pursuant to this paragraph, they shall be treated as "owned" or "supported," as applicable, by a PTO for purposes of this OATT and the

II.50 Additions to or Upgrades of PTF

The possible need for an addition to or upgrade of PTF may be identified in connection with the planning process of Attachment K of this OATT, an application or request for service under this OATT, or a request for the installation of or material change to a generation or transmission facility, or may be separately identified by an ISO committee under the Participants Agreement, a Market Participant or the ISO. In such cases, a study, if necessary, to assess available transfer capability and, if necessary, a System Impact Study and a Facility Study, shall be performed by the affected PTO(s) in whose Local Network(s) the addition or upgrade would or might be effected or their designee(s), or the ISO, in the case of a System Impact Study, or the ISO's designee(s), with review of the study by the ISO if it does not perform the study. Studies to assess available transfer capability and System Impact Studies and Facilities Studies shall be conducted, as appropriate, in accordance with any affected PTO's Local Service Schedule of this OATT, or in accordance with the applicable methodology specified in Attachments C and D to this OATT, and the provisions of the Local Service Schedules to this OATT or the applicable provisions of Attachments I and J to this OATT shall apply, as appropriate, with respect to the payment of the costs of the study and the other matters covered thereby.

Responsibility for the costs of new PTF or any modification or other upgrade of PTF shall be determined, to the extent applicable, in accordance with Parts II.B and II.C and Schedules 11 and 12 to this OATT, including without limitation the provisions relating to responsibility for the costs of new PTF or modifications or other upgrades to PTF exceeding regional system, regulatory or other public requirements set forth in Section (3)(b) of Schedule 11 and Schedule 12 to this OATT. _

II.51 Treatment of SATOA

A SATOA may only be evaluated and selected as a regulated transmission solution to address the needs of the system identified in a Needs Assessment or Public Policy Transmission Study in accordance with the regional system planning processes and requirements in Attachment K of the OATT, this Section II.51, and any other applicable requirements in the Tariff. A SATOA selected as the preferred solution to address an identified system need shall be classified as a Regional Benefit Upgrade or Public Policy Transmission Upgrade and meet the definition, criteria, and other requirements applicable to such upgrades.

II.51.1 Evaluation and Selection of a SATOA: In addition to the criteria, factors, and requirements in Attachment K of the OATT for evaluating transmission solutions and identifying a preferred solution, the ISO shall consider the following when evaluating whether a SATOA is the appropriate preferred solution to address needs of the system identified in the regional system planning process:

- (a) the ability of the proposed SATOA to address the applicable system need in all hours that the need is determined to exist;
- (b) the ability of the proposed SATOA to provide or absorb reactive power regardless of whether the SATOA is injecting or consuming real power;
- (c) the aggregate amount of SATOAs in New England, which shall be limited to 300 MW of charging capability and 300 MWs of discharging capability;
- (d) the total amount of SATOAs at a substation, which shall be limited to 30 MW of charging capability and 30 MW of discharging capability;
- (e) a SATOA shall not be evaluated or selected as the preferred solution to address violations of IROL(s) or system needs related to an IROL;
- (f) multiple SATOAs shall not be selected to address a single system need or multiple needs in the same area due to contingencies involving the same or similarly situated elements;

(g) a SATOA shall only be evaluated or identified as the preferred solution to resolve a system need that is a second contingency (N-1-1): a proposed SATOA shall not be evaluated or identified as the preferred solution to resolve an N-0 (all-lines-in) or N-1 (first contingency) system need; and

(h) any additional considerations unique to SATOAs that may support comparative evaluation to other solutions to the system need.

II.51.2 Operation of SATOAs: A SATOA shall operate, up to the capabilities of the device as proposed and selected during the process to evaluate and select transmission solutions, as necessary to, and only to:

(a) dynamically provide or absorb available reactive power while the SATOA is not injecting and not consuming real power to or from PTF;

(b) dynamically provide or absorb reactive power while the SATOA is injecting or consuming real power to or from PTF subject to the requirements in Section II.51.2 (c)-(f);

(c) maintain the required state-of-charge or maintenance of the SATOA;

(d) address the applicable system needs or concerns for which the SATOA was identified to address through a Needs Assessment, a Solutions Study, a Public Policy Transmission Study, the competitive solutions process in Attachment K of the OATT, or a combination thereof;

(e) support the New England Transmission System during system restoration; or

(f) as specified in the ISO New England Operating Documents, avoid or mitigate Load Shedding after all available Dispatchable Resources that can effectively provide relief to avoid or mitigate the Load Shedding have been dispatched.

The ISO New England Operating Documents shall specify the operating practices, limits, and audit requirements applicable to the SATOAs.

II.51.3 Transmission Service Associated with SATOA Operation: Transmission service charges, including charges for Ancillary Services, and charges assessed or revenues allocated under Schedules 1, 2, 3, and 5 of Section IV.A of the Tariff are not applicable to the operation of a SATOA.

ATTACHMENT F – APPENDIX E

RULES FOR DETERMINING INVESTMENT TO BE INCLUDED IN PTF

Section A – Transmission Lines*

Section B – Terminal Facilities*

Section C – Right of Way*

*The following provision shall apply to Sections A, B and C below:

Of those transmission facilities that are upgrades, modifications or additions to the New England Transmission System on and after January 1, 2004, only those that: (i) are rated 115kV or above, and (ii) otherwise meet the non-voltage criteria specified in Section II.49 of this OATT shall be classified as PTF. Those transmission facilities that were PTF on December 31, 2003, and any upgrades to such facilities that meet the definition of PTF specified in this OATT, shall remain classified as PTF for all purposes under the Transmission, Markets and Services Tariff.

Section A: Rules for Determining Transmission Line Investment to be Included in PTF

Pool Transmission Facilities (PTF) are the transmission facilities owned by PTO rated 69 kV or above required to allow energy from significant power sources to move freely on the New England transmission network, and include:

1. All transmission lines and associated facilities owned by the PTOs rated 69 kV and above, except:
 - a. those which are required to serve local load only, thereby contributing little or no parallel capability to the transmission network,
 - b. generator leads, which are defined as the radial transmission from a generator bus to the nearest point on the transmission network,
 - c. lines that are normally operated open.
 - d. those that are classified as MTF.
2. Terminal facilities (including substation facilities such as transformers, circuit breakers, and associated equipment) required to interconnect the lines which constitute PTF (see Section B).
3. If a PTO with significant generation in its system (initially 25 MW) is connected to the New England Transmission System and none of the transmission facilities owned by the PTO qualify to be included in PTF as defined in “1” and “2” above, then such PTO’s connection to PTF will constitute PTF if both of the following requirements are met for this connection:

will facilitate accomplishment of the ISO's objectives. If such facilities constitute PTF pursuant to this paragraph, they shall be treated as "owned" or "supported," as applicable, by a PTO for purposes of the OATT and the other provisions of the TOA, including the ability to include the cost associated with such PTF and any Transmission Support Expenses for support of PTF made by its Related Person in that PTO's Annual Transmission Revenue Requirements pursuant to Attachment F of the OATT.

Section B: Rules for Determining Terminal Investment to be Included in PTF

Terminal Investment is investment associated with the terminal facilities of electrical lines, including substation facilities such as transformers, circuit breakers, disconnects and airbreaks, bus conductor, related protection equipment and other related facilities (see paragraph 7).

1. The investment in terminal facilities shall be included where these facilities are identifiable and serve directly for terminating and/or switching PTF lines.
2. In cases where a line terminal is used in conjunction with both PTF and Non-PTF lines and/or facilities, it will be considered a PTF facility providing the terminal facility is at 69 kV or above and carries any power flow at 69 kV or above through parallel paths within the interconnected network under normal operation. PTF equipment is any element of the transmission system in those parallel paths. Any equipment not in these parallel paths is Non-PTF.
3. Where line terminals are installed solely for Non-PTF facilities, and do not carry any power flow at 69 kV or above through parallel paths within the interconnected network under normal operation, such terminal cost shall not be included in PTF.
4. A two-winding transformer which connects PTF facilities at both terminals along with any switcher which can be identified as pertaining solely to the transformer, will be included in their entirety as PTF.
5. An autotransformer or three winding transformer which connects PTF facilities at two (2) or more terminals, along with any switchgear which can be identified as pertaining solely to the PTF-connected terminals of the transformer, will be included in their entirety as PTF. An autotransformer or three winding transformer which is connected to PTF at only one terminal will not be PTF.
6. When a transformer supplies only Non-PTF facilities, the entire transformer installation, including the high side disconnect switch or circuit breaker and associated structures or tap lines shall be excluded from PTF except for the portion of line terminal facilities covered by paragraph 2.
7. Other facilities – the investment in that portion of a multi-use substation or switching station which is identifiable as serving a PTF function shall be included in PTF, while the investment in such facilities which are identifiable as serving a Non-PTF function shall be excluded. The investment in land, structures, ground mats, fences, ducts, lighting, etc., can often be identified and thus allocated. The investment in other facilities in the substation or switching station, excluding transformers, which are not identifiable as serving either a PTF

or a Non-PTF function and general overheads shall be allocated to PTF on the basis of the ratio of the investment in those facilities identified as PTF to the sum of the investments in the facilities which are identified as serving PTF and Non-PTF functions; the equipment cost of power transformers shall not be included in this calculation for determining the division of investment, since this would produce a distorted balance.

8. Alternate method of allocating the cost of terminal facilities – In those cases where the major portion of the investment has been lumped and utility plant records do not permit the accurate assignment of costs to specific terminals, the total investment may be prorated to PTF and Non-PTF according to the number of terminals serving PTF and Non-PTF facilities.
9. In cases where microwave facilities are used in whole or part for PTF purposes, a prorated portion of such investment shall be included in PTF based on the PTF and Non-PTF functions served by the microwave facilities except where these facilities are otherwise supported under the Microwave Sharing Agreement dated June 1, 1970 among some of the New England utilities.
10. Generator unit transformers and generator circuit breakers shall be excluded from PTF, unless otherwise included by paragraphs 1 or 5.
11. In cases where remote control (Supervisory Control) and telemetering facilities are used in whole or in part for PTF purposes, a prorated portion of such investment shall be included in PTF based on the PTF and Non-PTF functions served by these facilities.
12. The PTO Administrative Committee may designate appropriate facilities as PTF.
13. Flow limiting reactors, if operated normally bypassed, but capable of automatic insertion in a line to control flows in PTF facilities under certain operating conditions, shall be included in PTF.
14. Transmission level capacitor banks connected to a PTF eligible bus that may be normally operated open, but capable of being placed in service during adverse system events, shall be included in PTF.
15. Transmission level capacitor banks that are connected by the PTF by radial lines shall not be included in PTF.
16. Transformer-related costs, such as installation and other related costs that would not have been incurred but for the transformer, shall be treated in the same manner as the costs of the transformer.

17. SATOAs and associated facilities.

Section C: Rules for Determining PTF R/W Costs

ATTACHMENT O

NON-INCUMBENT TRANSMISSION DEVELOPER OPERATING AGREEMENT

NON-INCUMBENT TRANSMISSION DEVELOPER OPERATING AGREEMENT

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ARTICLE II
TRANSMISSION FACILITIES

2.01 **Transmission Facilities.** As to NTD, the transmission facilities over which the ISO shall exercise Operating Authority (as of the date the facilities are placed in service) in accordance with the terms set forth herein shall be:

(a) those facilities of NTD listed in Schedule 2.01(a) (hereinafter “NTD Category A Facilities”), as such list of facilities may be added to or deleted from in accordance with Sections 2.01(d) and 2.02 below;

(b) those facilities of NTD listed in Schedule 2.01(b) (hereinafter “NTD Category B Facilities”), as such list of facilities may be added to or deleted from, in accordance with Sections 2.01(d) and 2.02 below; and

(c) those transmission facilities of NTD within the New England Transmission System with a voltage level of less than 69 kV and all transformers that have no NTD Category A Facilities or NTD Category B Facilities connected to the lower voltage side of the transformer that are not listed on Schedule 2.01(a) and Schedule 2.01(b) (hereinafter “NTD Local Area Facilities”), provided that any excluded facilities of NTD listed on Schedule 4.01(d) shall not be NTD Local Area Facilities.

(d) The transmission facilities included on any of the lists of the NTD Category A Facilities or the NTD Category B Facilities contained in Schedule 2.01(a) and Schedule 2.01(b), respectively, may be redesignated on another of those two lists, deleted from such list, or redesignated as a NTD Local Area Facility without the necessity of an amendment to this Agreement, but only in the following manner:

(i) at the direction of a Governmental Authority with jurisdiction over the Transmission Facilities in question, provided that the ISO and NTD shall be provided prior written notice of such changes;

(ii) as agreed between the ISO and NTD; or

(iii) where the operational characteristics of a transmission facility have been materially modified (including a change from a radial transmission facility to a looped

transmission facility that contributes to the parallel carrying capability of the New England Transmission System) in accordance with Section 2.01(e); provided that any such changes shall also be subject to ISO review consistent with Section 2.06.

(e) All transmission facilities to be redesignated as NTD Category A Facilities, NTD Category B Facilities, or Local Area Facilities or deleted from the lists in Schedule 2.01(a) and Schedule 2.01(b) in accordance with Section 2.01(d)(iii), and all transmission facilities to be added to the lists in Schedule 2.01(a) and Schedule 2.01(b) in accordance with Section 2.02 shall be classified in accordance with the following standards:

(i) NTD Category A Facilities shall consist of: all transmission lines with a voltage level of 115 kV and above, except for those 115 kV transmission facilities specifically designated as NTD Category B Facilities in accordance with Section 2.01(e)(ii); all transmission interties between Control Areas; all transformers that have NTD Category A Facilities connected to the lower voltage side of the transformer; all transformers that require an NTD Category A Facility to be taken out of service when the transformer is taken out of service; SATOAs connected to transmission facilities with a voltage level of 115 kV and above; and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers.

(ii) NTD Category B Facilities shall consist of: all 115 kV radial transmission lines and all 69 kV transmission lines that are not interties between Control Areas; all transformers that have any NTD Category B Facilities and no NTD Category A Facilities connected to the lower voltage side of the transformer except to the extent such transformers are designated as NTD Category A Facilities in accordance with Section 2.01(e)(i); and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such NTD Category B Facilities.

(iii) NTD Local Area Facilities shall consist of all transmission facilities with a voltage level of less than 69 kV and all transformers that have no NTD Category A Facilities or NTD Category B Facilities connected to the lower voltage side of the transformer.

(iv) To the extent there is any dispute between the ISO and NTD as owner of a transmission facility concerning classification of such transmission facility under these standards, such disagreement shall be subject to the dispute resolution provisions of this Agreement, provided that the ISO's classification of a transmission facility under the standards shall govern pending resolution of the dispute.

Collectively, all NTD Category A Facilities, NTD Category B Facilities, and NTD Local Area Facilities shall hereinafter be referred to as the "Transmission Facilities," provided that "Transmission Facilities" shall not include Excluded Assets as defined in Section 2.04 of this Agreement or Merchant Facilities. The ISO shall maintain on its OASIS a posting of the current versions of Schedule 2.01(a) and Schedule 2.01(b), in each instance, reflecting each such change promptly after such change is made.

(f) The classifications set forth in this Section 2.01 are for operational purposes. Rate treatment of Transmission Facilities shall be governed by the ISO OATT, provided that filings for rate treatment under the ISO OATT shall be subject to Section 3.04 of this Agreement.

2.02 **New and Acquired Transmission Facilities and Transmission Upgrades.**

(a) Any New Transmission Facility or Transmission Upgrade shall be considered a "Transmission Facility" under this Agreement once it is included as "Proposed" in the RSP Project List and, unless otherwise agreed by the ISO and NTD, shall thereafter be added to Schedule 2.01(a) and/or (b), as applicable.

(b) Any Merchant Facility interconnected to or within the New England Transmission System shall not be the subject of this Agreement. Any Merchant Facility interconnected to or within the New England Transmission System constructed and placed in commercial operation after the Operations Date shall be subject to the authority of the ISO under a separate agreement in accordance with Section 2.03 and any applicable provisions of the ISO OATT.

Schedule 1.01

Schedule of Definitions

Acquired Transmission Facilities. Any transmission facility acquired within the New England Control Area by NTD after the Operations Date that meets the classification standards set forth in Section 2.02(a).

Additional Term. “Additional Term” shall have the meaning ascribed thereto in Section 10.01(a) of this Agreement.

Affiliate. Any person or entity which controls, is controlled by, or is under common control by another person or entity. For purposes of this definition, "control" shall mean the possession, directly or indirectly and whether acting alone or in conjunction with others, of the authority to direct the management or policies of a person or entity. A voting interest of ten percent or more shall create a rebuttable presumption of control.

Agreement. This Operating Agreement between the ISO and NTD, as it may be amended from time to time.

Ancillary Service. Those services that are necessary to support the transmission of electric capacity and energy from resources to loads while maintaining reliable operation of the transmission system in accordance with Good Utility Practice.

Approved Outages. “Approved Outages” shall have the meaning ascribed thereto in Market Rule 1 of the ISO Tariff.

Best’s. The A.M. Best Company.

Business Day. Any day other than a Saturday or Sunday or an ISO holiday, as posted by the ISO on its website.

Commercially Reasonable Efforts. A level of effort which, in the exercise of prudent judgment in the light of facts or circumstances known or which should reasonably be known at the time a decision is made, can be expected by a reasonable person to accomplish the desired result in a manner consistent with Good Utility Practice and which takes the performing party's interests into consideration.

RTO. An independent entity that complies with Order No. 2000 and FERC's corresponding regulations (or an entity that complies with all such requirements except for the scope and regional configuration requirements), as determined by the FERC.

Storage as Transmission-Only Asset ("SATOA"). "Storage as Transmission-Only Asset" or "SATOA" shall have the meaning ascribed thereto in Section I.2.2 of the ISO Tariff.

Schedule 22 Large Generator Interconnection Agreement. The interconnection agreement included in Schedule 22 of the ISO OATT.

Schedule 23 Small Generator Interconnection Agreement. The interconnection agreement included in Schedule 23 of the ISO OATT.

Scheduled Outages. "Scheduled Outages" shall have the meaning ascribed thereto in Market Rule 1 of the ISO Tariff.

Small Generating Facility. "Small Generating Facility" shall have the meaning ascribed thereto in the ISO OATT.

System Failure. Widespread telecommunication, hardware or software failure or systemic the ISO hardware or software failures that makes it impossible to receive or process bid information, dispatch resources, or exercise Operating Authority over the Transmission Facilities.

Tax or Taxes. All taxes, charges, fees, levies, penalties or other assessments imposed by any United States federal, state or local or foreign taxing authority, including, but not limited to, income, excise, property, sales, transfer, franchise, payroll, withholding, social security or other taxes, including any interest, penalties or additions attributable thereto.

Tax Return. Any return, report, information return, or other document (including any related or supporting information) required to be supplied to any authority with respect to Taxes.

Technical Committees. "Technical Committee" shall mean the stakeholder technical committees established pursuant to the ISO Participants Agreement.

Term. "Term" shall have the meaning ascribed thereto in Section 10.01 of this Agreement.

SCHEDULE 22

LARGE GENERATOR INTERCONNECTION PROCEDURES

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APPENDICES TO LGIP

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APPENDIX 6 LARGE GENERATOR INTERCONNECTION AGREEMENT

APPENDIX 7 INTERCONNECTION PROCEDURES FOR WIND GENERATION

SECTION I. DEFINITIONS

The definitions contained in this section are intended to apply in the context of the generator interconnection process provided for in this Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under this Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

Administered Transmission System shall mean the PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Adverse System Impact shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

Affected System shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affected Party shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the reliability council applicable to the New England Control Area.

Generating Facility shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities and shall not include a SATOA as defined in Section I of the Tariff.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Initial Synchronization Date shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner's Interconnection Facilities to obtain back feed power.

Interconnecting Transmission Owner shall mean a Transmission Owner that owns, leases or otherwise possesses an interest, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point

APPENDIX 6
LARGE GENERATOR INTERCONNECTION
AGREEMENT

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THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

("Agreement") is made and entered into this ____ day of _____ 20__, by and between _____, a _____ organized and existing under the laws of the State/Commonwealth of _____ ("Interconnection Customer" with a Large Generating Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and _____, a _____ organized and existing under the laws of the State/Commonwealth of _____ ("Interconnecting Transmission Owner"). Under this Agreement, the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement ("TOA") which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

WHEREAS, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and

WHEREAS, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Large Generating Facility to the Administered Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Standard Large Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

ARTICLE 1. DEFINITIONS

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the generator interconnection process provided for in Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

Administered Transmission System shall mean the PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Adverse System Impact shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

Affected Party shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affected System shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Generating Facility shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities and shall not include a SATOA as defined in Section I of the Tariff.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

5.1 Options. Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall specify the In-Service Date, Initial Synchronization Date, and Commercial Operation Date as specified in the Interconnection Request or as subsequently revised pursuant to Section 4.4 of the LGIP; and select either the Standard Option or Alternate Option set forth below, and such dates and selected option shall be set forth in Appendix B (Milestones). At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Interconnecting Transmission Owner, the Interconnection Customer shall notify Interconnecting Transmission Owner within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build. In accordance with Section 8 of the LGIP and unless otherwise mutually agreed, the Alternate Option is not an available option if the Interconnection Customer waived the Interconnection Facilities Study.

5.1.1 Standard Option. The Interconnecting Transmission Owner shall design, procure, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B (Milestones). The Interconnecting Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Interconnecting Transmission Owner reasonably expects that it will not be able to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, the Interconnecting Transmission Owner shall

to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives, or the procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.3). If the Parties are unable to reach agreement on such terms and conditions, then, pursuant to Article 5.1.1 (Standard Option), Interconnecting Transmission Owner shall assume responsibility for the design, procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build.

5.2 General Conditions Applicable to Option to Build. If Interconnection Customer assumes responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall commit in the LGIA to a schedule for the completion of, and provide the System Operator evidence of proceeding with: (a) engineering and design of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, (b) procurement of necessary equipment and ordering of long lead time material, and (c) construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(2) the Interconnection Customer shall engineer, procure equipment, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Interconnecting Transmission Owner;

(3) Interconnection Customer's engineering, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Interconnecting Transmission

Owner would be subject in the engineering, procurement or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(4) Interconnecting Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(5) prior to commencement of construction, Interconnection Customer shall provide to Interconnecting Transmission Owner any changes to the schedule for construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades reflected in Appendix B (Milestones), and shall promptly respond to requests for information from Interconnecting Transmission Owner;

(6) at any time during construction, Interconnecting Transmission Owner shall have the right to gain unrestricted access to the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(7) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Interconnecting Transmission Owner, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(8) the Interconnection Customer shall indemnify the Interconnecting Transmission Owner for claims arising from the Interconnection Customer's construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 (Indemnity);

- (9) the Interconnection Customer shall transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the Interconnecting Transmission Owner prior to the In-Service Date;
- (10) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner prior to the In-Service Date;
- (11) Interconnecting Transmission Owner shall approve and accept for operation and maintenance the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2;
- (12) Interconnection Customer shall deliver to Interconnecting Transmission Owner "as built" drawings, information, and any other documents that are reasonably required by Interconnecting Transmission Owner to assure that the Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and specifications required by Interconnecting Transmission Owner; and
- (13) Interconnection Customer shall pay Interconnecting Transmission Owner the agreed upon amount of [\$ PLACEHOLDER] for Interconnecting Transmission Owner to execute responsibilities enumerated to Interconnecting Transmission Owner under this Article 5.2. Interconnecting Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.

5.3 Liquidated Damages. The actual damages to the Interconnection Customer, in the event the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Interconnecting Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity

SCHEDULE 23

**SMALL GENERATOR
INTERCONNECTION PROCEDURES**

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Attachment 2 – Small Generator Interconnection Request

Attachment 3 – Certification Codes and Standards

Attachment 4 – Certification of Small Generator Equipment Packages

Attachment 5 – 10 kW Inverter Process

Attachment 6 – Interconnection Feasibility Study Agreement

Attachment 7 – Interconnection System Impact Study Agreement

Attachment 8 – Interconnection Facilities Study Agreement

EXHIBIT 1 - Small Generator Interconnection Agreement (SGIA)

Attachment 1

Glossary of Terms

10 kW Inverter Process – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

Administered Transmission System – The PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Affected Party– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affected System – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affiliate – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

At-Risk Expenditure – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

Cluster Entry Deadline shall mean the deadline specified in Section 1.5.3.3.1.

Clustering shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

Commercial Operation – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

Commercial Operation Date – For a unit, the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Standard Small Generator Interconnection Agreement.

Distribution System – The Interconnecting Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

Distribution Upgrades – The additions, modifications, and upgrades to the Interconnecting Transmission Owner’s Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Fast Track Process – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility that meets the eligibility requirements of section 2.1 and includes the section 2 screens, customer options meeting, and optional supplemental review.

Generating Facility – The Interconnection Customer’s device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities and shall not include a SATOA as defined in Section I of the Tariff.

**STANDARD SMALL GENERATOR
INTERCONNECTION AGREEMENT (SGIA)**

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12.11 Subcontractors

12.12 Reservation of Rights

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Attachment 2 – Description and Costs of the Small Generating Facility, Interconnection Facilities, and
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Attachment 3 – One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities,
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Attachment 6 – Interconnecting Transmission Owner's Description of its Upgrades and Best Estimate of
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Attachment 7 – Commercial Operation Date

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Attachment 1

Glossary of Terms

Administered Transmission System – The PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Affected Party– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affected System – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affiliate – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Standards – The requirements and guidelines of NERC, NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Systems.

At-Risk Expenditure – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (1) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and survey, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

Cluster Entry Deadline shall mean the deadline specified in Section 1.5.3.3.1.

Clustering shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

Commercial Operation – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

Commercial Operation Date – The date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Attachment 7 to the Standard Small Generator Interconnection Agreement.

Default – The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

Distribution System – The Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

Distribution Upgrades – The additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Generating Facility – The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities and shall not include a SATOA as defined in Section I of the Tariff.

SCHEDULE 25

ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION PROCEDURES

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SECTION I. DEFINITIONS.

The definitions contained in this section are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in this Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under this Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

Administered Transmission System shall mean the PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Adverse System Impact shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

Affected System shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affected Party shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the reliability council applicable to the New England Control Area.

generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

Elective Transmission Upgrade ("ETU") shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade shall not include a SATOA as defined in Section I of the Tariff. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

Elective Transmission Upgrade Interconnection Agreement ("ETU IA") shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

Elective Transmission Upgrade Interconnection Procedures ("ETU IP") shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

Emergency Condition shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission

APPENDICES TO ETU IP

- APPENDIX 1 INTERCONNECTION REQUEST FOR ELECTIVE TRANSMISSION UPGRADE
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APPENDIX 6
ELECTIVE TRANSMISSION UPGRADE
INTERCONNECTION AGREEMENT

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THIS ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT

("Agreement") is made and entered into this ____ day of _____ 20__, by and between _____, a _____ organized and existing under the laws of the State/Commonwealth of _____ ("Interconnection Customer" with an Elective Transmission Upgrade Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and _____, a _____ organized and existing under the laws of the State/Commonwealth of _____ ("Interconnecting Transmission Owner"). Under this Agreement the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement ("TOA") which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

WHEREAS, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Elective Transmission Upgrade identified in Appendix C to this Agreement; and

WHEREAS, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Elective Transmission Upgrade to the Administered Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Elective Transmission Upgrade Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

ARTICLE 1. DEFINITIONS

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

Administered Transmission System shall mean the PTF, the Non-PTF, and distribution facilities that are subject to the Tariff.

Adverse System Impact shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

Affected System shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

Affected Party shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the reliability council applicable to the New England Control Area.

Distribution System shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

Elective Transmission Upgrade ("ETU") shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade shall not include a SATOA as defined in Section I of the Tariff. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

Elective Transmission Upgrade Interconnection Agreement ("ETU IA") shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

Elective Transmission Upgrade Interconnection Procedures ("ETU IP") shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

TRANSMISSION OPERATING AGREEMENT

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TRANSMISSION OPERATING AGREEMENT

This Transmission Operating Agreement (this “TOA” or this “Agreement”), dated as of February 1, 2005, is made and entered into by and among Bangor Hydro-Electric Company; Town of Braintree Electric Light Department; Boston Edison Company, Cambridge Electric Light Company, Canal Electric Company, and Commonwealth Electric Company; Central Maine Power Company; Central Vermont Public Service Corporation; Connecticut Municipal Electric Energy Cooperative; The City of Holyoke Gas and Electric Department; Florida Power & Light Company; Green Mountain Power Corporation; Massachusetts Municipal Wholesale Electric Company; New England Power Company; New Hampshire Electric Cooperative, Inc.; Northeast Utilities Service Company as agent for: The Connecticut Light and Power Company, Western Massachusetts Electric Company, Holyoke Power and Electric Company; Holyoke Water Power Company; and Public Service Company of New Hampshire; Norwood Municipal Light Department; Town of Reading Municipal Light Department; Taunton Municipal Lighting Plant; The United Illuminating Company; Unitil Energy Systems, Inc. and Fitchburg Gas and Electric Light Company; Vermont Electric Cooperative, Inc; and Vermont Electric Power Company, Inc. (herein collectively referred to as the “Initial Participating Transmission Owners”), and the Initial Participating Transmission Owners along with the Vermont Public Power Supply Authority, Vermont Transco LLC and any other Additional Participating Transmission Owners (as defined in Section 11.05 of this Agreement), are collectively referred to herein as the “PTOs” and individually each is referred to as a “PTO”), and ISO New England Inc. (“ISO”), a Delaware corporation (all PTOs and the ISO are collectively referred to herein as the “Parties”).

WHEREAS, each of the PTOs owns and/or operates certain transmission facilities that are interconnected with the transmission facilities of certain other PTOs within the New England Transmission System or otherwise provides transmission service within the New England Transmission System;

WHEREAS, the ISO is a regional transmission organization (“RTO”) authorized by the Federal Energy Regulatory Commission (“FERC”) to exercise the functions required of RTOs pursuant to FERC’s Order No. 2000 (“Order 2000”) and FERC’s RTO regulations;

WHEREAS, in accordance with the requirements of Order 2000, the ISO will be the transmission provider under the ISO Open Access Transmission Tariff (the “ISO OATT”) of non-discriminatory, open access transmission services over the transmission facilities of the PTOs (“Transmission Service”);

WHEREAS, the ISO OATT will be designed to provide for the payment by transmission customers for Transmission Service at rates designed to recover the revenue requirements of the PTOs in supporting the provision of such transmission service by the ISO under the ISO OATT;

WHEREAS, the ISO will be responsible for system planning within the ISO region subject to certain rights and obligations of the PTOs, all as set forth in this Agreement;

ARTICLE II

TRANSMISSION FACILITIES

2.01 **Transmission Facilities**. As to any PTO, the transmission facilities over which the ISO shall exercise Operating Authority in accordance with the terms set forth herein shall be:

(a) those facilities of such PTO listed in Schedule 2.01(a) (hereinafter “Category A Facilities”), as such list of facilities may be added to or deleted from in accordance with Sections 2.01(d) and 2.02 below;

(b) those facilities of such PTO listed in Schedule 2.01(b) (hereinafter “Category B Facilities”), as such list of facilities may be added to or deleted from, in accordance with Sections 2.01(d) and 2.02 below; and

(c) those transmission facilities of such PTO within the New England Transmission System with a voltage level of less than 69 kV and all transformers that have no Category A Facilities or Category B Facilities connected to the lower voltage side of the transformer that are not listed on Schedule 2.01(a) and Schedule 2.01(b) (hereinafter “Local Area Facilities”), provided that any excluded facilities of such PTO listed on Schedule 4.01(d) shall not be Local Area Facilities.

(d) As to each PTO, the transmission facilities included on any of the lists of the Category A Facilities or the Category B Facilities contained in Schedule 2.01(a) and Schedule 2.01(b), respectively, as of the Operations Date may be redesignated on another of these two lists, deleted from such list, or redesignated as a Local Area Facility without the necessity of an amendment to this Agreement, but only in the following manner:

(i) at the direction of a Governmental Authority with jurisdiction over the Transmission Facilities in question, provided that the ISO and all PTOs shall be provided prior written notice of such changes;

(ii) as agreed between the ISO and the PTO or PTOs owning the transmission facilities; or

(iii) where the operational characteristics of a transmission facility have been materially modified after the Operations Date (including a change from a radial transmission facility to a looped transmission facility that contributes to the parallel carrying capability of the New England Transmission System) in accordance with Section 2.01(e); provided that any such changes shall also be subject to ISO review consistent with Section 2.06.

(e) All transmission facilities to be redesignated as Category A Facilities, Category B Facilities, or Local Area Facilities or deleted from the lists in Schedule 2.01(a) and Schedule 2.01(b) in accordance with Section 2.01(d)(iii), and all transmission facilities to be

added to the lists in Schedule 2.01(a) and Schedule 2.01(b) in accordance with Section 2.02 shall be classified in accordance with the following standards:

(i) Category A Facilities shall consist of: all transmission lines with a voltage level of 115 kV and above, except for those 115 kV transmission facilities specifically designated as Category B Facilities in accordance with Section 2.01(e)(ii); all transmission interties between Control Areas; all transformers that have Category A Facilities connected to the lower voltage side of the transformer; all transformers that require a Category A Facility to be taken out of service when the transformer is taken out of service; SATOAs connected to transmission facilities with a voltage level of 115 kV and above; and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers.

(ii) Category B Facilities shall consist of: all 115 kV radial transmission lines and all 69 kV transmission lines that are not interties between Control Areas; all transformers that have any Category B Facilities and no Category A Facilities connected to the lower voltage side of the transformer except to the extent such transformers are designated as Category A Facilities in accordance with Section 2.01(e)(i); and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such Category B Facilities.

(iii) Local Area Facilities shall consist of all transmission facilities with a voltage level of less than 69 kV and all transformers that have no Category A Facilities or Category B Facilities connected to the lower voltage side of the transformer.

(iv) To the extent there is any dispute between the ISO and a PTO or PTOs owning a transmission facility concerning classification of such transmission facility under these standards, such disagreement shall be subject to the dispute resolution provisions of this Agreement, provided that the ISO's classification of a transmission facility under the standards shall govern pending resolution of the dispute.

(f) Collectively, all Category A Facilities, Category B Facilities, and Local Area Facilities shall hereinafter be referred to as the "Transmission Facilities," provided that "Transmission Facilities" shall not include Excluded Assets as defined in Section 2.04 of this Agreement or Merchant Facilities. The ISO shall maintain on its OASIS a posting of the current versions of Schedule 2.01(a) and Schedule 2.01(b), in each instance, reflecting each such change promptly after such change is made.

Schedule 1.01

Schedule of Definitions

Acquired Transmission Facilities. Any transmission facility acquired within the New England Control Area by one or more PTOs after the Operations Date that meets the classification standards set forth in Section 2.01(e).

Additional Participating Transmission Owners. “Additional Participating Transmission Owners” shall have the meaning ascribed thereto in Section 11.05 of this Agreement.

Additional Term. “Additional Term” shall have the meaning ascribed thereto in Section 10.01(a) of this Agreement.

Affiliate. Any person or entity which controls, is controlled by, or is under common control by another person or entity. For purposes of this definition, "control" shall mean the possession, directly or indirectly and whether acting alone or in conjunction with others, of the authority to direct the management or policies of a person or entity. A voting interest of ten percent or more shall create a rebuttable presumption of control.

Agreement. This Transmission Operating Agreement, as it may be amended from time to time.

Ancillary Service. Those services that are necessary to support the transmission of electric capacity and energy from resources to loads while maintaining reliable operation of the transmission system in accordance with Good Utility Practice.

Approved Outages. “Approved Outages” shall have the meaning ascribed thereto in Section 3.08(a)(iv) of this Agreement.

ATC. Available Transfer Capability.

Backstop Transmission Solution. A solution proposed: (i) to address a reliability or market efficiency need identified by the ISO in a Needs Assessment reported by the ISO pursuant to Section 4.1(i) of Attachment K to the ISO OATT, (ii) by the PTO or PTOs with an obligation under Schedule 3.09(a) of the TOA to address the identified need; and (iii) in circumstances in which the competitive solution process specified in Section 4.3 of Attachment K to the ISO OATT will be utilized.

Back-up Control Center. The control center established by the ISO as a back-up to the ISO Control Center.

Back-up Control Center Lease. The lease for premises in Newington, Connecticut entered into by ISO New England Inc. and Rocky River Realty Company for an initial term ending July 31, 2005, and subject to the right of the tenant to four three-year extensions.

Public Policy Project. Any New Transmission Facility or Transmission Upgrade that is included in the ISO System Plan as a Public Policy Transmission Upgrade in accordance with Attachment K to the ISO OATT.

Publicly-Owned PTO. A “Publicly-Owned PTO” shall mean a PTO that is exempt, under Section 201(f) of the Federal Power Act, from the obligations and requirements of the Federal Power Act.

Qualified Transmission Project Sponsor. “Qualified Transmission Project Sponsor” shall have the meaning ascribed thereto in Section I.2.2 of the ISO Tariff.

Rating Procedures. “Rating Procedures” shall have the meaning ascribed thereto in Section 3.02(d) of this Agreement.

Regulation and Frequency Response Service. An Ancillary Service as defined in the ISO OATT.

Reliability Authority. “Reliability Authority” shall have the meaning established by NERC, as such definition may change from time to time, provided such definition of Reliability Authority shall not be inconsistent with the specific rights and responsibilities of the ISO and the PTOs under this Agreement.

Restoration Plans. The System Restoration Plan and all PTO Local Restoration Plans.

RFAP. “RFAP” shall have the meaning ascribed thereto in Section 6 of Schedule 3.09(a) to this Agreement.

RMR. Reliability must run resources.

RTO. An independent entity that complies with Order No. 2000 and FERC’s corresponding regulations (or an entity that complies with all such requirements except for the scope and regional configuration requirements), as determined by the FERC.

Storage as Transmission-Only Asset (“SATO”). “Storage as Transmission-Only Asset” or “SATO” shall have the meaning ascribed thereto in Section I.2.2 of the ISO Tariff.

Schedule 22 Large Generator Interconnection Agreement. The interconnection agreement included in Schedule 22 of the ISO OATT.

Schedule 23 Small Generator Interconnection Agreement. The interconnection agreement included in Schedule 23 of the ISO OATT.

Scheduled Outages. “Scheduled Outages” shall have the meaning ascribed thereto in Sections 3.08(a)(ii) and 3.08(a)(iii) of this Agreement.

Small Generating Facility. “Small Generating Facility” shall have the meaning ascribed thereto in the ISO OATT.

Transmission Upgrade. Any upgrade to an existing Transmission Facility owned by any PTO that goes into commercial operation after the Operations Date

TRM. Transmission Reliability Margin.

TTC. Total Transfer Capability.

VAR. Volt-Amps Reactive.

Workers Compensation. Any financial award or settlement provided to employees or their dependents under state or federal law due to the occurrence of an employment-related accident, disease or injury.

Workers Compensation Insurance. The insurance, procured by the ISO in accordance with Section 9.05(a), covering losses that the ISO is subject to as an employer under state or federal worker's compensation laws.

Schedule 2.01(a)

Category A Facilities shall consist of all transmission lines listed as "Category A" in this Schedule and all transmission interties between Control Areas, all transformers that have listed Category A lines connected to the lower voltage side of the transformer; all transformers that require a listed line to be taken out of service when the transformer is taken out of service; SATOAs connected to transmission facilities with a voltage level of 115 kV and above; and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers.

The list of Category A Facilities can be found at:

<http://www.oatiaoasis.com/ISNE/index.html>

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...

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...

III.1.7.21 SATOA Participation in Markets: A Node will be established for each SATOA. A Market Participant's market activity, transactions, and actions taken at a SATOA's Node and a SATOA's participation in the New England Markets shall be limited to those necessary to consume or inject energy from or to PTF for any period, magnitude, and duration identified as necessary to: (1) address the applicable system needs or provide the transmission function for which the SATOA was selected as the preferred solution; or (2) as specified in the ISO New England Operating Documents, avoid or mitigate Load Shedding after all available Dispatchable Resources that can effectively provide relief to avoid or mitigate the Load Shedding have been dispatched.

III.3 Accounting And Billing

III.3.1 Introduction.

This Section III.3 sets forth the accounting and billing principles and procedures for the purchase and sale of services in the New England Markets and for the operation of the New England Control Area.

If a dollar-per-MW-hour value is applied in a calculation where the interval of the value produced in that calculation is less than an hour, then for purposes of that calculation the dollar-per-MW-hour value is divided by the number of intervals in the hour.

III.3.2 Market Participants.

III.3.2.1 ISO Energy Market.

For purposes of establishing the following positions, unless otherwise expressly stated, the settlement interval for the Real-Time Energy Market is five minutes and the settlement interval for the Day-Ahead Energy Market is hourly. The Real-Time Energy Market settlement is determined using the Metered Quantity For Settlement calculated in accordance with Section III.3.2.1.1.

(a) **Day-Ahead Energy Market Obligations** – For each Market Participant for each settlement interval, the ISO will determine a Day-Ahead Energy Market position representing that Market Participant's net purchases from or sales to the Day-Ahead Energy Market as follows:

(i) **Day-Ahead Load Obligation** – Each Market Participant shall have for each settlement interval a Day-Ahead Load Obligation for energy at each Location equal to the MWhs of its Demand Bids, Decrement Bids and External Transaction sales accepted by the ISO in the Day-Ahead Energy Market at that Location and such Day-Ahead Load Obligation shall have a negative value.

(ii) **Day-Ahead Generation Obligation** – Each Market Participant shall have for each settlement interval a Day-Ahead Generation Obligation for energy at each Location equal to the MWhs of its Supply Offers, Increment Offers and External Transaction purchases accepted by the ISO in the Day-Ahead Energy Market at that Location and such Day-Ahead Generation Obligation shall have a positive value.

(iii) **Day-Ahead Demand Reduction Obligation** – Each Market Participant shall have for each settlement interval a Day-Ahead Demand Reduction Obligation at each Location equal to the MWhs of its Demand Reduction Offers accepted by the ISO in the Day-Ahead Energy Market at that Location, increased by average avoided peak distribution losses. Day-Ahead Demand Reduction Obligations shall have a positive value.

(iv) **Day-Ahead Adjusted Load Obligation** – Each Market Participant shall have for each settlement interval a Day-Ahead Adjusted Load Obligation at each Location equal to the Day-Ahead Load Obligation adjusted by any applicable Day-Ahead internal bilateral transactions at that Location.

(v) **Day-Ahead Locational Adjusted Net Interchange** – Each Market Participant shall have for each settlement interval a Day-Ahead Locational Adjusted Net Interchange at each Location equal to the Day-Ahead Adjusted Load Obligation plus the Day-Ahead Generation Obligation plus the Day-Ahead Demand Reduction Obligation at that Location.

(b) **Real-Time Energy Market Obligations Excluding Demand Response Resource Contributions** – For each Market Participant for each settlement interval, the ISO will determine a Real-Time Energy Market position. For purposes of these calculations, if the settlement interval is less than one hour, any internal bilateral transaction shall be equally apportioned over the settlement intervals within the hour. To accomplish this, the ISO will perform calculations to determine the following:

(i) **Real-Time Load Obligation** – Each Market Participant shall have for each settlement interval a Real-Time Load Obligation for energy at each Location equal to the MWhs of load, where such MWhs of load shall include External Transaction sales and shall have a negative value, at that Location, adjusted for unmetered load and any applicable internal bilateral transactions which transfer Real-Time load obligations.

(ii) **Real-Time Generation Obligation** – Each Market Participant shall have for each settlement interval a Real-Time Generation Obligation for energy at each Location. The Real-Time Generation Obligation shall equal the MWhs of energy, where such MWhs of energy shall have positive value, provided by Generator Assets and External Transaction purchases at that Location.

(iii) **Real-Time Adjusted Load Obligation** – Each Market Participant shall have for each settlement interval a Real-Time Adjusted Load Obligation at each Location equal to the Real-Time Load Obligation adjusted by any applicable energy related internal Real-Time bilateral transactions at that Location.

(iv) **Real-Time Locational Adjusted Net Interchange** – Each Market Participant shall have for each settlement interval a Real-Time Locational Adjusted Net Interchange at each Location equal to the Real-Time Adjusted Load Obligation plus the Real-Time Generation Obligation plus the Real-Time SATOA Obligation at that Location.

(v) **Marginal Loss Revenue Load Obligation** – Each Market Participant shall have for each settlement interval a Marginal Loss Revenue Load Obligation at each Location equal to the Real-Time Load Obligation adjusted by any energy related internal Real-Time bilateral transactions at that Location that the parties to those bilateral transactions have elected to include in their Marginal Loss Revenue Load Obligation for the purpose of allocating Day-Ahead Loss Revenue and Real-Time Loss Revenue. Contributions from Coordinated External Transactions shall be excluded from the Real-Time Load Obligation for purposes of determining Marginal Loss Revenue Load Obligation.

(vi) **Real-Time SATOA Obligation** – Each PTO shall have for each settlement interval a Real-Time SATOA Obligation for energy at each Location equal to the sum of: (1) the MWhs of energy, where such MWhs of energy shall have positive value, provided by SATOAs at that Location; and (2) the MWhs of load, where such MWhs of load shall have a negative value, consumed by SATOAs at that Location.

(c) **Real-Time Energy Market Obligations For Demand Response Resources**

Real-Time Demand Reduction Obligation – Each Market Participant shall have for each settlement interval a Real-Time Demand Reduction Obligation at each Location equal to the MWhs of demand reduction provided by Demand Response Resources at that Location in response to non-zero Dispatch Instructions. The MWhs of demand reduction produced by a Demand Response Resource are equal to the sum of the demand reductions produced by its constituent Demand Response Assets calculated pursuant to Section III.8.4, where the demand reductions, other than MWhs associated with Net Supply, are increased by average avoided peak distribution losses.

- (a) For external interfaces, the Metered Quantity For Settlement is the scheduled value adjusted for any curtailment, except that for Inadvertent Interchange, the Metered Quantity For Settlement is the difference between the actual and scheduled values, where the actual value is
 - (i) calculated as the five-minute telemetry value plus the difference between the hourly revenue quality meter value and the hourly average telemetry value, or
 - (ii) the five-minute revenue quality meter value, if five-minute revenue quality meter data are available.
- (b) For Resources submitting five-minute revenue quality meter data (other than Demand Response Resources), the Metered Quantity For Settlement is the five-minute revenue quality meter value.
- (c) For Resources with telemetry submitting hourly revenue quality meter data, the Metered Quantity For Settlement is calculated as follows:
 - (i) In the event that in an hour, the difference between the average of the five-minute telemetry values for the hour and the revenue quality meter value for the hour is greater than 20 percent of the hourly revenue quality meter value and greater than 10 MW then the Metered Quantity For Settlement is a flat profile of the revenue quality meter value equal to the hourly revenue quality meter value equally apportioned over the five-minute intervals in the hour. (For a Continuous Storage Facility, the difference between the average of the five-minute telemetry values and the revenue quality meter value will be determined using the net of the values submitted by its component Generator Asset and DARD.)
 - (ii) Otherwise, the Metered Quantity For Settlement is the telemetry profile of the revenue quality meter value equal to the five-minute telemetry value adjusted by a scale factor.
- (d) For a Demand Response Resource, the Metered Quantity For Settlement equals the sum of the demand reductions of each of its constituent Demand Response Assets produced in response to a non-zero Dispatch Instruction, with the demand reduction for each such asset calculated pursuant to Section III.8.4.
- (e) For Resources without telemetry submitting hourly revenue quality meter data, the Metered Quantity For Settlement is the hourly revenue quality meter value equally apportioned over the five-minute intervals in the hour.

III.3.2.2 Metering and Communication.

- (a) **Revenue Quality Metering and Telemetry for Assets other than Demand Response Assets**

The megawatt-hour data of each Generator Asset, Tie-Line Asset, ~~and Load Asset~~, and SATOA must be metered and automatically recorded at no greater than an hourly interval using metering located at the asset's point of interconnection, in accordance with the ISO operating procedures on metering and telemetering. This metered value is used for purposes of establishing the hourly revenue quality metering of the asset.

The instantaneous megawatt data of each Generator Asset (except Settlement Only Resources), ~~and each Asset Related Demand~~, and each SATOA must be automatically recorded and telemetered in accordance with the requirements in the ISO operating procedures on metering and telemetering.

(b) Meter Maintenance and Testing for all Assets

Each Market Participant must adequately maintain metering, recording and telemetering equipment and must periodically test all such equipment in accordance with the ISO operating procedures on metering and telemetering. Equipment failures must be addressed in a timely manner in accordance with the requirements in the ISO operating procedures on maintaining communications and metering equipment.

(c) Additional Metering and Telemetry Requirements for Demand Response Assets

- (i) Market Participants must report to the ISO in real time a set of telemetry data for each Demand Response Asset associated with a Demand Response Resource. The telemetry values shall measure the real-time demand of Demand Response Assets as measured at their Retail Delivery Points, and shall be reported to the ISO every five minutes. For a Demand Response Resource to provide TMSR or TMNSR, Market Participants must in addition report telemetry values at least every one minute. Telemetry values reported by Market Participants to the ISO shall be in MW units and shall be an instantaneous power measurement or an average power value derived from an energy measurement for the time interval from which the energy measurement was taken.
- (ii) If one or more generators whose output can be controlled is located behind the Retail Delivery Point of a Demand Response Asset, other than emergency generators that cannot operate electrically synchronized to the New England Transmission System, then the Market Participant must also report to the ISO, before the end of the Correction Limit for the Data Reconciliation Process, a single set of meter data, at an interval of five minutes, representing the combined output of all generators whose output can be controlled.
- (iii) If the Market Participant or the ISO finds that the metering or telemetry devices do not meet the accuracy requirements specified in the ISO New England Manuals and



memo

To: NEPOOL Transmission Committee

From: Brent Oberlin, Director, Transmission Planning

Date: August 10, 2022

Subject: Storage as a Transmission-Only Asset

The ISO is requesting a vote on the Storage as a Transmission-Only Asset proposal. The proposal seeks to satisfy stakeholder requests to allow storage to participate as a transmission asset. This proposal will enable storage to be considered as a solution in both the Solutions Study process and the competitive solution process to address system concerns identified in Needs Assessments and Public Policy Transmission Studies.

The Transmission Committee will take action on the following Tariff provisions:

Transmission, Markets, and Services Tariff Section I.2.2, definition of SATOA; Open Access Transmission Tariff (OATT) Section II.51; OATT Section II, Attachment O Sections 2.01(e)(i) and Schedule 1.01; Schedule 22, Section 1 and Appendix 6, Article 1; Schedule 23, Section 1 and Exhibit 1, Attachment 1; Schedule 25, Section 1 and Appendix 6, Article 1, and the Transmission Operating Agreement.

The specific proposal for the Transmission committee's consideration at its August 16-17th meeting has been presented in the meeting dates outlined below.

- April 14, 2022 agenda item #5: https://www.iso-ne.com/static-assets/documents/2022/04/a5_storage_as_transmission_only_asset.pdf
- May 31, 2022, agenda item #7: [a7_storage_as_a_transmission_only_asset.pdf \(iso-ne.com\)](https://www.iso-ne.com/static-assets/documents/2022/05/a7_storage_as_a_transmission_only_asset.pdf)
- June 28, 2022, agenda item #5: https://www.iso-ne.com/static-assets/documents/2022/06/a5_satoa_tariff_revisions_and_presentation.zip
- July 27, 2022, agenda item #5: https://www.iso-ne.com/static-assets/documents/2022/06/a5_satoa_tariff_revisions_and_presentation.zip
- August 16-17th, agenda item #14: <https://www.iso-ne.com/event-details?eventId=149653>



memo

To: NEPOOL Markets Committee ("MC")

From: Greg Stoltzfus, Manager – Market Operations Support Services
Brent Oberlin, Director – Transmission Planning

Date: September 7, 2022

Subject: Settlement Treatment for Storage as a Transmission Only Asset ("SATO")
(WMPP ID: 166)

The ISO is requesting a vote on proposed revisions to Section I.2.2 of the Tariff, Sections III.3.2.1 and III.3.2.2 of Market Rule 1, and the addition of Section III.1.7.21 to Market Rule 1 to incorporate conforming energy settlement rules associated with a SATOA.

The proposal, as discussed at the NEPOOL Transmission Committee, will enable storage to be considered as a solution in both the Solutions Study process and the competitive solution process to address system concerns identified in Needs Assessments and Public Policy Transmission Studies. Related conforming changes are being considered by the MC to address SATOA's limited participation in markets and metering requirements.

Incorporating the consideration of energy storage devices as transmission facilities into the regional transmission planning process addresses requests from stakeholders, including NESCOE.

The proposal for the committee's consideration at its September 13-14, 2022 meeting has been presented previously to the Markets Committee at the meeting dates outlined below.

- June 7-8, 2022, [agenda item #8](#)
- August 9-10, 2022, [agenda item #8](#)

Storage as a Transmission-Only Asset



Final Follow-up and Draft Tariff Red-Lines

Revision 1 – slide 8 updated

Brent Oberlin

(413) 540-4512 | BOBERLIN@ISO-NE.COM



Project Title: Storage as a Transmission-Only Asset

WMPP ID:
166

Proposed Effective Date: July 2024

- Currently, the New England planning process and associated documents, such as the Tariff and the Transmission Operating Agreement, do not allow storage devices (storage) to be considered as a transmission asset when addressing identified needs and therefore storage is not available for treatment as a transmission asset eligible for Pool-Supported Pool Transmission Facility (PTF)
- Stakeholders have expressed their desire to have storage considered as a transmission asset
 - During the 2019 Competitive Transmission Solicitation Enhancements effort
 - As part of the 2021/2022 Boston 2028 RFP Lessons Learned process
 - At various ISO and NEPOOL meetings
 - FERC noted the ISO's commitment to consider "allowing storage to be considered transmission when addressing reliability concerns" in Docket No. ER22-733-000

Introduction: Storage as a Transmission-Only Asset

- The ISO is developing a process to allow for storage to be considered as a transmission asset. This would allow storage to be considered as a solution in both the Solutions Study process and the competitive solution process to address system concerns identified in Needs Assessments and Public Policy Transmission Studies
- Today's Transmission Committee (TC) discussion is intended to further discuss storage as transmission-only asset (SATO), provide responses to previously discussed open items raised at the TC, and to discuss updated Tariff-redlines
- FERC filing is targeted for the end of the year to support future Solutions Studies and Requests for Proposal (RFP)



Background

- What is a SATOA?
 - A SATOA is an energy storage device connected to the PTF at 115 kV or higher which can inject stored power to address transmission system concerns
 - The storage medium will not be restricted to one particular technology. Batteries, air, water, large concrete blocks on cranes, etc. are all acceptable
- The ISO has identified some hurdles in undertaking this as a concept. To avoid issues identified, these two concepts will guide its proposal:
 - Introduction of a SATOA cannot compromise reliability by introducing unmanageable operating burdens into the control room
 - A SATOA cannot have a significant impact on the markets
- The proposed design takes these concepts into account



FOLLOW-UP ON PRIOR TC DISCUSSIONS



Follow-up from the July TC Meeting

- At the July TC meeting, questions were asked regarding the ability to co-locate resources with a SATOA
 - A resource can be installed at the same substation as a SATOA, including storage, and the additional resource is not subject to, nor considered in, the 300 MW/30 MW SATOA limitations
 - A resource cannot interconnect in such a manner that it uses any of the same facilities as the SATOA, such as inverters or step-up transformers
 - This issue had been previously considered by the ISO, and was prohibited in the definition: “(3) is capable of receiving energy only from the Pool Transmission Facilities and storing the energy for later injection to the Pool Transmission Facilities”
 - Co-locating facilities in this manner would cause concerns such as inverter sizing, equipment failure/longevity, maintenance, etc.



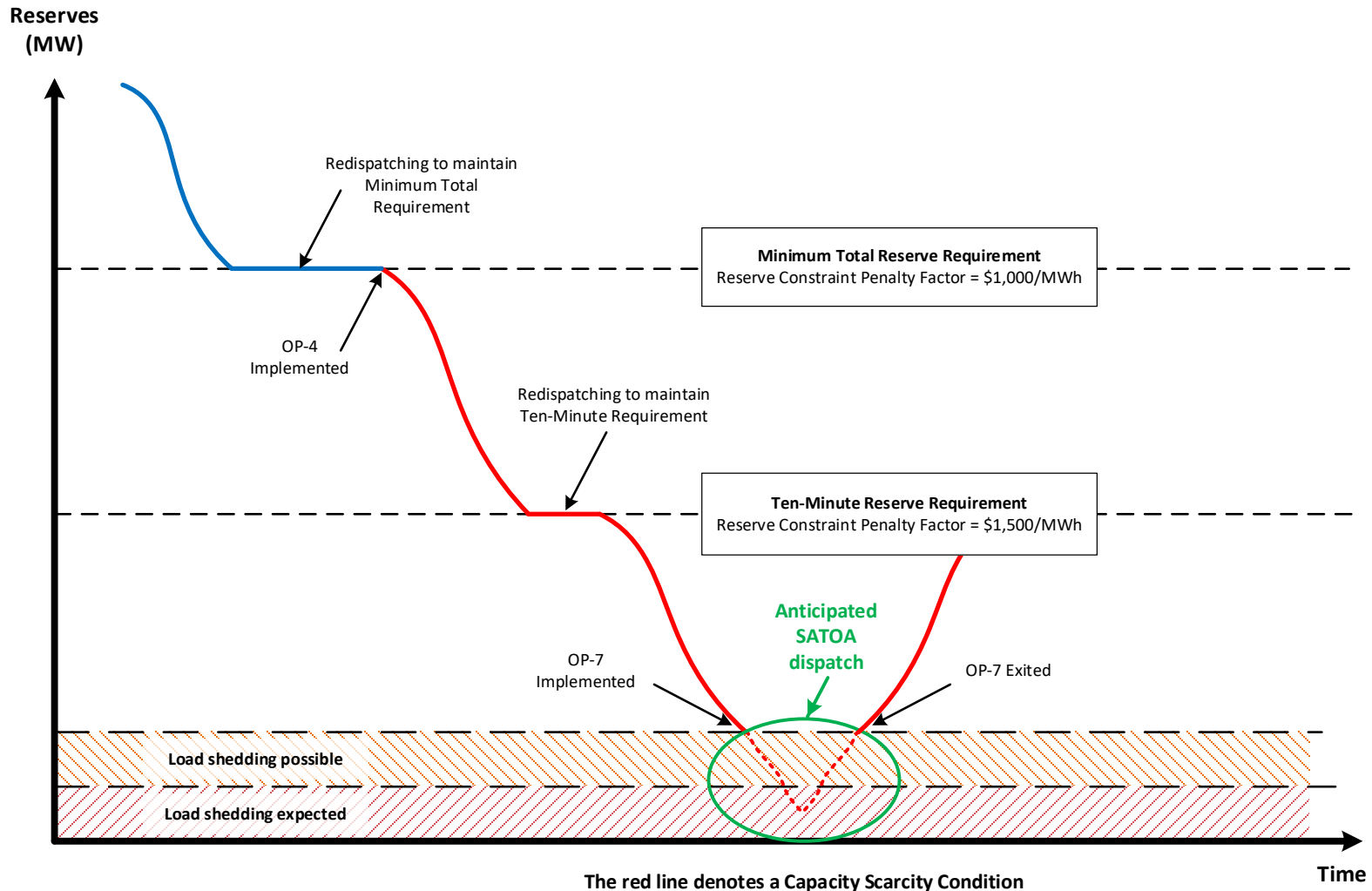
Follow-up from the July TC Meeting, cont.

- At previous TC meetings, a number of questions were asked regarding the use of a SATOA by Operations to prevent or reduce the amount of load shedding during a capacity deficiency
- The example on the next slide provides further clarity on the ISO's previous responses



Example: Reserve Deficiency (Capacity Scarcity Condition) and SATOA Dispatch

ISO-NE PUBLIC RESERVE COMMITTEE
OCTOBER 2023 MEETING AGENDA ITEM #7.a
Attachment C1



CHANGES TO DRAFT TARIFF LANGUAGE SINCE THE JULY TC MEETING



Section II.51.2(d)

- Stakeholders noted an inconsistency between language in the presentation discussing the use of a SATOA in FCM and PPA related analysis and the operational description provided in Section II.51.2(d)
- The ISO has revised Section II.51.2(d) to be consistent with the description provided regarding the use of a SATOA in FCM and PPA related analysis

~~(d)→address the applicable system needs or concerns for which the SATOA was selected as the preferred solution identified to address through a Needs Assessment, a Solutions Study, a Public Policy Transmission Study, the competitive solutions process in Attachment K of the OATT, or a combination thereof;¶~~



Conclusion

- The ISO received stakeholder requests to consider energy storage devices as transmission facilities and seeks to meet that request with this proposal
- To ensure minimal impact on the ability to operate the system and the markets, limitations on the installation and use of SATOAs are necessary
- The ISO made limited changes (Section II.51.2(d)) to the draft Tariff language between the July TC meeting and today
- The ISO is requesting a vote on the proposed Tariff revisions
- The ISO is targeting a Q4 2022 FERC filing



Stakeholder Schedule for Storage as a Transmission-Only Asset

NEPOOL PARTICIPANTS COMMITTEE
OCT 6, 2022 MEETING, AGENDA ITEM #7.a
Attachment C1

Proposed Effective Date – July 2024

| Stakeholder Committee and Date | Scheduled Project Milestone |
|---|---|
| April 14, 2022 TC | Discussion of concepts |
| May 31, 2022 TC | Continued discussion of concepts |
| June 7-8, 2022 MC | Introduction of settlement conforming changes |
| June 28, 2022 TC | Review of proposed Tariff redlines |
| July 27, 2022 TC | Respond to questions, review incremental changes to Tariff redlines and discuss any proposed stakeholder amendments |
| August 9-10, 2022 MC | Discussion on Tariff changes to enable settlement of SATOAs, introduction of redlines, follow up on stakeholder questions |
| August 16-17, 2022 TC | Vote on proposal and any stakeholder amendments |
| August 23, 2022 B & F | Discussion of the proposed language changes related to the indirect link to Schedule IV.A |
| September 13-14, 2022 MC | Vote on the proposed Tariff revisions related to settlement provisions and any proposed amendments |
| Participants Committee October 6, 2022 | Vote on the proposed Tariff revisions and any proposed amendments |

Questions

Brent Oberlin

(413) 540-4512 | BOBERLIN@ISO-NE.COM



APPENDIX 1

Summary of Tariff-Related Revisions



Summary of Tariff-Related Revisions

- This effort requires revisions to a number of Tariff sections and related documents
 - Section I – Definitions added:
 - Real Time SATOA Obligation
 - SATOA



Summary of Tariff-Related Revisions

- Section II, Open Access Transmission Tariff, new Section II.51 added
 - Identifies SATOA as a solution to a Needs Assessment or a Public Policy Transmission Study
 - Section II.51.1 – provides additional evaluation factors and limits the use of a SATOA in planning
 - Section II.51.2 – discusses the use of a SATOA in operations
 - Section II.51.3 – limits the charges that are applicable to a SATOA
 - OATT Section II, Attachment F
 - Appendix E, Section B - Allows a SATOA to be considered as a PTF facility
 - OATT, Section II, Attachment O Non-Incumbent Transmission Developer Operating Agreement (NTDOA)
 - Section 2.01(e)(i) - Adds a SATOA as a Category A facility
 - Schedule 1.01 - Definition of SATOA added since it is now used in the NTDOA
 - Schedules 22, Section 1 and Appendix 6, Article 1 - prevents a SATOA from interconnecting via the generator interconnection process
 - Schedule 23, Section 1 and Exhibit 1, Attachment 1 - prevents a SATOA from interconnecting via the generator interconnection process
 - Schedule 25, Section 1 and Appendix 6, Article 1 - prevents a SATOA from interconnecting via the elective transmission upgrade process

Summary of Tariff-Related Revisions, cont.

- Section III, Market Rule (Tariff redlines to be discussed at the Markets Committee)
 - Section III.1.7.21 – new section added describes a SATOA's participation in the markets
 - Section III.3.2.1(b)(iv) – SATOA added to ensure that real time supply and demand are addressed
 - Section III.3.2.1(b)(v) – new section added to ensure that each PTO accounts for charging and discharging of the SATOA
 - Section III.3.2.2 – added SATOA to metering requirements
- Transmission Operating Agreement (TOA)
 - Section 2.01(e)(i) - Adds a SATOA as a Category A facility
 - Schedule 1.01 - Definition of SATOA added since it is now used in the TOA
 - Schedule 2.01(a) - SATOAs were added to the description of Category A facilities



APPENDIX 2

Proposed Tariff Red-lines that are Unchanged Since the July 27, 2022 TC Meeting



Proposed Tariff-Related Changes, Section I

| Tariff Section | Tariff Change | Reason for Change |
|----------------|--|---|
| Section I.2.2 | <p><u>Storage as Transmission-Only Asset (SATO)</u> is electric storage equipment that: (1) is connected to or to be connected to Pool Transmission Facilities in the New England Transmission System at a voltage level of 115 kV or higher; (2) the ISO approved to be included in the Regional System Plan and RSP Project List as a regulated transmission solution and Pool Transmission Facility pursuant to the regional system planning processes in Attachment K of the OATT; and (3) is capable of receiving energy only from the Pool Transmission Facilities and storing the energy for later injection to the Pool Transmission Facilities.</p> | Establishes the term for use in other Tariff sections |



Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|-------------------------|---|--|
| New section II.51 added | <p><u>II.51 – Treatment of SATOA¶</u></p> <p><u>A SATOA may only be evaluated and selected as a regulated transmission solution to address the needs of the system identified in a Needs Assessment or Public Policy Transmission Study in accordance with the regional system planning processes and requirements in Attachment K of the OATT, this Section II.51, and any other applicable requirements in the Tariff. A SATOA selected as the preferred solution to address an identified system need shall be classified as a Regional Benefit Upgrade or Public Policy Transmission Upgrade and meet the definition, criteria, and other requirements applicable to such upgrades.¶</u></p> | Identifies SATOA as a solution to a Needs Assessment or a Public Policy Transmission Study |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|---------------------------|--|---|
| New section II.51.1 added | <p><u>II.51.1 Evaluation and Selection of a SATOA: In addition to the criteria, factors, and requirements in Attachment K of the OATT for evaluating transmission solutions and identifying a preferred solution, the ISO shall consider the following when evaluating whether a SATOA is the appropriate preferred solution to address needs of the system identified in the regional system planning process:</u></p> <p><u>(a) the ability of the proposed SATOA to address the applicable system need in all hours that the need is determined to exist;</u></p> <p><u>(b) the ability of the proposed SATOA to provide or absorb reactive power regardless of whether the SATOA is injecting or consuming real power;</u></p> <p><u>(c) the aggregate amount of SATOAs in New England, which shall be limited to 300 MW of charging capability and 300 MWs of discharging capability;</u></p> <p><u>(d) the total amount of SATOAs at a substation, which shall be limited to 30 MW of charging capability and 30 MW of discharging capability;</u></p> <p><u>(e) a SATOA shall not be evaluated or selected as the preferred solution to address violations of IROL(s) or system needs related to an IROL;</u></p> <p><u>(f) multiple SATOAs shall not be selected to address a single system need or multiple needs in the same area due to contingencies involving the same or similarly situated elements;</u></p> <p><u>(g) a SATOA shall only be evaluated or identified as the preferred solution to resolve a system need that is a second contingency (N-1-1); a proposed SATOA shall not be evaluated or identified as the preferred solution to resolve an N-0 (all-lines-in) or N-1 (first contingency) system need; and</u></p> <p><u>(h) any additional considerations unique to SATOAs that may support comparative evaluation to other solutions to the system need.</u></p> | Provides additional evaluation factors and limits the use of a SATOA in planning. |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|----------------------------------|--|--|
| <p>New section II.51.2 added</p> | <p>II.51.2-Operation of SATOAs: A SATOA shall operate, up to the capabilities of the device as proposed and selected during the process to evaluate and select transmission solutions, as necessary to, and only to, ¶</p> <p>¶</p> <p>(a) dynamically provide or absorb available reactive power while the SATOA is not injecting and not consuming real power to or from PTF; ¶</p> <p>¶</p> <p>(b) dynamically provide or absorb reactive power while the SATOA is injecting or consuming real power to or from PTF subject to the requirements in Section II.51.2 (c)-(f); ¶</p> <p>¶</p> <p>(c) maintain the required state-of-charge or maintenance of the SATOA; ¶</p> <p>¶</p> <p>(d) address the applicable system needs or concerns for which the SATOA was selected as the preferred solution identified to address through a Needs Assessment, a Solutions Study, a Public Policy Transmission Study, the competitive solutions process in Attachment K of the OATT, or a combination thereof; ¶</p> <p>¶</p> <p>(e) support the New England Transmission System during system restoration; or ¶</p> <p>¶</p> <p>(f) as specified in the ISO New England Operating Documents, avoid or mitigate Load Shedding after all available Dispatchable Resources that can effectively provide relief to avoid or mitigate the Load Shedding have been dispatched. ¶</p> <p>¶</p> <p>The ISO New England Operating Documents shall specify the operating practices, limits, and audit requirements applicable to the SATOAs. ¶</p> | <p>Discusses the use of a SATOA in operations. (Language in yellow discussed on slide 10.)</p> |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|---------------------------|---|---|
| New section II.51.3 added | II.51.3 Transmission Service Associated with SATOA Operation: Transmission service charges, including charges for Ancillary Services, and charges assessed or revenues allocated under Schedules 1, 2, 3, and 5 of Section IV.A of the Tariff are not applicable to the operation of a SATOA.¶ | Limits the charges that are applicable to a SATOA |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|---|--|---|
| Attachment F – Appendix E, Rules for Determining Investment to be Included in PTF, Section B, Terminal Investment | <p>16. → Transformer-related costs, such as installation and other related costs that would not have been incurred but for the transformer, shall be treated in the same manner as the costs of the transformer. ¶</p> <p><u>17. → SATOAs and associated facilities. ¶</u></p> | Allows a SATOA to be considered as a PTF facility |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|---|--|---|
| Attachment O, Non-Incumbent Transmission Developer Operating Agreement, Section 2.10(e)(i) | (i) → NTD Category A Facilities shall consist of: all transmission lines with a voltage level of 115 kV and above, except for those 115 kV transmission facilities specifically designated as NTD Category B Facilities in accordance with Section 2.01(e)(ii); all transmission interties between Control Areas; all transformers that have NTD Category A Facilities connected to the lower voltage side of the transformer; all transformers that require an NTD Category A Facility to be taken out of service when the transformer is taken out of service; <u>SATOA's connected to transmission facilities with a voltage level of 115 kV and above;</u> and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers.¶ | Adds a SATOA as a Category A facility |
| Attachment O, Non-Incumbent Transmission Developer Operating Agreement, Section Schedule 1.01 | <u>Storage as Transmission-Only Asset ("SATOA"). "Storage as Transmission-Only Asset" or "SATOA" shall have the meaning ascribed thereto in Section I.2.2 of the ISO Tariff.¶</u> | Definition of SATOA added since it is now used in the NTDOA |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|---|---|---|
| Schedule 22 (Large Generator Interconnection Procedures): Section 1 (Definitions); and Appendix 6 (Large Generator Interconnection Agreement), Article 1 (Definitions) | Generating Facility shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities <u>and shall not include a SATOA as defined in Section I of the Tariff.</u> | Prevents a SATOA from interconnecting via the generator interconnection process |
| Schedule 23 (Small Generator Interconnection Procedures): Attachment 1 (Glossary of Terms); and Exhibit 1 (Small Generator Interconnection Agreement), Attachment 1 (Glossary of Terms) | Generating Facility — The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities <u>and shall not include a SATOA as defined in Section I of the Tariff.</u> | Prevents a SATOA from interconnecting via the generator interconnection process |

Proposed Tariff-Related Changes, Section II

| Tariff Section | Tariff Change | Reason for Change |
|--|--|---|
| Schedule 25 (Elective Transmission Upgrade Interconnection Procedures): Section 1 (Definitions); and Appendix 6 (Elective Transmission Upgrade Interconnection Agreement), Article 1 (Definitions) | <p>Elective Transmission Upgrade (“ETU”) shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. <u>An Elective Transmission Upgrade shall not include a SATOA as defined in Section I of the Tariff.</u> An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.</p> | Prevents a SATOA from interconnecting via the elective transmission upgrade process |

Proposed Tariff-Related Changes, TOA

| Tariff Section | Tariff Change | Reason for Change |
|--------------------|---|---|
| Section 2.01(e)(i) | <p>◀ (i) → Category A Facilities shall consist of: all transmission lines with a voltage level of 115 kV and above, except for those 115 kV transmission facilities specifically designated as Category B Facilities in accordance with Section 2.01(e)(ii); all transmission interties between Control Areas; all transformers that have Category A Facilities connected to the lower voltage side of the transformer; all transformers that require a Category A Facility to be taken out of service when the transformer is taken out of service; <u>SATOA's connected to transmission facilities with a voltage level of 115 kV and above</u>; and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers. ¶</p> | Adds a SATOA as a Category A facility |
| Schedule 1.01 | <p><u>Storage as Transmission-Only Asset ("SATOA"). "Storage as Transmission-Only Asset" or "SATOA" shall have the meaning ascribed thereto in Section 1.2.2 of the ISO Tariff.</u> ¶</p> | Definition of SATOA added since it is now used in the TOA |

Proposed Tariff-Related Changes, TOA

| Tariff Section | Tariff Change | Reason for Change |
|------------------|--|--|
| Schedule 2.01(a) | <p>Category A Facilities shall consist of all transmission lines listed as "Category A" in this Schedule and all transmission interties between Control Areas, all transformers that have listed Category A lines connected to the lower voltage side of the transformer; all transformers that require a listed line to be taken out of service when the transformer is taken out of service; SATOs connected to transmission facilities with a voltage level of 115 kV and above; and all breakers and disconnects connected to, and all shunts, relays, reclosing and associated equipment, dynamic reactive resources, FACTS controllers, special protection systems, PARS, and other equipment specifically installed to support the operation of such transmission lines, interties, and transformers.¶</p> | SATOs were added to the description of Category A facilities |





Settlement Treatment for Storage as a Transmission-Only Asset

Treatment of real-time energy obligations

Greg Stoltzfus

MANAGER, MARKET SUPPORT SERVICES



Project Title: Storage as a Transmission-Only Asset

WMPP ID:
166

Proposed Effective Date: July 2024

- The ISO received stakeholder requests to consider energy storage devices as transmission facilities and seeks to meet those requests with its Storage as a Transmission-Only Asset (SATO) proposal
 - During the 2019 Competitive Transmission Solicitation Enhancements effort
 - As part of the 2021/2022 Boston 2028 RFP Lessons Learned process
 - At various ISO and NEPOOL meetings
 - FERC noted the ISO's commitment to consider "allowing storage to be considered transmission when addressing reliability concerns" in Docket No. ER22-733-000
- Changes to the planning process were discussed at the Transmission Committee (TC); the Markets Committee (MC) is discussing the associated settlement treatment
 - The TC [voted in support](#) of the associated planning process revisions at its August 17, 2022 meeting
- This presentation addresses stakeholder questions and describes conforming energy settlement rules to incorporate Pool Transmission Facility (PTF) energy injections and withdrawals by a SATOA

SATOA Proposal Summary

- A SATOA is an energy storage device connected to the PTF at 115 kV or higher which can inject stored power to address transmission system concerns
- The storage medium will not be restricted to one particular technology
- Details associated with the planning process were discussed at the TC
- A SATOA will have a market settlement only for the energy it injects and withdraws on the PTF to operate
- A SATOA will not otherwise participate in markets, and will not use bids/offers or be subject to economic dispatch



Transmission Facility Cost Recovery

- Since a SATOA is considered transmission, the cost of construction and operation are recovered through the Regional Network Service (RNS) rate
- Real-Time Energy costs and revenues resulting from a SATOA performing its transmission function will be reflected in a transmission owner's annual revenue requirement
 - Costs will be added to the owner's transmission revenue requirements
 - Revenues will be used to offset the owner's transmission revenue requirements
- Other than those described above, there will be no other payments made - such as Day-Ahead Energy, Reserve, Regulation, NCPC, Capacity, VAR, Black Start, etc.



FOLLOW-UP FROM STAKEHOLDER QUESTIONS



Follow-up from Stakeholder Questions

When will SATOAs operate?

- The conditions when the ISO could direct a SATOA to charge or discharge are defined in Section II.51.2* of the proposed Tariff language
 - Address the applicable system concern for which the SATOA has been identified to address through the planning process
 - Mitigate load-shedding when a SATOA may help and available market actions that can address the system concern have been exhausted (see example on [slide 8](#))
 - In order to maintain required state-of-charge or maintenance of the SATOA
 - Allow use of a SATOA's capabilities during system restoration
 - Allow auditing of a SATOA's capabilities
- The ISO expects changes to Operating Procedures 4, 7, and 19
- Updates to Operating Procedures are expected to be brought to the NEPOOL Committees soon after a SATOA has been selected through the planning process

*Section II.51.2 was most recently discussed at the [August TC meeting](#). See slide 22 of the presentation (file "SATOAs August TC presentation_final_Rev1.pdf").



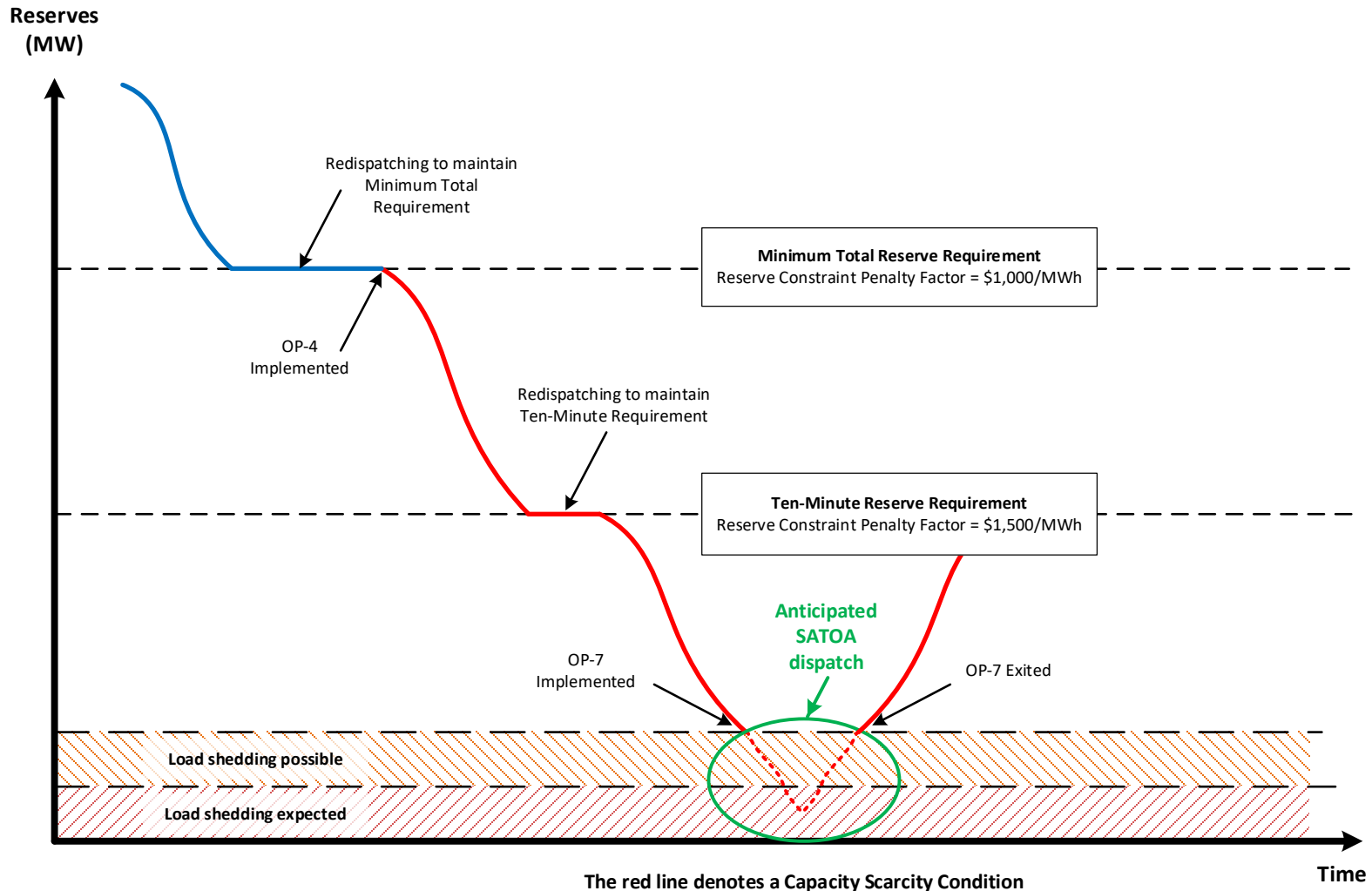
Follow-up from Stakeholder Questions

Please clarify what occurs under OP-7 vs OP-4 during a reserve deficiency.

- Changes to Operating Procedures 4 (OP-4) and 7 (OP-7) are anticipated to address the use of a SATOA, consistent with Section II.51.2, during a reserve deficiency
 - OP-4
 - Update reference to accounting for load shedding for post-contingent NERC recovery requirements to include the use of SATOAs in OP-7
 - This accounting occurs after all available market actions have been performed, is for reliability situational awareness, and does not affect reserve pricing
 - OP-7
 - Permit the use of a SATOA to prevent or reduce load shed when all available market assets have been dispatched
- The next slide shows the relationship between OP-4 and OP-7 for using a SATOA during a reserve deficiency



Example: Reserve Deficiency (Capacity Scarcity Condition) and SATOA Dispatch



SUMMARY AND NEXT STEPS



Summary of Tariff Revisions

- There are no changes to the Tariff revisions presented at the August meeting, which are located in the [appendix](#)
- Section I – General Terms and Conditions
 - Section 1.2.2 – new definitions added for Real Time SATOA Obligation and SATOA
- Section III – Market Rule 1
 - Section III.1.7.21 – new section added to define the limited participation of a SATOA in markets
 - Section III.3.2.1(b)(iv) – SATOA added to ensure that real time supply and demand are addressed
 - Section III.3.2.1(b)(v) – new section added to ensure that each PTO accounts for charging and discharging of the SATOA
 - Section III.3.2.2 – added SATOA to metering requirements



Conclusion

- The ISO received stakeholder requests to consider energy storage devices as transmission facilities and seeks to meet that request with its SATOA proposal
- Conforming energy settlement rules to incorporate PTF energy injections and withdrawals by a SATOA are needed
 - A SATOA will incur costs and receive revenues for charging and discharging in the Real-Time Energy settlement
 - These costs and revenues will be offset by increasing and reducing the SATOA's owner's annual revenue requirement
 - The costs of a SATOA will be recovered through the Regional Network Service rate
- The proposed effective date of these changes is July 2024



Stakeholder Schedule for Storage as a Transmission-Only Asset

NEPOOL PARTICIPANTS COMMITTEE
OCT 6, 2022 MEETING, AGENDA ITEM #7.b
Attachment C2

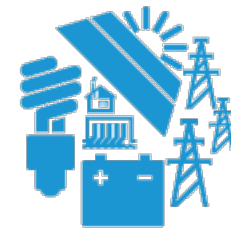
Proposed Effective Date – July 2024

| Stakeholder Committee and Date | Scheduled Project Milestone |
|---|---|
| April 14, 2022 TC | Discussion of concepts |
| May 31, 2022 TC | Continued discussion of concepts |
| June 7-8, 2022 MC | Introduction of settlement conforming changes |
| June 28, 2022 TC | Review of proposed Tariff redlines |
| July 27, 2022 TC | Respond to questions, review incremental changes to Tariff redlines and discuss any proposed stakeholder amendments |
| August 9-10, 2022 MC | Discussion on Tariff changes to enable settlement of SATOAs, introduction of redlines, follow up on stakeholder questions |
| August 16-17, 2022 TC | Vote on proposal and any stakeholder amendments |
| August 23, 2022 B & F | Discussion of the proposed language changes related to the indirect link to Schedule IV.A |
| September 13-14, 2022 MC | Vote on the proposed Tariff revisions related to settlement provisions and any proposed amendments |
| Participants Committee October 6, 2022 | Vote on the proposed Tariff revisions and any proposed amendments |

Questions

Greg Stoltzfus

(413) 540-4269 | GSTOLTZFUS@ISO-NE.COM



APPENDIX

Proposed Tariff Changes



Proposed Tariff Changes, Section I

| Tariff Section | Tariff Change | Reason for Change |
|----------------|---|---|
| Section I.2.2 | <u>Real-Time SATOA Obligation is defined in Section III.3.2.1(b) of Market Rule 1.</u> | Establishes the term for use in settlement |
| Section I.2.2 | <u>Storage as Transmission-Only Asset (SATO) is electric storage equipment that: (1) is connected to or to be connected to Pool Transmission Facilities in the New England Transmission System at a voltage level of 115 kV or higher; (2) the ISO approved to be included in the Regional System Plan and RSP Project List as a regulated transmission solution and Pool Transmission Facility pursuant to the regional system planning processes in Attachment K of the OATT; and (3) is capable of receiving energy only from the Pool Transmission Facilities and storing the energy for later injection to the Pool Transmission Facilities.</u> | Establishes the term for use in other Tariff sections |



Proposed Tariff Changes, Section III

| Tariff Section | Tariff Change | Reason for Change |
|--------------------------|--|---|
| Section III.1.7.21 | III.1.7.21 → SATOA Participation in Markets: A Node will be established for each SATOA. A Market Participant's market activity, transactions, and actions taken at a SATOA's Node and a SATOA's participation in the New England Markets shall be limited to those necessary to consume or inject energy from or to PTF for any period, magnitude, and duration identified as necessary to: (1) address the applicable system needs or provide the transmission function for which the SATOA was selected as the preferred solution; or (2) as specified in the ISO New England Operating Documents, avoid or mitigate Load Shedding after all available Dispatchable Resources that can effectively provide relief to avoid or mitigate the Load Shedding have been dispatched.¶ | New section added to define the limited participation of a SATOA in markets |
| Section III.3.2.1(b)(iv) | (iv) → Real-Time Locational Adjusted Net Interchange — Each Market Participant shall have for each settlement interval a Real-Time Locational Adjusted Net Interchange at each Location equal to the Real-Time Adjusted Load Obligation plus the Real-Time Generation Obligation plus the Real-Time SATOA Obligation at that Location. ¶ | SATOA added to ensure that real time supply and demand are addressed |

Proposed Tariff Changes, Section III

| Tariff Section | Tariff Change | Reason for Change |
|--------------------------|--|--|
| Section III.3.2.1(b)(vi) | <p>(vi) → Real-Time SATOA Obligation — Each PTO shall have for each settlement interval a Real-Time SATOA Obligation for energy at each Location equal to the sum of: (1) the MWhs of energy, where such MWhs of energy shall have positive value, provided by SATOAs at that Location; and (2) the MWhs of load, where such MWhs of load shall have a negative value, consumed by SATOAs at that Location.¶</p> | New section added to ensure that each PTO accounts for charging and discharging of the SATOA |
| III.3.2.2(a) | <p>(a) → Revenue Quality Metering and Telemetry for Assets other than Demand Response Assets¶</p> <p>The megawatt-hour data of each Generator Asset, Tie-Line Asset, and Load Asset, and SATOA must be metered and automatically recorded at no greater than an hourly interval using metering located at the asset's point of interconnection, in accordance with the ISO operating procedures on metering and telemetry. This metered value is used for purposes of establishing the hourly revenue quality metering of the asset.¶</p> <p>The instantaneous megawatt data of each Generator Asset (except Settlement-Only Resources), and each Asset-Related Demand, and each SATOA must be automatically recorded and telemetered in accordance with the requirements in the ISO operating procedures on metering and telemetry.¶</p> | Added SATOA to metering requirements |

MEMORANDUM

TO: NEPOOL Participants Committee Members and Alternates

FROM: Paul Belval and Samantha Regan, NEPOOL Counsel

DATE: September 29, 2022

RE: Request by NuPower for Waiver of GIS Operating Rules and GIS Agreement

At the October 6, 2022 Participants Committee (the “PC”) meeting, members will be asked to consider once again whether to waive certain NEPOOL Generation Information System (“GIS”) requirements, this time in order to correct renewable energy Certificates for a generator for February and March this year. To provide the requested relief NEPOOL would need to waive provisions of both the GIS Operating Rules (“Rules”) and the Amended and Restated Generation Information System Administration Agreement dated as of October 1, 2017, between APX, Inc. (“APX”) and NEPOOL, as amended and extended (the “GIS Agreement”). The generator, NuPower Cherry Street FC, LLC (“NuPower”),¹ will offer an explanation why it believes its requested relief is appropriate at the October 6 meeting. NuPower states that, if this request is accepted, the value of the Certificates (\$20,000 to \$30,000) will be paid by third party buyers of the Certificates under NuPower’s contract in the Connecticut LREC program.

By way of context, NuPower operates the Cherry Street Facility, which is a fuel cell facility located in Bridgeport, Connecticut. NuPower’s emissions data and Connecticut Class I eligibility for the months of February and March 2022 were not reflected on its GIS Certificates when they were issued on July 15. NuPower attempted to rectify the problem via a request to the Connecticut Public Utilities Regulatory Authority that it recognize the Certificates as Connecticut Class I eligible, but its request was denied by that agency, keeping with its practice with similar requests in the recent past. The Authority noted that, in this situation, only NEPOOL can certify the Certificates as Class I and accordingly this was an issue between NuPower and NEPOOL.

NuPower then sought relief from the Markets Committee (“MC”) pursuant to the MC’s authority under Rule 3.8 to correct Certificates, arguing that the Certificates in question were issued erroneously because of a software error in the GIS. APX, the GIS Administrator, disputes that there was an error in the GIS software and believes the problem with the NuPower Certificates was due to user error. The MC referred NuPower’s request to the GIS Operating Rules Working Group (the “Working Group”) to develop additional evidence of whether there was a software error in the GIS that caused the errors in the NuPower Certificates. Indicating subsequently that it did not expect further evidence to be provided with respect to a software error in the GIS, NuPower requested instead that the Rules and the GIS Agreement be waived to rectify the errors in its February and March 2022 Certificates.

¹ NuPower is not a NEPOOL Participant and is a Non-Participant Account Holder under the GIS Rules.

APX does not have the authority to correct the monthly generation data on the Certificates without both APX and NEPOOL waiving Section 4.2 of the GIS Agreement and Rule 1.4, which require APX to administer and operate the GIS in accordance with the Rules. APX, as the GIS Administrator, has under those provisions “the sole responsibility for the compilation, indexing, reasonable interpretation and implementation of the GIS Operating Rules.” Since APX believes it has followed the Rules and GIS Agreement, it can correct NuPower’s Certificates only if that Rule and Section of the GIS Agreement are waived.

APX indicates that it would be willing to waive the applicable requirements but only if NEPOOL, as the counterparty to the GIS Agreement, agreed to such a waiver and directed APX to correct the Certificates. In addition, APX has stated that it will not engage in discussions with NEPOOL about the requested waiver unless NuPower first retracts its previous statements regarding the claimed error in the GIS software.

When asked in August 2021 by another renewable energy generator, Stored Solar, LLC, to waive these applicable Rules and the GIS Agreement, the PC referred the matter to the MC for a recommendation first. The MC, in turn, referred the issue to the Working Group for recommendations on the request and suggestions on proposed criteria for NEPOOL to consider any future waiver requests. Before the MC acted on that direction from the PC, the producer found an alternative means of relief and withdrew its request for a waiver.

While the PC can act on NuPower’s waiver request without any recommendation from the MC or the Working Group, the PC has already indicated its desire for a recommendation first from the MC in such circumstances. Similarly, while the MC can act on a waiver request without a recommendation from the Working Group, the MC has already indicated its preference for a Working Group recommendation first. Thus, for efficiency the PC can short circuit the process by directing the Working Group to recommend (1) criteria if any to apply to future requests for waiver of the Rules and GIS Agreement to correct erroneous certificates and (2) whether NEPOOL should grant the waivers here to correct NuPower’s February and March Certificates (i.e. whether the criteria in item 1 are met in this instance). The PC can further direct that the MC make a recommendation here based on its consideration of any Working Group recommendation, or can have any Working Group recommendation delivered directly to the PC for action.

Whatever process is selected by the PC, NuPower has stated that it needs to have the Certificates corrected no later than the end of the year. There is time for the Working Group to consider this matter, for the MC to consider any recommendations from the Working Group on this matter, and for the PC to have a recommendation in time for a vote at its November or December meeting (depending upon when the Working Group meets and when the MC makes its recommendation). Of course, the PC could also vote on NuPower’s waiver request at its October 6 meeting if it is prepared to do so.

Separately, APX requests amendments to the GIS Agreement to provide (1) NEPOOL the authority to waive the Rules to permit adjustments to Certificates without APX’s consent; and (2) for APX either to charge NEPOOL for time APX must spend on waiver requests and requests for adjustments to Certificates under Rule 3.8 either at its standard rates or to charge that time against

the 500 annual development hours included in the fee paid under the GIS Agreement. APX explains that it had not experienced these sorts of requests prior to the most recent extension of the GIS Agreement and had not included the considerable effort required to respond to those requests in its modified pricing structure agreed to at the time. NEPOOL may also want to consider revising the Rules to require the GIS Account Holder seeking a waiver of the Rules or an adjustment to its Certificates to pay NEPOOL for the costs associated with addressing that request. If members agree conceptually to those GIS Agreement changes, we would suggest that we work with the Participants Committee chair (or his designee(s)) and APX to prepare an amendment for the Participants Committee's consideration, not contingent on the NuPower request or its requested timeline.

The following alternative forms of resolution can be used for Participants Committee actions on NuPower's request:

RESOLVED, that the Participants Committee refers to the NEPOOL GIS Operating Rules Working Group consideration of the request by NuPower Cherry Street FC, LLC to waive certain NEPOOL Generation Information System Operating Rules and sections of the Amended and Restated Generation Information System Administration Agreement dated as of October 1, 2017, between APX, Inc. and NEPOOL for a recommendation to [this Committee/The Markets Committee] on (1) criteria to apply in acting on this and future waiver requests and (2) the specific waivers sought by NuPower, all as discussed in the materials circulated for this meeting.

OR

RESOLVED, that the Participants Committee [grants] [denies] NuPower Cherry Street FC, LLC's request to waive certain NEPOOL Generation Information System Operating Rules and sections of the Amended and Restated Generation Information System Administration Agreement dated as of October 1, 2017, between APX, Inc. and NEPOOL as discussed in the materials circulated for this meeting.

EXECUTIVE SUMMARY
Status Report of Current Regulatory and Legal Proceedings
as of October 4, 2022

The following activity, as more fully described in the attached litigation report, has occurred since the report dated August 31, 2022 ("last Report") was circulated. New matters/proceedings since the last Report are preceded by an asterisk '*'. Page numbers precede the matter description.

I. Complaints/Section 206 Proceedings

| | | | |
|---|---|--------|--|
| 3 | NMISA Complaint Against PTO AC (Reciprocal TOUT Discount) (EL22-31-002) | Sep 26 | FERC issues notice that NMISA's request for reh'g of the FERC's Jul 28 order denying the NMISA Complaint seeking a reciprocal TOUT Discount may be deemed denied by operation of law |
|---|---|--------|--|

II. Rate, ICR, FCA, Cost Recovery Filings

| | | | |
|-----|---|---|---|
| * 8 | FirstLight CIP IROL (Schedule 17) Cost Recovery Schedule Filing (ER22-2876) | Sep 16 | FirstLight requests FERC acceptance of a proposed rate schedule to allow it to begin the recovery period for certain CIP-IROL Costs under Schedule 17 of the ISO-NE Tariff; comment date Oct 5, 2022 |
| | | Sep 21 | NESCOE intervenes |
| * 9 | NESCOE 5-year (2013-2027) <i>Pro Forma</i> Budget (ER22-2812) | Sep 6 Sep 23-26 Sep 27 | NESCOE files fourth 5-year <i>pro forma</i> budget covering 2023-2027 period NEPOOL, National Grid, Eversource intervene NEPOOL files comments supporting the budget |
| 9 | FCA17 De-List Bids Filing (ER22-2651) | Sep 8 | FERC accepts filing, eff. Oct 9, 2022 |
| 9 | Essential Power Newington CIP-IROL (Schedule 17) Section 205 Cost Recovery Filing (ER22-2469) | Sep 20 | FERC accepts EP Newington's CIP-IROL Cost Recovery, eff. Sep 21, 2022 |
| 9 | Mystic COS Agreement Updates to Reflect Constellation Spin Transaction (ER22-1192) | Sep 8 Sep 9 Sep 22 Sep 28 Oct 4 | Mystic files an Offer of Settlement to resolve all issues set for hearing in this proceeding and requests authorization to implement, on an interim basis (until the Settlement Agreement filed in ER22-1192-001 is approved), the agreed upon Settlement Rate Settlement Judge French issues third status report, recommending settlement judge procedures continue FERC Staff files comments supporting Offer of Settlement Acting Chief ALJ authorizes implementation of Settlement Rate on an interim basis (until the Settlement Agreement is approved) Settlement Judge French certifies uncontested Settlement Agreement to the Commission; issues 4 th and final settlement judge report |
| 11 | Mystic 8/9 COS Agreement <i>Second</i> CapEx Info Filing (ER18-1639) | Sep 15 | Mystic submits 2022 Capital Expenditures Informational Filing covering the Jan 2023-Dec 2023 period |

III. Market Rule and Information Policy Changes, Interpretations and Waiver Requests

| | | | |
|----|----------------------------|--------|---|
| 13 | CSF Revisions (ER22-2546) | Sep 23 | FERC accepts revisions, eff. Oct 1, 2022 |
| 14 | IEP Remand (ER19-1428-005) | Sep 23 | FERC issues an order directing ISO-NE to refile, on or before Nov 23, 2022 , the IEP Tariff provisions consistent with the D.C. Circuit's decision |

IV. OATT Amendments / TOAs / Coordination Agreements

No Activity to Report

V. Financial Assurance/Billing Policy Amendments*No Activity to Report***VI. Schedule 20/21/22/23 Changes & Agreements**

- | | | | |
|------|---|--------|---|
| * 16 | Schedule 21-RIE (ER23-16) | Oct 4 | The Narragansett Electric Company d/b/a Rhode Island Energy (RIE) files revisions to Schedule 21 and Attachment E of Section II of the OATT to establish RIE's rates, terms, and conditions for the provision of Local Service and to accommodate RIE as a new Participating Transmission Owner; comment date Oct 25, 2022 |
| 16 | Schedule 21-NEP: Narragansett/Pawtucket Power Decomm. CRA (ER22-2732) | Sep 13 | National Grid intervenes |

VII. NEPOOL Agreement/Participants Agreement Amendments*No Activity to Report***VIII. Regional Reports**

- | | | | |
|------|--|-----------------|--|
| 17 | Capital Projects Report - 2022 Q2 (ER22-2667) | Sep 1 Sep 20 | Eversource intervenes FERC accepts 2022 Q2 Report, eff. Jul 1, 2022 |
| * 18 | Reserve Market Compliance (33rd) Semi-Annual Report (ER06-613) | Oct 3 | ISO-NE submits 33rd semi-annual report |

IX. Membership Filings

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|------|--|--------|--|
| * 18 | October 2022 Membership Filing (ER22-2982) | Sep 30 | New Members: Danske Commod., MCAN, MFT, and Spotlight Power; and Withdrawal: IPKeys Power Partners |
| 19 | Aug 2022 Membership Filing (ER22-2260) | Sep 29 | FERC accepts (i) the membership of Concurrent, LLC; Leapfrog Power; Old Middleboro Road Solar; and Accelerate Renewables; and (ii) the termination of the Participant status of Chris Anthony; Indeck Energy-Alexandria; Standard Normal; and Borrego Solar Systems |
| 19 | June 2022 Membership Filing (ER22-1991) | Sep 2 | FERC accepts (i) the memberships of Ebsen LLC and Umber LLC; (ii) the termination of the Participant status of Dantzig Energy; Pilot Power Group; and Twin Eagle Resource Management; and (iii) the name change of LS Power Grid Northeast, LLC (f/k/a New England Energy Connection, LLC) |

X. Misc. - ERO Rules, Filings; Reliability Standards

- | | | | |
|----|--|----------------------------|---|
| 19 | CIP Standards Development: Info Filings on Virtualization & Cloud Computing Services Projects (RD20-2) | Sep 15 | NERC submits quarterly informational filing, advising of a modified schedule for the revised Standards included in Project 2016-02 (FERC filing scheduled for Dec 2022) |
| 19 | 2023 NERC/NPCC Business Plans and Budgets (RR22-4) | Sep 12 Sep 13 Sep 27 | NERC amends proposed 2023 Business Plan and Budget; comment deadline Oct 7, 2022 EEI submits comments NERC responds to EEI comments |
| 20 | Rules of Procedure Changes (CMEP Risk-Based Approach Enhancements) (RR21-10) | Sep 9 | FERC accepts Jul 18 compliance filing |

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|------|--|--------|---|
| * 21 | Notice of Penalty: National Grid (NP22-33) | Sep 29 | NERC files a Notice of Penalty regarding National Grid's violation of FAC-008-3 R6 and R8, and PRC-023-4 R1, including a Settlement Agreement requiring National Grid to pay a \$512,000 penalty |
|------|--|--------|---|

XI. Misc. - of Regional Interest



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|------|--|-----------|---|
| * 21 | 203 Application: Salem Harbor / Lenders (EC22-117) | Sep 2 | Salem Harbor requests authorization to transfer the direct and indirect equity interests in Salem Harbor to Salem Harbor's lenders under a pre-petition credit facility |
| | | Sep 12 | Public Citizen intervenes |
| 21 | 203 Application: Centrica / CPower (EC22-90) | Sep 29 | FERC authorizes sale of 100% of Centrica's equity interests to CPower |
| 22 | 203 Application: Clearway / TotalEnergies (EC22-84) | Sep 6 | FERC authorizes sale of 50% of Clearway's equity interests to TotalEnergies |
| | | Sep 12 | Sale consummated |
| | | Sep 19 | Parties file notice of consummation of Sale |
| * 22 | D&E Agreement: CL&P/NY Transco (ER22-2830) | Sep 12 | CL&P files D&E Agreement |
| | | Sep 20 | NY Transco intervenes |
| * 23 | E&P Agreement: Seabrook / NECEC Transmission (ER22-2807) | Sep 7 | Seabrook files amended and restated E&P Agreement |
| | | Sep 13-23 | Avangrid, National Grid intervene |
| 23 | Versant MPD OATT Order 881 Compliance Filing (ER22-2358) | Aug 31 | MPUC withdraws protest (Notice of Withdrawal) |
| | | Sep 6 | Versant supplements its filing, confirming MPUC's understandings set forth in its Aug 31 Notice of Withdrawal |
| 24 | Orders 864/864-A (Public Util. Trans. ADIT Rate Changes): New England Compliance Filings (various) | Sep 23 | FERC accepts many of the pending Order 864 compliance filings |
| | | Oct 3 | ER20-2219 (NEP (Tariff No. 1)). NEP supplements its July 19, 2022 compliance filing |

XII. Misc. - Administrative & Rulemaking Proceedings



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|----|---|-----------|---|
| 25 | Interregional HVDC Merchant Transmission (AD22-13) | Sep 6 | Engie supports tech conf request |
| | | Sep 12 | Invenergy answers MISO comments |
| 25 | New England Gas-Electric Winter Forum (AD22-9) | Sep 2 | ISO submits presentations and Owners' Draft Problem Statement; National Grid, Acadia Center submit pre-forum comments |
| | | Sep 6 | FERC issues second supplemental notice of Forum |
| | | Sep 7 | K. Watson submits Kinder Morgan/INGAA pre-forum comments |
| | | Sep 8 | Forum held |
| | | Sep 14 | Sep 8 Burlington Forum materials posted for C. Dickerson, NPCC and comments posted from NERC/NPCC |
| | | Sep 21 | FERC invites any party wishing to submit comments regarding the topics discussed at the Forum to do so on or before Nov 7, 2022 |
| 25 | Transmission Planning and Cost Management Tech Conf (AD22-8) | Sep 8 | FERC issues second supplemental notice of Oct 6, 2022 tech conf |
| | | Sep 16-30 | Pre-conference materials submitted by over 35 parties |
| | | Sep 30 | FERC issues third supplemental notice of Oct 6, 2022 tech conf |
| | | Oct 4 | FERC issues fourth supplemental notice of Oct 6, 2022 tech conf |
| 26 | Joint Federal-State Task Force on Electric Transmission (AD21-15) | Sep 2 | ACRE , AEP , Invenergy , MISO , and PJM file post-Jul 20 JFSTF meeting comments |
| | | Sep 8 | FERC announces Nov 15, 2022 (5 th) JFSTF meeting in New Orleans, LA |
| 28 | NOPR: Duty of Candor (RM22-20) | Sep 1 | Joint Associations request 30-day extension of time to file comments |
| | | Sep 14 | FERC grants requested extension of time to file comments; comments due Nov 10, 2022 |
| | | Sep 22 | J. Fitzhenry opposes proposed Duty of Candor Requirements |

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|----|---|--------|--|
| 29 | NOPR: Interconnection Reforms (RM22-14) | Sep 14 | NW and Intermountain Power Producers Coalition files comments Initial comments due Oct 13, 2022 ; reply comments, Nov 14, 2022 |
| 33 | <i>Transmission NOPR</i> (RM21-17) | Sep 19 | Nearly 100 sets of reply comments were filed, including by: ISO-NE , AEE , Anbaric , Avangrid , CT DEEP , Cypress Creek , Dominion , ENGIE , Eversource , Invenergy , LS Power , MA AG , NECOS , NESCOE , NextEra , Shell , Transource , UCS , ACPA , ACRE , APPA , EEI , Industrial Customer Organizations , LPPA , NRECA , Public Interest Organizations , R Street , SEIA |

XIII. FERC Enforcement Proceedings

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|------|--|--------|--|
| * 37 | ISO-NE (Salem Harbor) (IN18-8) | Sep 30 | FERC approves Stipulation and Consent Agreement that resolved OE's investigation into ISO-NE's capacity payments for Salem Harbor before the Project had been built or commenced commercial operation; ISO-NE must pay a \$500,000 civil penalty , make \$350,000 in new investments in its compliance program , and submit at least one annual compliance monitoring report |
| 40 | Total Gas & Power North America, Inc. et al. (IN12-17) | Sep 9 | Judge Krolikowski adjusts procedural schedule in support of hearings (estimated to last 3-4 weeks) scheduled to begin Jan 23, 2023 and an initial decision due Jul 10, 2023 |

XIV. Natural Gas Proceedings

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|----|------------------------------------|-------|---|
| 42 | Northern Access Project (CP15-115) | Sep 6 | Sierra Club petitions DC Circuit for review of <i>Northern Access Project Add'l Extension Order</i> |
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XV. State Proceedings & Federal Legislative Proceedings**No Activity to Report****XVI. Federal Courts**

- | | | | |
|----|---|----------------|---|
| 46 | Mystic II (ROE & True-Up) (21-1198 et al.) (consol.) | Sep 7 Sep 8 | Mystic moves to sever and dismiss Case No. 22-1215 Parties asked that the Cases continue to be held in abeyance |
| 48 | Northern Access Project (22-1233) | Sep 6 | Sierra Club appeals <i>Northern Access Project Add'l Extension Order</i> ; Initial submissions due Oct 11, 2022 ; dispositive motions and Certified Index to the Record, Oct 24, 2022 |
| 49 | <i>Opinion 569/569-A</i> : FERC's Base ROE Methodology (16-1325 et al.) (consol.) | Oct 4 | Court issues Mandate - underlying FERC orders vacated; cases remanded to FERC to reopen proceedings |

M E M O R A N D U M

TO: NEPOOL Participants Committee Members and Alternates

FROM: Patrick M. Gerity, NEPOOL Counsel

DATE: October 5, 2022

RE: Status Report on Current Regional Wholesale Power and Transmission Arrangements Pending Before the Regulators, Legislatures and Courts

We have summarized below the status of key ongoing proceedings relating to NEPOOL matters before the Federal Energy Regulatory Commission ("FERC"),¹ state regulatory commissions, and the Federal Courts and legislatures through October 4, 2022. If you have questions, please contact us.

I. Complaints/Section 206 Proceedings

- **206 Proceeding: FTR Collateral Show Cause Order (EL22-63)**

On July 28, 2022, the FERC instituted a Section 206 proceeding finding that the existing tariffs of certain ISO/RTOs, including the ISO-NE Tariff, appear to be unjust and unreasonable.² The FERC found that ISO-NE's Tariff appears to be unjust and unreasonable in the absence of volumetric minimum collateral requirements for FTR Market Participants ("volumetric FTR collateral requirements"). Accordingly, ISO-NE was directed, on or before **October 26, 2022**, to either: (1) show cause as to why the Tariff remains just and reasonable and not unduly discriminatory or preferential; or (2) explain what changes to the Tariff it believes would remedy the identified concerns if the FERC were to determine that the Tariff has in fact become unjust and unreasonable or unduly discriminatory or preferential.³ Alternatively, if it is so inclined, ISO-NE may propose Tariff revisions on the subject of the *FTR Collateral Show Cause Order* under FPA Section 205 and request that these proceedings be held in abeyance pending disposition of that proceeding.⁴ ISO-NE's proposed response was reviewed and Participant input received at a special Budget & Finance Subcommittee meeting on September 22, 2022.

The *FTR Collateral Show Cause Order* follows PJM's *Green Hat* experience,⁵ a 2019 request by the Energy Trading Institute requesting a FERC-convened technical conference to consider a potential rulemaking to improve ISO/RTO credit practices,⁶ and a two-day technical conference in February 2021 that discussed principles and best

¹ Capitalized terms used but not defined in this filing are intended to have the meanings given to such terms in the Second Restated New England Power Pool Agreement (the "Second Restated NEPOOL Agreement"), the Participants Agreement, or the ISO New England Inc. ("ISO" or "ISO-NE") Transmission, Markets and Services Tariff (the "Tariff").

² *CAISO, ISO-NE, NYISO, and SPP*, 180 FERC ¶ 61,049 (July 28, 2022) ("*FTR Collateral Show Cause Order*").

³ *Id.* at P 31.

⁴ *Id.* at P 32.

⁵ See *GreenHat Energy, LLC*, 175 FERC ¶ 61,138 (2021) (order to show cause) (*GreenHat Show Cause Order*); *GreenHat Energy, LLC*, 177 FERC ¶ 61,073 (2021) (order assessing civil penalties). In June 2018, GreenHat Energy LLC ("GreenHat") defaulted on its obligations to PJM after amassing one of the largest FTR portfolios in the PJM region. At the time of its default, GreenHat had only \$559,447 on deposit as collateral with PJM and no other material assets. However, over the subsequent three-year period ending in May 2021, this FTR portfolio incurred approximately \$179 million in losses, which were borne by non-defaulting market participants in PJM.

⁶ Energy Trading Institute Request for Technical Conference and Petition for Rulemaking to Update Credit and Risk Management Rules and Procedures in the Organized Markets, *Credit Reforms in Organized Wholesale Electric Markets*, Docket No. AD20-6-000 (Dec. 16, 2019).

practices for credit risk management in organized wholesale electric markets.⁷ In the *FTR Collateral Show Cause Order*, the FERC stated that, although the record developed through the technical conference highlighted numerous different approaches to managing credit risk, “we believe that two specific practices may be particularly critical to effectively managing credit risk for FTRs: the use of a mark-to-auction mechanism and a volumetric minimum collateral requirement for FTRs.”⁸ ISO-NE currently employs a mark-to-auction mechanism but not volumetric FTR collateral requirements.

The FERC issued on July 28, 2022, a notice of this proceeding and of the refund effective date, which will be August 3, 2022.⁹ Those interested in participating in this proceeding were required to intervene on or before August 18, 2022. Doc-less interventions were been filed by NEPOOL, Calpine, DC Energy, NRG, the Maine Public Utilities Commission (“MPUC”), Electric Power Supply Association (“EPSA”), PJM, SPP, and Public Citizen. If you have any questions concerning this matter, please contact Paul Belval (860-275-0381; pnbelval@daypitney.com).

- **RENEW/ACPA Resource Capacity Accreditation & Operating Reserve Designation Complaint (EL22-42)**

As previously reported, RENEW Northeast, Inc. (“RENEW”) and the American Clean Power Association (“ACPA”) filed a Complaint on March 15, 2022 under Section 206 of the Federal Power Act (“FPA”) against ISO-NE seeking a FERC order directing ISO-NE to make changes to its rules for capacity accreditation and operating reserve designations, effective no later than FCA18 with respect to capacity accreditation and promptly with respect to operating reserve designations. RENEW/ACPA asserted that the changes are needed to address undue preferences granted under ISO-NE’s rules and procedures to gas-fired generation resources that have neither dual-fuel capability nor dedicated, firm natural gas supply arrangements (“Gas-Only Resources”). Complainants asserted that the undue preferences arise in the context of capacity accreditation through an assumption of 100% fuel availability for Gas-Only Resources, and in the context of operating reserves, through the absence of any pre-dispatch requirements to confirm fuel availability. ISO-NE’s response and comments, following a request for extension of time granted by the FERC, were due on or before April 14, 2022.

On April 14, 2022, ISO-NE responded to the Complaint. Protests and comments on the Complaint were filed by: NEPOOL, AEE, Calpine, EDF, FirstLight, LS Power, NEPGA, NESCOE, Public Interest Orgs,¹⁰ Vistra/LSP Power, State Parties,¹¹ EPSA, National Hydropower Assoc., and the Solar Energy Industries Association (“SEIA”). On April 29, RENEW/ACPA answered the ISO-NE and NEPOOL motions to dismiss and answered the protests and comments filed in opposition to the Complaint. On May 17, ISO-NE answered the April 29 RENEW/ACPA answer. Interventions only were filed by AEP, Avangrid, Avangrid Renewables, Borrego, Brookfield, Constellation, CPV Towantic, Dominion, ENE, Excelebrate, National Grid, NextEra, NH OCA, North East Offshore, NRG, Public Systems,¹²

⁷ See Supp. Notice of Tech. Conf., *RTO/ISO Credit Principles and Practices*, Docket No. AD21-6, et al. (Feb. 10, 2021).

⁸ The FERC explained that (i) the mark-to-auction mechanism mitigates the risk of default by updating collateral requirements to reflect the most recent valuation of the FTR position and (ii) volumetric FTR collateral requirements ensure that a market participant is required to post a minimum amount of collateral to cover potential defaults, even when the market participant has offsetting positions. With respect to volumetric FTR collateral requirements, the FERC expressed a concern that netting of FTRs with negative collateral requirements against FTRs with positive collateral requirements can lead to insufficient collateral for a portfolio’s risk should future congestion be significantly different than historical congestion. Without explicit \$/MWh volumetric FTR collateral requirements, the FERC is “concerned that market participants may be able to minimize their collateral requirements without a corresponding reduction in risk”. The ISO-NE Financial Assurance Policy (“FAP”) allows for some limited offsetting. See FAP § VI (allowing for netting of FTRs with the same or opposite path, same contract month and type). *FTR Collateral Show Cause Order* at PP 28-29.

⁹ The *Notice* was published in the *Fed. Reg.* on Aug 3, 2022 (Vol. 87, No. 148) p. 47,409.

¹⁰ “Public Interest Orgs” are the Sustainable FERC Project, Acadia Center, Conservation Law Foundation (“CLF”), Sierra Club, and Natural Resources Defense Council (“NRDC”).

¹¹ “State Parties” are the Connecticut Department of Energy and Environmental Protection (“CT DEEP”), the Massachusetts Attorney General (“MA AG”), and the Connecticut Attorney General (“CT AG”).

¹² “Public Systems” are Connecticut Municipal Electric Energy Cooperative (“CMEEC”), Massachusetts Municipal Wholesale Electric Company (“MMWEC”), New Hampshire Electric Cooperative, Inc. (“NHEC”), and Vermont Public Power Supply Authority (“VPPSA”).

CT PURA, MA DPU, MPUC, Repsol, APPA, EPSA, the Institute for Policy Integrity at New York University School of Law, and Public Citizen. On July 20, 2022, ISO-NE submitted a letter requested expeditious action on the Complaint (a request NEPOOL supported). RENEW/ACPA supported the request for expedited action on August 1, 2022 (adding that the FERC “should grant the Complaint and direct ISO-NE to submit a compliance filing that timely implements the proposed remedies”, and could address the wish for “constructive *ex parte* communications with [FERC] Staff ... with an appropriately crafted waiver of the *ex parte* limitations”). No action has yet been taken and this Complaint remains pending before the FERC. If you have any questions concerning this Complaint, please contact Sebastian Lombardi (860-275-0663; slombardi@daypitney.com) or Rosendo Garza (860-275-0660; rgarza@daypitney.com).

- **NMISA Complaint Against PTO AC (Reciprocal TOUT Discount) (EL22-31)**

On September 26, 2022, the FERC issued a notice¹³ that the Northern Maine Independent System Administrator’s (“NMISA”) request for rehearing of the FERC’s order¹⁴ denying NMISA’s complaint against ISO-NE and the Participating Transmission Owners (“PTOs”) Administrative Committee (“PTO AC”)¹⁵ may be deemed denied by operation of law, triggering the 60-day period during which a petition for review of the *NMISA Order* can be filed with an appropriate federal court. The notice also indicated that the FERC, as is its right, “may modify or set aside [the *NMISA Order*], in whole or in part, in such manner as it shall deem proper”. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **206 Proceeding: ISO-NE Tariff Schedule 25 and Section I.3.10 (EL21-94)**

Still pending before the FERC is the FERC-instituted FPA Section 206 proceeding under which the FERC is considering whether Schedule 25 and Tariff § I.3.10 may be unjust and unreasonable.¹⁶ As previously reported, this proceeding arises out of issues raised in the NECEC Transmission LLC (“NECEC”)/Avangrid Complaint Against NextEra/Seabrook (related to the interconnection of the New England Clean Energy Connect transmission project (“NECEC Project”)) summarized below (EL21-6). Specifically, the FERC identified a concern that “Schedule 25’s definition of Affected Party and Tariff section I.3.10 may be unjust and unreasonable to the extent they may allow generating facilities and their components to be identified as facilities on which adverse impacts must be remedied before an elective transmission upgrade can interconnect to the ISO-NE transmission system, even though generators are not subject to the [FERC]’s open access transmission principles,” and could result in upgrades identified on an Affected Party’s system without any obligation for the Affected Party to construct the identified upgrades.¹⁷

The FERC directed ISO-NE to: (1) show cause as to why Schedule 25 and Tariff § I.3.10 remain just and reasonable or (2) explain what changes to Schedule 25 and/or Tariff § I.3.10 it believes would remedy the identified concerns if the FERC were to determine that Schedule 25 and/or Tariff section I.3.10 has become unjust and unreasonable and proceeds to establish a replacement rate. On September 8, 2021, the FERC issued a notice

¹³ *Northern Maine Indep. Sys. Administrator, Inc. v. ISO New England Participating Transmission Owners Administrative Comm.*, 180 FERC ¶ 61,044 (Sep. 23, 2022) (notice that req. for reh’g of July 28 order may be deemed denied).

¹⁴ *Northern Maine Indep. Sys. Administrator, Inc. v. ISO New England Participating Transmission Owners Administrative Comm.*, 180 FERC ¶ 62,168 (July 28, 2022) (“*NMISA Order*”) (order denying reciprocal TOUT discount complaint).

¹⁵ As previously reported, the FERC found in the *NMISA Order* that “NMISA has not demonstrated that the failure of the PTO AC and ISO-NE to offer NMISA reciprocal treatment is unduly discriminatory or preferential”. Specifically, the FERC cited its longstanding policy permitting such charges, found for a number of reasons NYISO and NMISA not similarly situated, and noted that NMISA’s showing that the proposed approach might be superior for NMISA insufficient to meet its FPA Section 206 statutory burden. In requesting rehearing, NMISA asserted that the FERC erred by (i) failing to provide a reasoned explanation for its determination that NMISA and NYISO are not similarly situated; and (ii) failed to justify its decision not to enforce the requirement that ISO-NE engage in extensive efforts to reduce seams with neighboring control areas.

¹⁶ *NECEC Transmission LLC and Avangrid, Inc. v. NextEra Energy Resources, LLC et al. and ISO New England Inc.*, 176 FERC ¶ 61,148 (Sep. 7, 2021) (“*Sep 7 Order*”).

¹⁷ *Id.* at P 20.

of the proceeding and of the refund effective date, which is October 13, 2020 (the date the NECEC/Avangrid Complaint Against NextEra/Seabrook was filed). Those interested in participating in this proceeding were required to intervene on or before October 5, 2021¹⁸ and included NEPOOL, NESCOE, Brookfield, Calpine, Dominion, Eversource, HQ US, LS Power, MA AG, MMWEC, National Grid, NECEC Transmission, NEPGA, NextEra, NRG, CT DEEP, MA DOER, Pixelle Androscoggin (out-of-time), Vistra (out-of-time), ACPA, EPSA, RENEW, and Public Citizen.

ISO-NE Answer. On November 8, 2021, ISO-NE submitted its answer explaining why Schedule 25 and Tariff § I.3.10 remain just and reasonable. ISO-NE called for the FERC to “assist Affected Parties and Interconnection Customers in resolving any disputes pertaining to upgrades on Affected Systems—such as the dispute between NECEC Transmission and NextEra Energy Seabrook, LLC in Docket No. EL21-6—as quickly as possible.” Interested parties had until January 7, 2022 to address whether ISO-NE’s existing Tariff remains just and reasonable and if not, what changes to ISO-NE’s Tariff should be implemented as a replacement rate.

Comments. Comments were filed by the January 7, 2022 deadline by [NEPOOL](#), [NECEC/Avangrid](#), [NEPGA](#), [NextEra](#). On January 20, 2022, [NextEra](#) answered the NECEC/Avangrid comments. On January 28, [NECEC](#) answered NextEra’s January 20 answer and [ISO-NE](#) answered NECEC’s Jan 7 comments.

As noted, this matter remains pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **NECEC/Avangrid Complaint Against NextEra/Seabrook (EL21-6)**

Still pending before the FERC is the October 13, 2020 complaint by NECEC and Avangrid Inc. (together, “Avangrid”) requesting FERC action “to stop NextEra from unlawfully interfering with the interconnection of the NECEC Project and seeking, among other things, an initial, expedited order that would grant certain relief¹⁹ and direct NextEra to immediately commence engineering, design, planning and procurement activities that are necessary for NextEra to construct the generator owned transmission upgrades during Seabrook Station’s Planned 2021 Outage (the “Complaint”). NextEra submitted an answer to the Complaint (requesting the FERC dismiss or deny the Complaint) and National Grid filed comments. Doc-less interventions only were filed by Dominion, Eversource, Calpine, Exelon, HQ US, MA AG, MMWEC, NESCOE, NRG, and Public Citizen. Avangrid answered NextEra’s answer and NextEra answered Avangrid’s answer (“supplemental answer”), repeating its request that the FERC dismiss or deny the Complaint. Avangrid subsequently answered the supplemental answer.

Amended Complaint. On March 26, 2021, Avangrid amended the Complaint to reflect that aspects of the relief originally requested in the Complaint were no longer feasible within the timeline previously sought. Avangrid continued to seek expeditious FERC action, requesting in its March 26 filing a FERC order on or before May 7, 2021 (which did not occur). On April 15, 2021, NextEra answered the amended Complaint. On April 20, 2021, Avangrid answered NextEra’s April 15 answer. On May 6, 2021, ISO-NE submitted a letter to express importance of prompt resolution of these matters. On May 17, Avangrid submitted a letter supporting ISO-NE’s May 6, 2021 letter.

¹⁸ The Notice was published in the *Fed. Reg.* on Sep. 14, 2021 (Vol. 86, No. 175) p. 51,140.

¹⁹ Directing NextEra to comply with the ISO-NE OATT, to comply with open access requirements, and to cease and desist unlawful interference with the NECEC Project; and to have the FERC temporarily revoke NextEra’s blanket waiver under Part 358 of the FERC’s regulations and to initiate an investigation and require NextEra to preserve and provide documents related to the interconnection of the NECEC Project.

Additional Briefing. On September 7, 2021, the FERC issued an order establishing additional briefing in this proceeding and instituted a broader Section 206 proceeding (see EL21-94 above).²⁰ Initial briefs²¹ were due on or before October 7, 2021, and were filed by [ISO-NE](#), [Avangrid](#), [NextEra](#), [MA AG](#), [NEPGA/EPSC](#), [MA DOER](#). Reply briefs were due on or before October 22, 2021, and were filed by [Avangrid](#), [NextEra](#), [ISO-NE](#). Avangrid answered NextEra's November 4 answer, NextEra moved to lodge a letter from a Branch Chief of the Nuclear Regulatory Commission ("NRC"), including an Inspection Report for Seabrook Station for the time period from July 1, 2021 through September 30, 2021 (together, the "NRC Seabrook Report"), to directly refute a central claim of Avangrid (that Seabrook should have already replaced the Generation Breaker at issue in this proceeding). Avangrid opposed that motion to lodge (asserting that the NRC Seabrook Report is outside the scope of these proceedings and will not assist the FERC in its decision making). With briefing complete, this matter is again pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **NextEra Energy Seabrook Declaratory Order Petition re: NECEC Elective Upgrade Costs Dispute (EL21-3)**

In a related matter, and also still pending before the FERC, is a Petition for a Declaratory Order filed by NextEra Energy Seabrook, LLC ("Seabrook") a week earlier than the Avangrid Complaint that seeks clarity on the scope of Seabrook's "FERC-jurisdictional regulatory obligations with respect to the project ("NECEC Elective Upgrade"), and to resolve its dispute with NECEC" (the "Seabrook Petition"). Specifically, Seabrook asked the FERC to declare that: (1) Seabrook is not required to incur a financial loss to upgrade, for NECEC's sole benefit, a 24.5 kV generator circuit breaker and ancillary equipment ("Generation Breaker") at Seabrook Station; (2) "Good Utility Practice" for replacement of the nuclear plant Generation Breaker is defined in terms of the practices of the nuclear power industry, such that Seabrook's proposed definition of that term is appropriate for use in a facilities agreement with NECEC; and (3) Seabrook will not be liable for consequential damages for the service it provides to NECEC under a facilities agreement (collectively, the "Requested Declarations"). Alternatively, Seabrook asked that the FERC declare that nothing in ISO-NE's Tariff requires Seabrook to enter into an agreement to replace the Generation Breaker, and therefore, Seabrook and the Joint Owners are entitled to bargain for appropriate terms and conditions to recover their costs, to define Good Utility Practice, and to limit liability associated with providing the service ("Alternative Declaration").

Comments on the Seabrook Petition were filed by Eversource, MMWEC and NEPGA. Avangrid and NECEC Transmission (together, "Avangrid") protested the Seabrook Petition. Doc-less interventions only were filed by Dominion, Eversource, Calpine, Exelon, HQ US, National Grid, NESCOE, NRG, and Public Citizen. NextEra answered Avangrid's protest and Avangrid answered NextEra's answer. On May 6, 2021, ISO-NE submitted a letter in this proceeding, as well as in EL21-6, to express importance of prompt resolution of these matters. NextEra moved to lodge both an August 29, 2021 filing containing an executed Engineering and Procurement Agreement ("E&P Agreement") between Seabrook and NECEC that was filed with the FERC on August 19, 2021 and the NRC Seabrook Report. Avangrid answered that motion, asserting that the NRC Seabrook Report was outside the scope of the proceeding and the motion to lodge should be denied. This matter remains pending before the FERC. If

²⁰ *NECEC Transmission LLC and Avangrid, Inc. v. NextEra Energy Resources, LLC et al. and ISO New England Inc.*, 176 FERC ¶ 61,148 (Sep. 7, 2021).

²¹ The FERC requested additional briefing from the Parties, as well as from ISO-NE, on the following issues: (i) whether or not Seabrook's breaker is properly identified as a part of Seabrook's generating facility; (ii) if Seabrook's breaker is part of Seabrook's generating facility, under what authority, if any, Seabrook may be subject to the upgrade obligations imposed on Affected Parties under the ISO-NE Tariff; (iii) if Seabrook's breaker is part of Seabrook's generating facility, what obligations, if any, Seabrook has under its LGIA with respect to replacement of the breaker and whether or not ISO New England Operating Documents and Applicable Reliability Standards impose an obligation to replace the breaker. If Seabrook's breaker is appropriately classified as a system protection facility, what obligations Seabrook has to replace the breaker. If the Seabrook LGIA obligates Seabrook to act, a description of the scope of Seabrook's obligation under the LGIA; (iv) whether there exists any solution for the interconnection of the NECEC Project that may be implemented without the replacement of Seabrook's breaker; and (v) If replacement of Seabrook's breaker is necessary for the interconnection of the NECEC Project, whether there exists any interim solution for the interconnection of the NECEC Project that would allow energization of the NECEC Project prior to the replacement of Seabrook's breaker.

you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Base ROE Complaints I-IV: (EL11-66, EL13-33; EL14-86; EL16-64)**

There are four proceedings pending before the FERC in which consumer representatives seek to reduce the TOs' return on equity ("Base ROE") for regional transmission service.

- **Base ROE Complaint I (EL11-66).** In the first Base ROE Complaint proceeding, the FERC concluded that the TOs' ROE had become unjust and unreasonable,²² set the TOs' Base ROE at 10.57% (reduced from 11.14%), capped the TOs' total ROE (Base ROE *plus* transmission incentive adders) at 11.74%, and required implementation effective as of October 16, 2014 (the date of *Opinion 531-A*).²³ However, the FERC's orders were challenged, and in *Emera Maine*,²⁴ the U.S. Court of Appeals for the D.C. Circuit ("DC Circuit") vacated the FERC's prior orders, and remanded the case for further proceedings consistent with its order. The FERC's determinations in *Opinion 531* are thus no longer precedential, though the FERC remains free to re-adopt those determinations on remand as long as it provides a reasoned basis for doing so.
- **Base ROE Complaints II & III (EL13-33 and EL14-86) (consolidated).** The second (EL13-33)²⁵ and third (EL14-86)²⁶ ROE complaint proceedings were consolidated for purposes of hearing and decision, though the parties were permitted to litigate a separate ROE for each refund period. After hearings were completed, ALJ Sterner issued a 939-paragraph, 371-page *Initial Decision*, which lowered the base ROEs for the EL13-33 and EL14-86 refund periods from 11.14% to 9.59% and 10.90%, respectively.²⁷ The *Initial Decision* also lowered the ROE ceilings. Parties to these proceedings filed briefs on exception to the FERC, which has not yet issued an opinion on the ALJ's *Initial Decision*.
- **Base ROE Complaint IV (EL16-64).** The fourth and final ROE proceeding²⁸ also went to hearing before an Administrative Law Judge ("ALJ"), Judge Glazer, who issued his initial decision on March

²² The TOs' 11.14% pre-existing Base ROE was established in *Opinion 489*. *Bangor Hydro-Elec. Co.*, Opinion No. 489, 117 FERC ¶ 61,129 (2006), *order on reh'g*, 122 FERC ¶ 61,265 (2008), *order granting clarif.*, 124 FERC ¶ 61,136 (2008), *aff'd sub nom.*, Conn. Dep't of Pub. Util. Control v. FERC, 593 F.3d 30 (D.C. Cir. 2010) ("*Opinion 489*").

²³ *Coakley Mass. Att'y Gen. v. Bangor Hydro-Elec. Co.*, 147 FERC ¶ 61,234 (2014) ("*Opinion 531*"), *order on paper hearing*, 149 FERC ¶ 61,032 (2014) ("*Opinion 531-A*"), *order on reh'g*, 150 FERC ¶ 61,165 (2015) ("*Opinion 531-B*").

²⁴ *Emera Maine v. FERC*, 854 F.3d 9 (D.C. Cir. 2017) ("*Emera Maine*"). *Emera Maine* vacated the FERC's prior orders in the Base ROE Complaint I proceeding, and remanded the case for further proceedings consistent with its order. The Court agreed with both the TOs (that the FERC did not meet the Section 206 obligation to first find the existing rate unlawful before setting the new rate) and "Customers" (that the 10.57% ROE was not based on reasoned decision-making, and was a departure from past precedent of setting the ROE at the midpoint of the zone of reasonableness).

²⁵ The 2012 Base ROE Complaint, filed by Environment Northeast (now known as Acadia Center), Greater Boston Real Estate Board, National Consumer Law Center, and the NEPOOL Industrial Customer Coalition ("NICC", and together, the "2012 Complainants"), challenged the TOs' 11.14% ROE, and seeks a reduction of the Base ROE to 8.7%.

²⁶ The 2014 Base ROE Complaint, filed July 31, 2014 by the Massachusetts Attorney General, together with a group of State Advocates, Publicly Owned Entities, End Users, and End User Organizations (together, the "2014 ROE Complainants"), seeks to reduce the current 11.14% Base ROE to 8.84% (but in any case no more than 9.44%) and to cap the Combined ROE for all rate base components at 12.54%. 2014 ROE Complainants state that they submitted this Complaint seeking refund protection against payments based on a pre-incentives Base ROE of 11.14%, and a reduction in the Combined ROE, relief as yet not afforded through the prior ROE proceedings.

²⁷ *Environment Northeast v. Bangor Hydro-Elec. Co. and Mass. Att'y Gen. v. Bangor Hydro-Elec. Co.*, 154 FERC ¶ 63,024 (Mar. 22, 2016) ("*2012/14 ROE Initial Decision*").

²⁸ The 4th ROE Complaint asked the FERC to reduce the TOs' current 10.57% return on equity ("Base ROE") to 8.93% and to determine that the upper end of the zone of reasonableness (which sets the incentives cap) is no higher than 11.24%. The FERC established hearing and settlement judge procedures (and set a refund effective date of April 29, 2016) for the 4th ROE Complaint on September 20, 2016. Settlement procedures did not lead to a settlement, were terminated, and hearings were held subsequently held December 11-15,

27, 2017.²⁹ The *Base ROE IV Initial Decision* concluded that the currently-filed base ROE of 10.57%, which may reach a maximum ROE of 11.74% with incentive adders, was **not** unjust and unreasonable for the Complaint IV period, and hence was not unlawful under Section 206 of the FPA.³⁰ Parties in this proceeding filed briefs on exception to the FERC, which has not yet issued an opinion on the *Base ROE IV Initial Decision*.

October 16, 2018 Order Proposing Methodology for Addressing ROE Issues Remanded in Emera Maine and Directing Briefs. On October 16, 2018, the FERC, addressing the issues that were remanded in *Emera Maine*, proposed a new methodology for determining whether an existing ROE remains just and reasonable.³¹ The FERC indicated its intention that the methodology be its policy going forward, including in the four currently pending New England proceedings (see, however, *Opinion 569-A*³² (EL14-12; EL15-45) in Section XI below). The FERC established a paper hearing on how its proposed methodology should apply to the four pending ROE proceedings.³³

At highest level, the new methodology will determine whether (1) an existing ROE is unjust and unreasonable under the first prong of FPA Section 206 and (2) if so, what the replacement ROE should be under the second prong of FPA Section 206. In determining whether an existing ROE is unjust and under the first prong of Section 206, the FERC stated that it will determine a “composite” zone of reasonableness based on the results of three models: the Discounted Cash Flow (“DCF”), Capital Asset Pricing Model (“CAPM”), and Expected Earnings models. Within that composite zone, a smaller, “presumptively reasonable” zone will be established. Absent additional evidence to the contrary, if the utility’s existing ROE falls within the presumptively reasonable zone, it is not unjust and unreasonable. Changes in capital market conditions since the existing ROE was established may be considered in assessing whether the ROE is unjust and unreasonable.

If the FERC finds an existing ROE unjust and unreasonable, it will then determine the new just and reasonable ROE using an averaging process. For a diverse group of average risk utilities, FERC will average four values: the midpoints of the DCF, CAPM and Expected Earnings models, and the results of the Risk Premium model. For a single utility of average risk, the FERC will average the medians rather than the midpoints. The FERC said that it would continue to use the same proxy group criteria it established in *Opinion 531* to run the ROE models, but it made a significant change to the manner in which it will apply the high-end outlier test.

The FERC provided preliminary analysis of how it would apply the proposed methodology in the Base ROE I Complaint, suggesting that it would affirm its holding that an 11.14% Base ROE is unjust and

2017. The September 26, 2016 order was challenged on rehearing, but rehearing of that order was denied on January 16, 2018. *Belmont Mun. Light Dept. v. Central Me. Power Co.*, 156 FERC ¶ 61,198 (Sep. 20, 2016) (“*Base ROE Complaint IV Order*”), *reh’g denied*, 162 FERC ¶ 61,035 (Jan. 18, 2018) (together, the “*Base ROE Complaint IV Orders*”). The *Base ROE Complaint IV Orders*, as described in Section XVI below, have been appealed to, and are pending before, the DC Circuit.

²⁹ *Belmont Mun. Light Dept. v. Central Me. Power Co.*, 162 FERC ¶ 63,026 (Mar. 27, 2018) (“*Base ROE Complaint IV Initial Decision*”).

³⁰ *Id.* at P 2.; Finding of Fact (B).

³¹ *Coakley v. Bangor Hydro-Elec. Co.*, 165 FERC ¶ 61,030 (Oct. 18, 2018) (“*Order Directing Briefs*” or “*Coakley*”).

³² *Ass’n of Buss. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A, 171 FERC ¶ 61,154 (2020) (“*Opinion 569-A*”). The refinements to the FERC’s ROE methodology included: (i) the use of the Risk Premium model instead of only relying on the DCF model and CAPM under both prongs of FPA Section 206; (ii) adjusting the relative weighting of long- and short-term growth rates, increasing the weight for the short-term growth rate to 80% and reducing to 20% the weight given to the long-term growth rate in the two-step DCF model; (iii) modifying the high-end outlier test to treat any proxy company as high-end outlier if its cost of equity estimated under the model in question is more than 200% of the median result of all the potential proxy group members in that model before any high- or low-end outlier test is applied, subject to a natural break analysis. This is a shift from the 150% threshold applied in *Opinion 569*; and (iv) calculating the zone of reasonableness in equal thirds, instead of using the quartile approach that was applied in *Opinion 569*.

³³ *Id.* at P 19.

unreasonable. The FERC suggested that it would adopt a 10.41% Base ROE and cap any preexisting incentive-based total ROE at 13.08%.³⁴ The new ROE would be effective as of the date of *Opinion 531-A*, or October 16, 2014. Accordingly, the issue to be addressed in the Base ROE Complaint II proceeding is whether the ROE established on remand in the first complaint proceeding remained just and reasonable based on financial data for the six-month period September 2013 through February 2014 addressed by the evidence presented by the participants in the second proceeding. Similarly, briefing in the third and fourth complaints will have to address whether whatever ROE is in effect as a result of the immediately preceding complaint proceeding continues to be just and reasonable.

The FERC directed participants in the four proceedings to submit briefs regarding the proposed approaches to the FPA section 206 inquiry and how to apply them to the complaints (separate briefs for each proceeding). Additional financial data or evidence concerning economic conditions in any proceeding must relate to periods before the conclusion of the hearings in the relevant complaint proceeding. Following a FERC notice granting a request by the TOs and Customers³⁵ for an extension of time to submit briefs, the latest date for filing initial and reply briefs was extended to January 11 and March 8, 2019, respectively. On January 11, initial briefs were filed by EMCOS, Complainant-Aligned Parties, TOs, Edison Electric Institute (“EEI”), Louisiana PSC, Southern California Edison, and AEP. As part of their initial briefs, each of the Louisiana PSC, SEC and AEP also moved to intervene out-of-time. Those interventions were opposed by the TOs on January 24, 2019. The Louisiana PSC answered the TOs’ January 24 motion on February 12. Reply briefs were due March 8, 2019 and were submitted by the TOs, Complainant-Aligned Parties, EMCOS, and FERC Trial Staff.

TOs Request to Re-Open Record and file Supplemental Paper Hearing Brief. On December 26, 2019, the TOs filed a Supplemental Brief that addresses the consequences of the November 21 *MISO ROE Order*³⁶ and requested that the FERC re-open the record to permit that additional testimony on the impacts of the *MISO ROE Order*’s changes. On January 21, 2020, EMCOS and CAPs opposed the TOs’ request and brief.

These matters remain pending before the FERC. If you have any questions concerning these matters, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com) or Joe Fagan (202-218-3901; jfagan@daypitney.com).

II. Rate, ICR, FCA, Cost Recovery Filings

- **FirstLight CIP IROL (Schedule 17) Cost Recovery Schedule Filing (ER22-2876)**

On September 16, 2022, FirstLight Power Management LLC (“FirstLight”) requested FERC acceptance of a proposed rate schedule to allow FirstLight to begin the recovery period for certain Interconnection Reliability Operating Limits Critical Infrastructure Protection costs (“CIP-IROL Costs”) of its affiliated generation facilities under Schedule 17 of the ISO-NE Tariff. FirstLight stated that the rate schedule will provide interested parties notice of FirstLight’s intent to recover CIP-IROL Costs for each affiliated facility designated as an IROL-Critical Facility, and an order accepting the rate schedule will provide an effective date after which associated costs incurred can be recovered following completion of the process contemplated by Schedule 17 and a subsequent Section 205 filing identifying the specific costs to be recovered. A September 16, 2022 effective date was requested. Comments on this filing are due on or before **October 5, 2022**. Thus far, NESCOE has filed a doc-less intervention. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

³⁴ *Id.* at P 59.

³⁵ For purposes of the motion seeking clarification, “Customers” are CT PURA, MA AG and EMCOS.

³⁶ *Ass’n of Buss. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (Nov. 21, 2019) (“*MISO ROE Order*”), *order on reh’g*, Opinion No. 569-A, 171 FERC ¶ 61,154 (May 21, 2020).

- **NESCOE 5-year (2023-2027) *Pro Forma* Budget (ER22-2812)**

On September 6, 2022, NESCOE filed its fourth 5-year *pro forma* budget covering years 2023 - 2027 (the “5-year *Pro Forma* Budget”) in accordance with the Memorandum of Understanding (“MOU”) among ISO-NE, NEPOOL and NESCOE. The 5-year *Pro Forma* Budget was supported by the Participants Committee at its September meeting. Comments on this filing were due on or before September 27. NEPOOL filed comments supporting the 5-year *Pro Forma* Budget on September 27. National Grid and Eversource filed doc-less interventions. This matter is pending before the FERC. If you have any questions concerning this proceeding, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **FCA17 De-List Bids Filing (ER22-2651)**

On September 8, 2022, the FERC accepted ISO-NE’s August 10, 2022 filing describing the Permanent De-List Bids and Retirement De-List Bids that were submitted on or prior to the May 6, 2022 FCA17 Existing Capacity Retirement Deadline.³⁷ ISO-NE reported that it received 3 Permanent De-List Bids and 2 Retirement De-List Bids. The bids were for resources located in the VT, South Eastern Massachusetts, and Western Central MA Load Zones, with 20.362 MWs of aggregate capacity. All of the Bids were for resources under 20 MW or that did not meet the affiliation requirements that would have required Internal Market Monitor (“IMM”) review. The IMM’s determination regarding those bids is described in the version of the filing that was filed confidentially as required under §13.8.1(a) of Market Rule 1. The FERC accepted the filing effective as of October 9, 2022, as requested. Unless the September 8 order is challenged, this proceeding will be concluded. If you have any questions concerning this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Essential Power Newington CIP-IROL (Schedule 17) Section 205 Cost Recovery Filing (ER22-2469)**

On September 20, 2022, the FERC accepted³⁸ the request by Essential Power Newington (“EP Newington”) for its recovery, pursuant to its Schedule 17 Rate Schedule,³⁹ of **\$360,261** in Interconnection Reliability Operating Limits Critical Infrastructure Protection costs (“CIP-IROL Costs”) for the February 18, 2021 through June 30, 2022 period (“Cost Recovery Period”). In accepting the recovery of the CIP-IROL Costs, the FERC found that EP Newington had met all of its ISO-NE Schedule 17 requirements.⁴⁰ The FERC accepted EP Newington’s CIP-IROL Cost Recovery effective September 21, 2022, as requested. Unless the September 20 order is challenged, this proceeding will be concluded. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Mystic COS Agreement Updates to Reflect Constellation Spin Transaction⁴¹ (ER22-1192)**

As previously reported, on May 2, 2022, the FERC accepted and suspended in part Constellation Mystic Power, LLC’s (“Mystic’s”) changes to its Amended and Restated Cost-of-Service Agreement (“COS Agreement”) to reflect Mystic’s current upstream ownership.⁴² The changes were accepted effective as of Jun 1, 2022, but subject to refund. Specifically, the FERC accepted (i) Mystic’s changes throughout the COS Agreement to replace the term

³⁷ *ISO New England Inc.*, Docket No. ER22-2651-000 (Sep. 8, 2022) (unpublished letter order).

³⁸ *Essential Power Newington, LLC*, 180 FERC ¶ 61,169 (Sep 20, 2022).

³⁹ See *Essential Power Newington, LLC*, Docket No. ER21-1171 (Mar. 31, 2021) (delegated letter order) (accepting Newington’s CIP-IROL Rate Schedule effective Feb. 18, 2021, starting the eligible Cost Recovery Period).

⁴⁰ *Id.* at P 13. The ISO-NE Tariff Schedule 17 requirements include: (1) establishing the beginning of the Cost Recovery Period via an FPA Section 205 filing; (2) completing the Pre-Filing Review Process; (3) submitting all the information required by Table 1 of Attachment A to Schedule 17; (4) submitting only costs to comply with the CIP Reliability Standards for the medium-impact assets that are above and beyond the costs paid to comply with CIP Reliability Standards for the low-impact assets; and (5) sufficiently supporting those costs.

⁴¹ In the Spin Transaction, Constellation’s and Mystic’s corporate parent changed from Exelon Corporation to a newly-created holding company, Constellation Energy Corporation (“Constellation Corporation”). Mystic continues to be an indirect wholly-owned subsidiary of Constellation Energy Generation, LLC, which in turn is a direct, wholly-owned subsidiary of Constellation Corporation.

⁴² *Constellation Mystic Power, LLC*, 179 FERC ¶ 61,081 (May 2, 2022) (“May 2, 2022 Order”).

“Exelon Generation Company, LLC” with “Constellation Energy Generation, LLC”; and (ii) the addition of language to the true-up methodology that provides that the values included in the true-up methodology exclude costs associated with the Spin Transaction. However, noting that Mystic’s contested proposal on the issue of capital structure and cost of debt raises issues of material fact that cannot be resolved based on the record, the FERC accepted and suspended this portion of the COS Agreement for a nominal period, to become effective June 1, 2022, subject to refund and to the outcome of paper hearing procedures. The FERC also directed the appointment of a settlement judge, holding its paper hearing in abeyance so as to provide the participants an opportunity for settlement discussions.⁴³

Settlement Judge Procedures Terminated. On May 10, 2022, Chief Judge Cintron designated Judge Steven Glazer as the Settlement Judge in this proceeding. Judge Glazer convened three settlement conferences -- on June 2, June 28, and July 14, 2022. In each of his two status reports (June 23 and July 26, 2022), Judge Glazer recommended that, “as the participants continue to engage in good faith efforts to reach settlement, that settlement procedures continue.” In addition, in his July 26 report, Judge Glazer reported that, “the participants reached an agreement to settle their issues. The participants have moved to documenting the agreement in principle.” On July 19, Deputy Chief ALJ Andrew Satten substituted ALJ Patricia M. French for Judge Glazer (who has now retired). Judge French conducted the remainder of the settlement judge procedures, which ended on October 4, 2022 following her certification to the Commission of the Settlement Agreement described immediately below.

Settlement Agreement (-001) and Interim Implementation of Settlement Rate (-002). On September 8, 2022, Mystic filed an offer of settlement and related materials (“Offer of Settlement”) to resolve all issues set for hearing in this proceeding. Comments supporting the Offer of Settlement were filed by FERC Trial Staff on September 22, 2022. No reply comments were filed. Judge French certified the uncontested Settlement to the Commission on October 4, 2022. The Offer of Settlement is pending before the FERC.

Mystic also requested authorization to implement on an interim basis (until the Settlement Agreement is approved) the Settlement Rate agreed upon in the Settlement Agreement.⁴⁴ That request was approved by Acting Chief ALJ Satten on September 28, 2022.⁴⁵ The interim Settlement Rate, which will be reflected in ISO-NE’s next invoices for Monthly Charges, will remain in effect pending the Commission’s consideration of the Offer of Settlement and will be subject to refund or surcharge if and as appropriate.

If you have questions on any aspect of this proceeding, please contact Joe Fagan (202-218-3901; jfagan@daypitney.com) or Sebastian Lombardi (860-275-0663; slombardi@daypitney.com).

⁴³ *Id.* at P 24.

⁴⁴ The interim rate constitutes a reduction, achieved through a reduced proportion of equity and a lower cost of debt used in Mystic’s capital structure and rate of return calculation.

⁴⁵ *Constellation Mystic Power, LLC*, 180 FERC ¶ 63,032 (Sep. 28, 2022) (“*Mystic Interim Settlement Rate Order*”).

- **Mystic 8/9 Cost of Service Agreement (ER18-1639)**

As previously reported, each of the *July 17 Orders*⁴⁶ and the *Mystic ROE Orders*,⁴⁷ which addressed in part or in whole the COS Agreement⁴⁸ among Mystic, Constellation Energy Generation, LLC⁴⁹ (“Constellation”) and ISO-NE, have been appealed to, and consolidated before, the DC Circuit (see Section XVI below).

(-000) First CapEx Info. Filing. On September 15, 2021, Mystic submitted, as required by orders in this proceeding and Sections I.B.1.i. and II.6. of Schedule 3A of the COS Agreement (“Protocols”), its informational filing to provide support for the capital expenditures and related costs that Mystic projects will be collected as an expense between June 1, 2022 to December 31, 2022 (“First CapEx Projects Info. Filing”). Formal challenges to the September 15 filing were submitted by the Eastern New England Customer-Owned Systems (“ENECOS”) and NESCOE. Mystic responded to the formal challenges on November 17, 2021 asserting that the challenges should be rejected without further procedures. ENECOS and NESCOE replied to Mystic’s November 17 reply on December 2 and December 6, 2021, respectively.

On April 28, 2022, the FERC issued an order granting in part, and denying in part, ENECOS’ and NESCOE’s formal challenges, subject to refund, and established hearing and settlement judge procedures.⁵⁰ The FERC summarily denied NESCOE’s challenge regarding the update to the AFRR and ENECOS’ challenge with regard to the improper booking of items. Those items, and challenges to other underlying projected costs, may be challenged in connection with Mystic’s Second Informational Filing (where the informal challenge process begins on April 1, 2022 and the formal challenge process begins on September 15, 2022).⁵¹ The FERC reiterated that all items except return on equity and depreciation are subject to the true-up process described in Schedule 3A of the COS Agreement, not just projected capital expenditures. However, with respect to NESCOE’s and ENECOS’ allegations that Mystic failed to support all of its projected capital expenditures, the FERC found that the First CapEx Projects Info. Filing raised issues of material fact that could not be resolved based on the record and would be more appropriately addressed under hearing and settlement judge procedures.⁵² Accordingly, the FERC set these matters for a trial-type evidentiary hearing. The FERC encouraged the parties to make every effort to settle their

⁴⁶ The “July 17 Orders” are the *July 2018 Rehearing Order*, *Dec 2018 Rehearing Order* and the *July 17 Compliance Order*. *Constellation Mystic Power, LLC*, 164 FERC ¶ 61,022 (July 13, 2018) (“*July 2018 Order*”), *clarif. granted in part and denied in part, reh’g denied*, 172 FERC ¶ 61,043 (July 17, 2020) (“*July 2018 Rehearing Order*”); *Constellation Mystic Power, LLC*, 165 FERC ¶ 61,267 (Dec. 20, 2018) (“*Dec 2018 Order*”), *set aside in part, clarification granted in part and clarification denied in part*, 172 FERC ¶ 61,044 (July 17, 2020) (“*Dec 2018 Rehearing Order*”); *Constellation Mystic Power, LLC*, 172 FERC ¶ 61,045 (July 17, 2020) (“*July 17 Compliance Order*”) (order on compliance and directing further compliance).

⁴⁷ *Constellation Mystic Power, LLC*, 176 FERC ¶ 61,019 (July 15, 2021) (“*Mystic ROE Order*”) (setting the base ROE for the Mystic COS Agreement at 9.33%); *Constellation Mystic Power, LLC*, 177 FERC ¶ 61,106 (Nov. 18, 2021) (“*Mystic ROE First Allegheny Order*”) (re-setting Mystic’s ROE to 9.19%); *Constellation Mystic Power, LLC*, 177 FERC ¶ 61,106 (Nov. 18, 2021) (“*Mystic ROE Second Allegheny Order*”), and together with the *Mystic ROE Order* and the *Mystic ROE Allegheny Order*, the “*Mystic ROE Orders*”) (modifying the discussion in, but sustaining the results of, the *Mystic ROE First Allegheny Order*).

⁴⁸ The COS Agreement, submitted on May 16, 2018, is between Mystic, Exelon Generation Company, LLC (“ExGen”) and ISO-NE. The COS Agreement is to provide cost-of-service compensation to Mystic for continued operation of Mystic 8 & 9, which ISO-NE has requested be retained to ensure fuel security for the New England region, for the period of June 1, 2022 to May 31, 2024. The COS Agreement provides for recovery of Mystic’s fixed and variable costs of operating Mystic 8 & 9 over the 2-year term of the Agreement, which is based on the pro forma cost-of-service agreement contained in Appendix I to Market Rule 1, modified and updated to address Mystic’s unique circumstances, including the value placed on continued sourcing of fuel from the Distrigas liquefied natural gas (“LNG”) facility.

⁴⁹ On Feb. 1, 2022, Exelon Generation Company, LLC was renamed and is now known as Constellation Energy Generation, LLC.

⁵⁰ *Constellation Mystic Power, LLC*, 179 FERC ¶ 61,011 (Apr. 28, 2022) (“*Mystic First CapEx Info. Filing Order*”).

⁵¹ *Id.* at PP 23-24.

⁵² *Id.* at P 26.

disputes before hearing procedures are commenced, and to that end, will hold the hearing in abeyance pending the appointment of a settlement judge and completion of settlement judge procedures.⁵³

(-000) Second CapEx Info. Filing. On September 15, 2022, Mystic submitted, as required by orders in this proceeding and Sections I.B.1.i. and II.6. of Schedule 3A of the COS Agreement (“Protocols”) its “Second CapEx Info Filing” to provide support for the capital expenditures and related costs that Mystic projects will be collected as an expense between January 1, 2023 to December 31, 2023 (“2023 CapEx Projects”). This filing will not be noticed for public comment by the FERC.

(-014) Revised ROE (Sixth) Compliance Filing. Still pending is Mystic’s December 20, 2021 filing in response to the requirements of the *Mystic ROE Allegheny Order*. The sixth compliance filing revised (i) the Cost of Common Equity figures from 9.33% to 9.19%, for both Mystic 8&9 and Everett Marine Terminal (“Everett”), and (ii) the stated Annual Fixed Revenue Requirements for both the 2022/23 and 2023/24 Capacity Commitment Periods. Comments on the sixth compliance filing were due on or before January 10, 2022; none were filed. The Sixth Compliance Filing remains pending before the FERC.

(-015) First CapEx Info. Filing Settlement Judge Procedures. On May 4, Chief Judge Cintron designated Judge Andrea McBarnette as the Settlement Judge. A first settlement conference was convened on Wednesday June 15, 2022. A second settlement conference is scheduled for **November 17, 2022**.

If you have questions on any aspect of this proceeding, please contact Joe Fagan (202-218-3901; jfagan@daypitney.com) or Margaret Czepiel (202-218-3906; mczepiel@daypitney.com).

- **Transmission Rate Annual (2022-23) Update/Informational Filing (ER09-1532; RT04-2)**

On July 29, 2022, the PTO AC submitted its 2023 annual filing identifying adjustments to Regional Transmission Service charges, Local Service charges, and Schedule 12C Costs under Section II of the Tariff. The filing reflected the charges to be assessed under annual transmission and settlement formula rates, reflecting actual 2021 cost data, plus forecasted revenue requirements associated with projected PTF, Local Service and Schedule 12C capital additions for 2022 and 2023, as well as the Annual True-up including associated interest. As prescribed in the Interim Protocols,⁵⁴ the formula rates that will be in effect for 2023 include a billing true up of seven months of 2021 (June-December). The PTO AC states that the annual updates results in a Pool “postage stamp” RNS Rate of \$140.94 /kW-year effective January 1, 2023, a decrease of \$1.84 /kW-year from the charges that went into effect on January 1, 2022. In addition, the filing includes updates to the revenue requirements for Scheduling, System Control and Dispatch Services (the Schedule 1 formula rate), which result in a Schedule 1 charge of \$1.75 kW-year (effective June 1, 2022 through May 31, 2023), a \$0.12/kW-year decrease from the Schedule 1 charge that last went into effect on June 1, 2022. This filing was not noticed for public comment.

The July 29 filing was reviewed with the Transmission Committee at its August 16, 2022 summer meeting and at an August 22, 2022 technical session for Interested Parties. The July 29 filing triggered the commencement of the Information Exchange Period and a Review Period under the Interim Protocols. Interested Parties have until September 15, 2022 to submit information and document requests, and the PTOs are required to make a good faith effort to respond to all requests within 15 days, but by no later than October 15, 2022. During the Review Period, Interested Parties have until November 15, 2022 to submit Informal Challenges to the PTOs, and the PTOs are required to make a good faith effort to respond to any Informal Challenges no later than December 15, 2022. Interested Parties have until January 31, 2023 to file a

⁵³ *Id.* at P 27.

⁵⁴ The Interim Formula Rate Protocols (“Interim Protocols”) became effective June 15, 2021, and will be replaced by permanent Formula Rate Protocols that will become effective June 15, 2023. See Settlement Agreement resolving all issues in Docket No. EL16-19 (“Settlement”) approved by the FERC on Dec. 28, 2020, in *ISO New England et al.*, 173 FERC ¶ 61,270 (2020) (“Settlement Order”).

Formal Challenge with the FERC. If there are questions on this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

III. Market Rule and Information Policy Changes, Interpretations and Waiver Requests

- **CSF Revisions (ER22-2546)**

On September 23, 2022, the FERC accepted changes to Market Rule 1, jointly filed by ISO-NE and NEPOOL, to allow storage facilities incapable of consuming electricity from the grid to participate in the New England Markets as Continuous Storage Facilities (“CSF”).⁵⁵ The changes were accepted effective October 1, 2022, as requested. Unless the September 23 order is challenged, this proceeding will be concluded. If you have any questions concerning this matter, please contact Rosendo Garza (860-275-0660; rgarza@daypitney.com).

- **New England’s Order 2222 Compliance Filing (ER22-983)**

New England’s Order 2222 Compliance Filing remains pending before the FERC. As previously reported, ISO-NE, NEPOOL and the PTO AC (“Filing Parties”) submitted on February 2, 2022 Tariff revisions (“Order 2222 Changes”) in response to the requirements of Order 2222. The Filing Parties stated that the Order 2222 Changes create a pathway for Distributed Energy Resource Aggregations (“DERAs”) to participate in the New England Markets by: creating new, and modifying existing, market participation models for DERA use; establishing eligibility requirements for DERA participation (including size, location, information and data requirements); setting bidding parameters for DERAs; requiring metering and telemetry arrangements for DERAs and individual Distributed Energy Resources (“DERs”); and providing for coordination with distribution utilities and relevant electric retail regulatory authorities (“RERRAs”) for DERA/DER registration, operations, and dispute resolution purposes.

Comments, following an extension of time granted by the FERC in response to a request by Advanced Energy Management Alliance (“AEMA”), were due on or before April 1, 2022. NEPOOL filed supplemental comments on March 28. Protests and comments were filed by: [AEE/PowerOptions/SEIA](#); [Environmental Organizations](#);⁵⁶ [MA AG](#); [Voltus](#); [AEMA](#) and [4 New England US Senators](#).⁵⁷ Doc-less interventions were filed by: Avangrid (CMP/UI), Calpine, Centrica Business Solutions Optimize (out-of-time), Constellation, ENE, Enerwise, Eversource, FirstLight, MA AG, National Grid, NESCOE, NRG, MA DPU, MPUC (out-of-time), APPA, and EEI. ISO-NE (April 20) and National Grid/Avangrid/Eversource (April 19) filed answers to the protests and adverse comments. Since the last Report, [AEE/PowerOptions/SEIA](#) and [AEMA](#) answered the ISO-NE and National Grid/Avangrid/Eversource answers.

(-001) Deficiency Letter. On May 18, 2022, the FERC issued a 25-page deficiency letter directing ISO-NE to provide, on or before June 17, 2022, additional information and clarifications. ISO-NE filed its 39-page response to the deficiency letter on June 17, 2022. Comments in response to ISO-NE’s deficiency letter response were due on or before July 8, 2022 and a joint protest was filed by AEE, AEMA, PowerOptions, and SEIA (“[Joint Protest](#)”). The Joint Protest, while supportive of certain responses (those regarding the exemption of DERAs from the Small Generator Interconnection Procedures (“SGIP”) prior to 2026, locational requirements for DER aggregation, and the role of host utilities in identifying potential conflicts with retail program participation), protested the adequacy of ISO-NE responses regarding proposed metering and telemetering requirements for behind-the-meter (“BTM”)

⁵⁵ *ISO New England Inc. and New England Power Pool Participants Comm.*, Docket No. ER22-2546-000 (Sep. 23, 2022) (unpublished letter order).

⁵⁶ Environmental Organizations are Acadia Center, Conservation Law Foundation (“CLF”), Environmental Defense Fund (“EDF”), Massachusetts Climate Action Network, NRDC, Sierra Club, and the Sustainable FERC Project.

⁵⁷ Senators Markey (MA), Sanders (VT), Warren (MA), and Whitehouse (RI).

DERs. On July 25, 2022, ISO-NE answered the July 8 Joint Protest. On August 9, 2022, AEE, AEMA, PowerOptions, and SEIA [answered](#) ISO-NE's July 25 answer.

This matter is pending before the FERC. If you have any questions concerning this matter, please contact Sebastian Lombardi (860-275-0663; slombardi@daypitney.com); Eric Runge (617-345-4735; ekrunge@daypitney.com); or Rosendo Garza (860-275-0660; rgarza@daypitney.com).

- **IEP Remand (ER19-1428-005)**

On September 23, 2022, the FERC issued an order⁵⁸ directing ISO-NE to refile, on or before **Nov 23, 2022**, Tariff provisions governing the Inventoried Energy Program ("IEP") consistent with the D.C. Circuit's decision.⁵⁹ ISO-NE's proposed Tariff changes, which must remove nuclear, biomass, coal, and hydroelectric generators from the IEP, will be reviewed at the October 12-13 Markets Committee meeting. If you have any questions concerning this matter, please contact Sebastian Lombardi (860-275-0663; slombardi@daypitney.com) or Rosendo Garza (860-275-0660; rgarza@daypitney.com).

IV. OATT Amendments / TOAs / Coordination Agreements

- **Phase I/II HVDC-TF Order 881 Compliance Filing: HVDC TOA (ER22-2467) and Sched. 20-A Common Attachment M (ER22-2468)**

On July 22, 2022, following a requested 10-day extension of time granted by the FERC, a Phase I/II HVDC-TF Order 881 compliance filing was submitted in two parts ((i) changes to the HVDC TOA and (ii) changes to Schedule 20-Common Attachment M) by: ISO-NE, the Asset Owners,⁶⁰ and the Schedule 20A Service Providers.⁶¹ Specifically, the Filing proposed changes to the **HVDC TOA** (ER22-2467) to address the Order 881 requirements related to transmission ratings and rating procedures and to **Schedule 20A-Common** (ER22-2468) to ensure compliance with Order 881 with respect to transmission rating transparency and transmission service (together, the "Phase I/II HVDC-TF Order 881 Compliance Filing"). Comments on the Phase I/II HVDC-TF Order 881 Compliance Filing were due on or before August 12, 2022; none were filed. The IRH Management Committee submitted a doc-less intervention. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Order 881 Compliance Filing: New England (ER22-2357)**

As previously reported, ISO-NE, NEPOOL, the PTO AC, and CSC (the "Filing Parties") filed, on July 12, 2022, proposed revisions to the OATT in response to the requirements of Order 881⁶² ("Order 881 Compliance

⁵⁸ *ISO New England Inc.*, 180 FERC ¶ 61,181 (Sep. 23, 2022) ("2022 IEP Remand Order Directing Compliance").

⁵⁹ *Belmont Mun. Light Dept., et al., v. FERC*, 2022 WL 2182810 (June 17, 2022) (the "IEP Decision"). The IEP Decision leaves intact the FERC's June 2020 IEP Remand Order (*ISO New England Inc.*, 171 FERC ¶ 61,235 (June 18, 2020)) except for the inclusion of nuclear, biomass, coal, and hydroelectric generators in ISO-NE's IEP, the inclusion of which the Court found arbitrary and capricious (because those resources were unlikely to change their behavior in response to the IEP payments). Because the Court believed "there is not substantial doubt that FERC would have adopted IEP if it had not included these resources in the first place [and] IEP can function sensibly without them", the Court found that it had the authority to sever this portion from the overall program and therefore vacated that portion of IEP from the remainder of the IEP. The Court upheld the remainder of the IEP and remanded the matter to the FERC for further proceedings consistent with its opinion.

⁶⁰ The "Asset Owners" are, collectively, New England Hydro-Transmission Electric Company, New England Hydro-Transmission Corporation, New England Electric Transmission Corporation, and Vermont Electric Transmission Company ("VETCO").

⁶¹ The "Schedule 20A Service Providers" are: Central Maine Power Co. ("CMP"); The Conn. Light and Power Co. and Public Service Co. of NH ("Eversource"); Green Mountain Power Cor. ("GMP"); New England Power Co. ("NEP"); NSTAR Electric Co.; The United Illuminating Co. ("UI"); Vermont Electric Cooperative, Inc. ("VEC"); and Versant Power.

⁶² *Managing Transmission Line Ratings*, Order No. 881, 177 FERC ¶ 61,179 (Dec. 16, 2021); *Managing Transmission Line Ratings*, Order No. 881-A, 179 FERC ¶ 61,125 (May 19, 2022) (together, "Order 881").

Changes”). Specifically, the Filing Parties proposed the addition of a new Attachment Q to the OATT, and to revise OATT Schedules 18 (MTF; MTF Service) and 21 (Local Service - Common). The *Order 881* Compliance Changes (the Attachment Q and Schedule 18 changes) were supported by the Participants Committee at its June 21-23 Summer Meeting (Consent Agenda Item No. 2). An effective date of September 10, 2022 was requested, with changes to Attachment Q and Schedule 21 to become applicable by their own terms in July 2025. Comments on the *Order 881* Compliance Changes are due on or before August 2, 2022; none were filed. Eversource, Narragansett Electric Company (“Narragansett”) and National Grid filed doc-less interventions. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Order 676-J Compliance Filing Part I (CSC-Schedule 18-Attachment Z) (ER22-1168)**

On March 2, 2022, in response to the requirements of *Order 676-J*,⁶³ ISO-NE and CSC filed revisions to ISO-NE Tariff Schedule 18 Attachment Z to incorporate the new cybersecurity and PFV standards contained in the North American Energy Standards Board (“NAESB”) Wholesale Electric Quadrant (“WEQ”) Version 003.3 Standards (“Schedule 18 Order 676-J Part I Changes”).⁶⁴ An effective date as of the date of the FERC order accepting these changes was requested. Comments on this filing were due on or before March 23, 2022; none were filed. Doc-less interventions were filed by CSC and NEPOOL. There was no activity since the last Report and this matter remains pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Order 676-J Compliance Filing Part I (TOs-Schedule 20/21-Common) (ER22-1161)**

Also on March 2, 2022, in response to the requirements of *Order 676-J*, the PTO AC, ISO-NE, and the Schedule 20A Service Providers (“S20SPs”) (collectively, the “TOs”) filed revisions to ISO-NE Tariff Schedules 20A-Common and 21-Common to incorporate the new cybersecurity and PFV standards contained in NAESB WEQ Version 003.3 Standards (“Schedule 20/21-Common Order 676-J Part I Changes”).⁶⁴ An effective date as of the date the FERC may determine was requested. Comments on this filing were due on or before March 23, 2022; none were filed. Doc-less interventions were filed by NEPOOL and Eversource. There was no activity since the last Report and this matter remains pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Order 676-J Compliance Filing Part I (ISO-NE-Schedule 24) (ER22-1150)**

Again on March 2, 2022, in response to the requirements of *Order 676-J*, ISO-NE filed revisions to ISO-NE Tariff Schedule 24 (Incorporation by Reference of NAESB Standards) to incorporate the new cybersecurity and PFV standards contained in NAESB WEQ Version 003.3 Standards (“Schedule 24 Order 676-J Part I Changes”).⁶⁴ An effective date no earlier than June 2, 2022 was requested. The Transmission Committee recommended that the Participants Committee support the Schedule 24 Order 676-J Part I Changes at its March 23 meeting, and the Participants Committee supported the changes at the April 7 meeting (Consent Agenda Item # 1). Comments on this filing were due on or before March 23, 2022; none were filed. NEPOOL, Eversource, MA DPU, and National Grid submitted doc-less interventions. There was no activity since the last Report and this matter remains pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

⁶³ *Standards for Business Practices and Communication Protocols for Public Utilities*, Order No. 676-J, 175 FERC ¶ 61,139 (May 20, 2021) (“*Order 676-J*”). *Order 676-J* revised FERC regulations to incorporate by reference the latest version (Version 003.3) of the Standards for Business Practices and Communication Protocols for Public Utilities adopted by NAESB’s Wholesale Electric Quadrant. The WEQ Version 003.3 Standards include, in their entirety, the WEQ-023 Modeling Business Practice Standards contained in the WEQ Version 003.1 Standards, which address the technical issues affecting Available Transfer Capability (“ATC”) and Available Flowgate Capability (“AFC”) calculation for wholesale electric transmission services, with the addition of certain revisions and corrections. The FERC also revised its regulations to provide that transmission providers must avoid unduly discriminatory and preferential treatment in the calculation of ATC.

⁶⁴ Compliance filings for the rest of the WEQ Version 003.3 Standards (Schedule 24 Order 676-J Part II Changes) were due 12 months after implementation of the WEQ Version 003.2 Standards, or no earlier than Oct. 27, 2022.

V. Financial Assurance/Billing Policy Amendments**No Activity to Report****VI. Schedule 20/21/22/23 Changes & Agreements**

- **Schedule 21-RIE (ER23-16)**

On October 4, 2022, The Narragansett Electric Company d/b/a Rhode Island Energy (“RIE”) filed revisions to Schedule 21 and Attachment E of Section II of the OATT to establish RIE’s rates, terms, and conditions for the provision of Local Service and to accommodate RIE as a new Participating Transmission Owner (“PTO”). Comments on this filing were due on or before September 16, 2022; none were filed. National Grid filed a doc-less intervention on September 13. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **Schedule 21-NEP: Narragansett/Pawtucket Power Decommissioning CRA (ER22-2732)**

On August 26, 2022, Narragansett filed a Decommissioning Cost Reimbursement Agreement (“CRA”) with Pawtucket Power Associates LP (Pawtucket”) to facilitate the performance of certain work that Pawtucket has requested Narragansett undertake to support the decommissioning of certain interconnection facilities and related equipment for Pawtucket’s 69 MW Rhode Island generating facility that was completely retired on June 1, 2022. Comments on this filing were due on or before September 16, 2022; none were filed. National Grid filed a doc-less intervention on September 13. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **Schedule 21-VP: 2021 Annual Update Settlement Agreement (ER20-2119-001)**

On March 25, 2022, Versant Power submitted a joint offer of settlement between itself and the MPUC to resolve all issues raised by the MPUC in response to Versant’s 2021 annual charges update filed, as previously reported, on June 15, 2021, and as amended on June 20, 2021 and July 8, 2021 (the “Versant 2021 Annual Update Settlement Agreement”). Under Part V of Attachment P-EM to Schedule 21-VP, “Interested Parties shall have the opportunity to conduct discovery seeking any information relevant to implementation of the [Attachment P-EM] Rate Formula. . . .” and follow a dispute resolution procedure set forth there. In accordance with those provisions, the MPUC identified certain disputes with the 2021 Annual Update, all of which are resolved by the Versant 2021 Annual Update Settlement Agreement. Comments on the Versant 2021 Annual Update Settlement Agreement were due on or before April 14, 2022; none were filed. This matter remains pending before the FERC. If you have any questions concerning this proceeding, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Schedule 21-VP: 2020 Annual Update Settlement Agreement (ER15-1434-005)**

On November 19, 2021, Versant Power submitted a joint offer of settlement between itself and the MPUC to resolve all issues raised by the MPUC in response to Versant’s 2020 annual charges update filed, as previously reported, on June 15, 2020 (the “Versant 2020 Annual Update Settlement Agreement”). Under Part V of Attachment P-EM to Schedule 21-VP, “Interested Parties shall have the opportunity to conduct discovery seeking any information relevant to implementation of the [Attachment P-EM] Rate Formula. . . .” and follow a dispute resolution procedure set forth there. In accordance with those provisions, the MPUC identified certain disputes with the 2020 Annual Update, all of which are resolved by the Versant 2020 Annual Update Settlement Agreement. Comments on the Versant 2020 Annual Update Settlement Agreement were due on or before December 10, 2021; reply comments, December 19, 2021; none were filed. There was no activity since the last Report and this matter remains pending before the FERC. If you have any questions concerning this proceeding, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

VII. NEPOOL Agreement/Participants Agreement Amendments*No Activity to Report***VIII. Regional Reports**

- **Opinion 531-A Local Refund Report: FG&E (EL11-66)**

Fitchburg Gas & Electric's ("FG&E") June 29, 2015 refund report for its customers taking local service during *Opinion 531-A*'s refund period remains pending. If there are questions on this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Opinions 531-A/531-B Regional Refund Reports (EL11-66)**

The TOs' November 2, 2015 refund report documenting resettlements of regional transmission charges by ISO-NE in compliance with *Opinions No. 531-A*⁶⁵ and *531-B*⁶⁶ also remains pending. If there are questions on this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Opinions 531-A/531-B Local Refund Reports (EL11-66)**

The *Opinions 531-A and 531-B* refund reports filed by the following TOs for their customers taking local service during the refund period also remain pending before the FERC:

- | | | |
|-----------------------|-----------------|-----------------------|
| ◆ Central Maine Power | ◆ National Grid | ◆ United Illuminating |
| ◆ Emera Maine | ◆ NHT | ◆ VTransco |
| ◆ Eversource | ◆ NSTAR | |

If there are questions on this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Capital Projects Report - 2022 Q2 (ER22-2667)**

On September 20, 2022, the FERC accepted ISO-NE's Capital Projects Report and Unamortized Cost Schedule covering the second quarter ("Q2") of calendar year 2022 (the "Report").⁶⁷ As previously reported, Report highlights included the following new projects: (i) New Cyber Security Operations Center (\$934,800); (ii) 2022 Issue Resolution Project (\$820,000); and (iii) Privileged Account Management Security Enhancements (\$706,300). Significant changes for Chartered Projects (2022 budget impact in parentheses) were: (i) Physical Security Improvement Project (\$369,000 decrease); (ii) FCTS Infrastructure Conversion Part III (\$285,000 decrease); (iii) nGEM Software Development Part II (\$637,000 decrease); (iv) nGEM Hardware Phase II (\$192,000 decrease); and (v) PI Historian for Short-Term Phasor Measurement Units Data Repository (\$130,000 increase). Unless the September 20 order is challenged, this proceeding will be concluded. If you have any questions concerning this matter, please contact Paul Belval (860-275-0381; pnbelval@daypitney.com).

⁶⁵ *Martha Coakley, Mass. Att'y Gen.*, 149 FERC ¶ 61,032 (Oct. 16, 2014) ("*Opinion 531-A*").

⁶⁶ *Martha Coakley, Mass. Att'y Gen.*, Opinion No. 531-B, 150 FERC ¶ 61,165 (Mar. 3, 2015) ("*Opinion 531-B*").

⁶⁷ *ISO New England Inc.*, Docket No. ER22-2667-000 (Sep. 20, 2022) (unpublished letter order).

- **Interconnection Study Metrics Processing Time Exceedance Report Q2 2022 (ER19-1951)**

On August 12, 2022, ISO-NE filed, as required,⁶⁸ public and confidential⁶⁹ versions of its Interconnection Study Metrics Processing Time Exceedance Report (the “Exceedance Report”) for the Second Quarter of 2022 (“2022 Q2”). ISO-NE reported that all three of the 2022 Q2 *Interconnection Feasibility Study (“IFS”) reports* delivered to Interconnection Customers were delivered later than the best efforts completion timeline.⁷⁰ In addition, five IFS Reports that are not yet completed have exceeded the 90-day completion expectation. The average mean time from ISO-NE’s receipt of the executed IFS Agreement to delivery of the completed IFS report to the Interconnection Customer was 158.7 days (20 days sooner than Q1 2022). Five of the seven *System Impact Study (“SIS”) reports* delivered to Interconnection Customers were delivered later than the best efforts completion timeline of 270 days. 12 SIS reports that are not yet completed have also exceeded the 270-day completion expectation. The average mean time from ISO-NE’s receipt of the executed SIS Agreement to delivery of the completed SIS report to the Interconnection Customer was 525.6 days (up 65 days from 2022 Q1). One Facility Study was delivered to an Interconnection Customer, and was delivered later than the best efforts completion timeline of 180 days. Facility Studies in progress have not exceeded the 90-day/180-day completion expectation. Section 4 of the Report identified steps ISO-NE has identified to remedy issues and prevent future delays, including mitigating the impact of backlogs and initiating clustering, moving to earlier in the process certain Interconnection Customer data reviews, and enhanced information sharing and coordination efforts with Interconnecting TOs. This report was not noticed for public comment.

- **Reserve Market Compliance (33rd) Semi-Annual Report (ER06-613)**

As directed by the original ASM II Order,⁷¹ as modified,⁷² ISO-NE submitted its 33rd semi-annual reserve market compliance report on October 3, 2022. In the 33rd report, ISO-NE stated that it “will begin discussions with stakeholders in the coming months regarding development of day-ahead ancillary services, and is currently seeking to file the proposed market design changes by the end of 2023. As those discussions proceed, the ISO will update the Commission regarding the relation of the proposed day-ahead ancillary services to a forward TMSR market, through future reports in this docket.” The October 3 report was not noticed for public comment. If there are questions on this matter, please contact Dave Doot (860-275-0102; dtdoot@daypitney.com).

IX. Membership Filings

- **October 2022 Membership Filing (ER22-2982)⁷³**

On September 30 2022, NEPOOL requested that the FERC accept (i) the memberships of Danske Commodities US LLC (Supplier Sector); The Massachusetts Climate Action Network (End User Sector); MFT Energy US 1 LLC (Supplier Sector); and Spotlight Power LLC (Supplier Sector); and (ii) the termination of the Participant

⁶⁸ Under section 3.5.4 of ISO-NE’s Large Generator Interconnection Procedures (“LGIP”), ISO-NE must submit an informational report to the FERC describing each study that exceeds its Interconnection Study deadline, the basis for the delay, and any steps taken to remedy the issue and prevent such delays in the future. The Exceedance Report must be filed within 45 days of the end of the calendar quarter, and ISO-NE must continue to report the information until it reports four consecutive quarters where the delayed amounts do not exceed 25 percent of all the studies conducted for any study type in two consecutive quarters.

⁶⁹ ISO-NE requested that the information contained in Section 3 of the un-redacted version of the Exceedance Report, which contains detailed information regarding ongoing Interconnection Studies and if released could harm or prejudice the competitive position of the Interconnection Customer, be treated as confidential under FERC regulations.

⁷⁰ 90 days from the Interconnection Customer’s execution of the study agreement.

⁷¹ See *NEPOOL and ISO New England Inc.*, 115 FERC ¶ 61,175 (2006) (“ASM II Order”) (directing the ISO to provide updates on the implementation of a forward TMSR market), *reh’g denied* 117 FERC ¶ 61,106 (2006).

⁷² See *NEPOOL and ISO New England Inc.*, 123 FERC ¶ 61,298 (2008) (continuing the semi-annual reporting requirement with respect to the consideration and implementation of a forward market for Ten-Minute Spinning Reserve (“TMSR”).

⁷³ There was no September membership filing.

status of IPKeys Power Partners, Inc. (Supplier Sector). Comments on the October Membership filing are due on or before October 21, 2022.

- **August 2022 Membership Filing (ER22-2568)**

On September 29, 2022, the FERC accepted⁷⁴ (i) the following Applicant's membership in NEPOOL: Concurrent, LLC (Provisional Member (since, the Supplier Sector)); Leapfrog Power (Provisional Member); Old Middleboro Road Solar [Related Person to Agilitas Companies (AR Sector, DG Sub-Sector)]; and Accelerate Renewables [Related Person to ECP Companies (Supplier Sector)]; and (ii) the termination of the Participant status of Chris Anthony; Indeck Energy-Alexandria; Standard Normal; and Borrego Solar Systems. Unless the September 29 order is challenged, this proceeding will be concluded.

- **June 2022 Membership Filing (ER22-1991)**

On September 2, 2022, the FERC accepted⁷⁵ (i) the following Applicant's membership in NEPOOL: Ebsen LLC and Umber LLC (both in the Supplier Sector); (ii) the termination of the Participant status of Dantzig Energy; Pilot Power Group; and Twin Eagle Resource Management; and (iii) the name change of LS Power Grid Northeast, LLC (f/k/a New England Energy Connection, LLC). The September 2 order was not challenged and is final and unappealable, concluding reporting on this matter.

X. Misc. - ERO Rules, Filings; Reliability Standards

Questions concerning any of the ERO Reliability Standards or related rule-making proceedings or filings can be directed to Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **CIP Standards Development: Informational Filings on Virtualization and Cloud Computing Services Projects (RD20-2)**

As previously reported, NERC is required to file on an informational basis quarterly status updates regarding the development of new or modified Reliability Standards pertaining to virtualization and cloud computing services. NERC submitted its most recent informational filing regarding one active CIP standard development project (Project 2016-02 – Modifications to CIP Standards ("Project 2016-02")) on September 15, 2022.⁷⁶ Project 2016-02 focuses on modifications to the CIP Reliability Standards to incorporate applicable protections for virtualized environments. A revised schedule for Project 2016-02, which has not changed since the last (June 2022) quarterly report, calls for final balloting of revised standards in October 2022, NERC Board of Trustees Adoption in November 2022 and filing of the revised standards with the FERC in December 2022.

- **2023 NERC/NPCC Business Plans and Budgets (RR22-4)**

On August 23, 2022, and as amended on September 12, 2022 (to correct MISO-related numbers), NERC submitted its proposed Business Plan and Budget, as well as the Business Plans and Budgets for the Regional Entities, including NPCC, for 2023. FERC regulations⁷⁷ require NERC to file its proposed annual budget for statutory and non-statutory activities 130 days before the beginning of its fiscal year (January 1), as well as the annual budget of each Regional Entity for their statutory and non-statutory activities, including complete business plans, organization charts, and explanations of the proposed collection of all dues, fees and charges and the proposed expenditure of funds collected. NERC reports that its proposed 2023 funding requirement represents an overall increase of approximately 13.7% over NERC's 2022 funding requirement. The NPCC U.S. allocation of NERC's net funding requirement is \$10.97 million. NPCC has requested \$18.14 million in statutory funding (a U.S.

⁷⁴ *New England Power Pool Participants Comm.*, Docket No. ER22-2568-000 (Sep. 29, 2022) (unpublished letter order).

⁷⁵ *New England Power Pool Participants Comm.*, Docket No. ER22-1991-000 (Sep. 2, 2022) (unpublished letter order).

⁷⁶ The other project which had been addressed in prior updates, Project 2019-02, has concluded, and the FERC approved in RD21-6 the Reliability Standards revised as part of that project (CIP-004-7 and CIP-011-3) on Dec. 7, 2021.

⁷⁷ 18 CFR § 39.4(b) (2014).

assessment per kWh (2021 NEL) of \$0.0000600) and \$1.07 million for non-statutory functions. Comments on NERC's amended filing are due on or before **October 7, 2022**. Since the last Report, EEI submitted comments supporting NERC's budget plan and budget ("BP&B"), but suggesting that the size of the budget increase warrants subsequent analysis to ensure the effectiveness of the new expenditures. NERC answered EEI's comments, committing to public accountability for its BP&B, and requesting that the FERC allow NERC's efforts underway to "identify qualitative and quantitative ways to illustrate NERC's value relative to its budget" to continue during the 2024 BP&B planning process.

- **NPCC Bylaws Changes (RR22-2)**

On July 8, 2022, the FERC conditionally approved changes to the NPCC Bylaws (the "Bylaws") filed by NERC and NPCC designed to, among other things: (1) to improve corporate governance; (2) to ensure consistency with the Not-for-Profit Corporation Law of the State of New York ("N-PCL"), pursuant to which NPCC is organized; and (3) to remove extraneous provisions from the Bylaws, create efficiencies, and reflect changes at NPCC since 2012 (when the last changes to the Bylaws were filed).⁷⁸ In accepting the Bylaws Changes, the FERC directed NERC/NPCC to submit in a compliance filing, due on or before September 6, 2022, changes that (i) provide members being terminated for failure to comply with bylaw provisions related to qualifications, obligations, and conditions of membership (a) notice within a reasonable time period of the NPCC Board's membership termination decision and the reason(s) for the action and (b) the option to appeal the membership termination in accordance with the due process requirement in FPA Section 215; and (ii) specifically describe the method of providing public notice of member meetings. The FERC found Public Citizen's protest⁷⁹ beyond the scope of the proceeding. The Bylaws changes were accepted effective as of the date of the order, or July 8, 2022, as requested. On July 29, 2022, NERC/NPCC requested a 30-day extension of time to submit the required compliance filing in order to accommodate procedural steps they are required complete before the compliance filing is due. On August 10, 2022, the FERC granted NERC/NPCC's request, with the deadline for the required compliance filing extended to and including **October 6, 2022**.

- **Rules of Procedure Changes (CMEP Risk-Based Approach Enhancements) (RR21-10)**

As previously reported, on May 19, 2022, the FERC approved in part, and denied in part, NERC's proposed revisions to its Rules of Procedure ("ROP") proposed in NERC's September 29, 2021 filing.⁸⁰ Specifically, the FERC approved the proposed revisions to the NERC ROP for the Personnel Certification and Credential Maintenance Program in ROP section 600, the Training and Education Program in ROP section 900, and Confidential Information in ROP section 1500. The FERC approved CMEP-related ROP sections 401, 404, 407-409; Appendix 2 (other than the definition of "Self-Logging"); and Appendix 4C sections 5.0, 6.0, 7.0, 8.0, 9.0, and Attachment 1. The FERC rejected certain of the proposed revisions to ROP sections 402, 403, 405, and 406, Appendix 2, and Appendix 4C (concerned that, taken together, those revisions could adversely impact the nature and extent of the ERO's and the FERC's oversight of reliability compliance and enforcement activities). Accordingly, the FERC directed that NERC submit a 60-day compliance filing (on or before July 18, 2022) reinstating language in its ROP. On July 18, 2022, NERC submitted a compliance filing in response to the requirements of the May 19, 2022 order. Comments on that compliance filing were due on or before August 8, 2022; none were filed. On September 9, 2022, the FERC

⁷⁸ *N. Am. Elec. Rel. Corp.*, 180 FERC ¶ 61,016 (July 8, 2022).

⁷⁹ In its protest, Public Citizen argued that the FERC should require a change to the composition of NPCC's Board of Directors, suggesting that NPCC be compelled to ensure that, of NPCC's eight board sectors and 15 voting members, "household consumer advocates" have two voting seats in Sector 7 (Sub-Regional Reliability Councils, Customers, Other Regional Entities and Interested Entities), and that regulators, reliability coordinators, and end-users compose at least half of the voting seats of the board.

⁸⁰ *N. Am. Elec. Rel. Corp.*, 179 FERC ¶ 61,129 (May 19, 2022). In its Sep. 29, 2021 filing, NERC proposed changes to sections 400 (Compliance Monitoring and Enforcement) and 1500 (Confidential Information), Appendix 2 (Definitions) and Appendix 4C (Compliance Monitoring and Enforcement Program) of NERC's ROP. The changes were proposed to further enhance the risk-based approach to the Compliance Monitoring and Enforcement Program ("CMEP") whereby registered entities and the ERO Enterprise focus on the greatest risks to the reliability and security of the Bulk Power System ("BPS").

accepted the July 18 compliance filing.⁸¹ Unless the September 9 order is challenged, this proceeding will be concluded.

- **Notice of Penalty: National Grid (NP22-33)**

On September 29, 2022, NERC filed a Notice of Penalty regarding National Grid's violation of Reliability Standards FAC-008-3 (Transmission Vegetation Management) Requirements 6 and 8, and PRC-023-4 (Transmission Relay Loadability) Requirement 1. Specifically, NPCC, NERC's Regional Entity for the Northeast, determined that National Grid (i) did not maintain accurate Facility Ratings consistent with its Facility Ratings Methodology at Facilities used for the planning and operation of the Bulk Power System ("BPS") in New York and New England, (ii) did not provide to its Reliability Coordinator accurate Facility Ratings or the accurate identity of the most limiting element of the Facility for a total of 154 Facilities (or 21% of the Entity's Facilities in scope of the Standard), and (iii) had 16 protective relay settings affecting 13 transmission lines, seven of which were 345 kV feeders and eight were part of an IROL, which did not meet various Criteria specified in PRC-023-4 R1. NERC said that the violations were caused by ineffective inter-departmental coordination or silos between departments, and contributing causes included insufficient communication, gaps in procedures, insufficient training, and failure to recognize the loadability impact of limiting transformers installed in series with applicable feeders on protection relays' settings.

To resolve all outstanding issues arising from NPCC's determinations and findings, NPCC and National Grid entered into a Settlement Agreement in which National Grid agreed to a **\$512,000 penalty**, in addition to other activities outlined in the Settlement Agreement. Pursuant to 18 CFR § 39.7(e), the penalty will be effective October 29, 2022, or, if the FERC decides to review the penalty, upon a final determination by the FERC. If you have any questions concerning this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

XI. Misc. - of Regional Interest

- **203 Application: Salem Harbor / Lenders (EC22-117)**

On September 2, 2022, Salem Harbor requested authorization for a transaction pursuant to which the direct and indirect equity interests in Salem Harbor that are currently directly and indirectly held by Salem Harbor Power FinCo, LP will be transferred to a newly formed Delaware limited liability company ("New HoldCo"), and (2) the equity interests of New HoldCo will be issued to Salem Harbor's lenders (the "Lenders") under a pre-petition credit facility. Comments on Salem Harbor's application were due on or before September 23, 2022; none were filed. Public Citizen filed a doc-less intervention. The application is pending before the FERC. If you have any questions, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **203 Application: Centrica / CPower (EC22-90)**

On September 29, 2022, the FERC authorized the sale of 100% of the equity interests in Centrica Business Solutions Optimize ("Centrica") to Enerwise Global Technologies, LLC d/b/a CPower ("CPower").⁸² Upon consummation, Centrica and CPower will become Related Persons and members of the AR Sector's RG Sub-Sector.⁸³ Among other conditions, the September 29 order required notice within 10 days of the consummation of the sale, which as of date of this Report has not been filed. Subject to that notice, this proceeding will be concluded. If you have any questions, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

⁸¹ *N. Am. Elec. Rel. Corp.*, Docket No. RR21-10-001 (Sep. 9, 2022) (unpublished letter order).

⁸² *Centrica Business Solutions Optimize, LLC and Enerwise Global Technologies, LLC*, 180 FERC ¶ 62,175 (Sep. 29, 2022).

⁸³ CPower is a member of the AR Sector's RG Sub-Sector with its Related Persons Jericho Power and LS Power Grid Northeast, LLC.

- **203 Application: Clearway / TotalEnergies (EC22-84)**

On September 6, 2022, the FERC authorized, among other things, TotalEnergies Renewables USA, LLC's ("TotalEnergies") acquisition of a 50% percent indirect interest in the Clearway Group (the "Sale").⁸⁴ A notice of consummation of the Sale as filed on September 19, 2022, indicating that the Sale was consummated on September 12, 2022. Reporting on this proceeding is now complete. If you have any questions, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **203 Application: Waterside Power / KKR (EC22-79)**

On August 19, 2022 the FERC authorized the sale of 100% of the equity interests in Applicants, including Generation Group Seat Member Waterside Power, among others,⁸⁵ to Cretaceous Bidco Limited ("Buyer"), a special purpose vehicle indirectly owned by funds, investment vehicles and/or separately managed accounts advised and/or managed by one or more subsidiaries of KKR & Co. Inc. ("KKR & Co." and, together with its subsidiaries, ("KKR")).⁸⁶ Pursuant to the *August 19 Order*, notice must be filed within 10 days of consummation of the transaction, which as of the date of this Report has not yet occurred. If you have any questions, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **203 Application: Stonepeak / JERA Americas (EC22-71)**

On June 1, 2022, Stonepeak⁸⁷ requested authorization for the sale of 100% of the interests in Canal Power Holdings LLC to a wholly-owned affiliate of JERA Americas Inc. ("JERA Americas").⁸⁸ Comments on the 203 application were due on or before June 22, 2022 and were filed by the MA AG (which encouraged the FERC to take the time necessary to comprehensively review the Application based on potential regional and SENE Capacity Zone competition and rate impacts) and Public Citizen (which raised four issues: (i) the potential threat to competition and rates that could be caused by the concentration of power generation ownership by JERA in ISO-NE and NYISO; (ii) the need for additional information to assess impacts on competition and rates as well as potential divestiture requirements to mitigate any threats to competition and rates; (iii) a desire for public disclosure of the purchase price; and (iv) what threats to rates might result from the Related Person relationships to be created and reflected in the NEPOOL stakeholder process). On July 1, 2022, Stonepeak answered the comments and protest. On August 8, 2022, Applicants submitted an informational filing informing the FERC that the Applicants and parties to the Transaction have received all other required regulatory approvals and the FERC's authorization in this proceeding is the only remaining regulatory approval for the Transaction and requested a FERC order authorizing the transaction by August 15, 2022. Notwithstanding Applicants' request, this matter remains pending before the FERC. If you have any questions, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **D&E Agreement: CL&P/NY Transco (ER22-2830)**

On September 12, 2022, CL&P filed an Agreement for Engineering, Design and Procurement (the "D&E Agreement") between itself and New York Transco LLC ("NY Transco"). The D&E Agreement sets forth the terms and conditions under which CL&P will perform the necessary services to address the impacts of NY Transco's reinforcement of a major 345 kV transmission corridor in New York that will have reliability impacts on the New England System. CL&P requested that the D&E Agreement be accepted for filing as of September 13, 2022.

⁸⁴ *Clearway Energy LLC et al.*, 180 FERC ¶ 62,120 (Sep. 6, 2022).

⁸⁵ In addition to Waterside Power, "Applicants" are: Lea Power Partners, LLC; Badger Creek Limited; Chalk Cliff Limited; Double C Generation Limited Partnership; High Sierra Limited; Kern Front Limited; McKittrick Limited; Bear Mountain Limited; Live Oak Limited; and WGP Redwood Holdings, LLC.

⁸⁶ *Lea Power Partners, LLC*, 180 FERC ¶ 62,086 (Aug. 19, 2022) ("*August 19 Order*").

⁸⁷ "Stonepeak" includes Canal Power Holdings LLC ("Seller"), and its indirect wholly-owned, public utility subsidiaries, Canal Generating LLC ("Canal Generating"), Canal 3 Generating LLC ("Canal 3"), Bucksport Generation LLC ("Bucksport"), and Stonepeak Kestrel Energy Marketing LLC ("Stonepeak Marketing").

⁸⁸ JERA Americas Related Persons include Provisional Member Cricket Valley Energy Center, LLC.

Comments on this filing were due on or before October 3, 2022; none were filed. NY Transco filed a doc-less intervention. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **E&P Agreement: Seabrook/NECEC Transmission (ER22-2807)**

On September 7, 2022, NextEra Energy Seabrook, LLC (Seabrook) filed an amended and restated Engineering and Procurement Agreement between Seabrook and NECEC Transmission LLC ("NECEC") (the "A&R E&P Agreement"). The A&R Agreement covers the final engineering drawings through the procurement and delivery of the 24.5 kV generator circuit breaker and ancillary equipment to Seabrook Station in advance of the Fall 2024 outage. The parties agreed to enter into the A&R EP Agreement to provide for greater clarity, rather than amending the original E&P Agreement. This filing is not intended to affect the pending proceedings in either Docket No. EL21-3-000 or EL21-6-000 described in Section I above. Seabrook requested that the A&R E&P Agreement be accepted for filing as of September 8, 2022. Comments on this filing were due on or before September 28, 2022; none were filed. Avangrid and National Grid filed doc-less interventions. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Pat Gerity (pmgerity@daypitney.com; 860-275-0533).

- **Versant Power MPD OATT Order 881 Compliance Filing (ER22-2358)**

On July 12, 2022, in response to the requirements of *Order 881*, Versant Power filed a proposed new Attachment T to the Versant Power Open Access Transmission Tariff for the Maine Public District ("MPD OATT"). Attachment T, Versant reported, incorporates all the contents of the *pro forma* OATT's new Attachment M. An effective date of July 12, 2025 was requested in an errata filing submitted on August 1, 2022. On August 2, 2022, MPUC submitted comments asserting that Versant's Compliance Filing, without further detail, is insufficient to meet the requirements of *Order 881* and should either (i) be rejected outright, ordering Versant to re-file with sufficient detail, or (ii) subject to a deficiency letter requiring further information with respect to the Compliance Filing. MPUC withdrew those comments on August 31, 2022 in exchange for certain understandings with Versant Power (including MPUC's attendance, as a non-voting participant, at any NMISA working group discussions on *Order 881* implementation planning and Versant Power's submission of informational compliance filings to keep the FERC apprised of versant's progress in developing its AAR implementation plan). On September 6, 2022, Versant Power supplemented its compliance filing to confirm the MPUC's understandings, as delineated in its Notice of Withdrawal. This matter is pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Versant Power MPD OATT Order 676-J Compliance Filing Part I (ER22-1142)**

As previously reported, Versant Power filed revisions to Section 4 of the Versant OATT for the Maine Public District ("MPD OATT") to incorporate the new cybersecurity and PFV standards contained in NAESB WEQ Version 003.3 Standards in response to the requirements of *Order 676-J*, ("Versant MPD OATT Order 676-J Part I Changes").⁶⁴ A placeholder effective date was submitted. Comments on this filing were due on or before March 23, 2022; none were filed. This matter remains pending before the FERC. If you have any questions concerning this matter, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **Orders 864/864-A (Public Util. Trans. ADIT Rate Changes): New England Compliance Filings (various)**

In accordance with *Order 864*⁸⁹ and *Order 864-A*,⁹⁰ and extensions of time granted, New England's transmission-owning public utilities submitted their *Order 864* compliance filings, with specific dockets and filing dates of the filings still pending or accepted since the last Report identified in the following table. The FERC has addressed a number of the compliance filings, with some yet to be acted on, and others submitting further compliance filings (generally to reflect a January 27, 2020 effective date). The *Order 864* compliance proceedings that remain open or that were accepted since the last Report are as follows:

| Docket(s) | Transmission Provider | Date of Last Filing | Date Accepted |
|------------------------|---|---------------------|---------------|
| ER21-1130 ER20-2572 | New England TOs (RNS) | Feb 18, 2022 | Pending |
| ER20-2429 | CMP (LNS) | May 6, 2022 | Pending |
| ER21-1702 | CMP (Schedule 1 Appendix A Implem. Rule) | Feb 28, 2022 | Pending |
| ER21-1654 | CL&P (LNS) | Feb 28, 2022 | Sep 23, 2022 |
| ER21-1295 | Eversource (CL&P, PSNH, NSTAR) (LNS; Schedule 21-ES) | Feb 23, 2022 | Sep 23, 2022 |
| ER21-1154 | FG&E (LNS) | Feb 23, 2022 | Sep 23, 2022 |
| ER21-1694 | Green Mountain Power | Feb 18, 2022 | Sep 23, 2022 |
| ER21-1241 | NEP (LNS) | Feb 28, 2022 | Sep 23, 2022 |
| ER20-2551 | NEP (Schedule 21-NEP and TSA-NEP-22 Compliance Revisions) | Jul 18, 2022 | Pending |
| ER20-2219 | NEP (Tariff No. 1) | Oct 3, 2022 | Pending |
| ER20-2553 | NEP (MECO/Nantucket LSA) | Jul 18, 2022 | Pending |
| ER21-1293 | NSTAR (LNS) | Feb 23, 2022 | Sep 23, 2022 |
| ER22-1850 | UI | May 10, 2022 | Pending |
| ER21-1709 | VTransco (LNS) | Feb 22, 2022 | Sep 23, 2022 |
| ER20-2133 | Versant Power (BHD Formula Rate) | Aug 12, 2022 | Sep 23, 2022 |

Since the last Report, *Order 864*-related activity included:

♦ **Various Filings Accepted.** On September 23, 2022, the FERC issued a single order accepting the pending *Order 864* filings of: FG&E (ER21-1154-002); NEP (LNS) (ER21-1241-002); NSTAR (LNS) (ER21-1293-002); Eversource (CL&P, PSNH, NSTAR) (LNS; Schedule 21-ES) (ER21-1295-002); New Hampshire Transmission (ER21-1325-002); NSTAR (ER21-1650-002); CL&P (ER21-1654-002); Green Mountain Power (ER21-1694-002); and VTransco (LNS) (ER21-1709-002).

⁸⁹ *Public Util. Trans. Rate Changes to Address Accumulated Deferred Income Taxes*, Order No. 864, 169 FERC ¶ 61,139 (Nov. 21, 2019), *reh'g denied and clarification granted in part*, 171 FERC ¶ 61,033 (Apr. 16, 2020) ("*Order 864*"). *Order 864* requires all public utility transmission providers with transmission rates under an OATT, a transmission owner tariff, or a rate schedule to revise those rates to account for changes caused by the 2017 Tax Cuts and Jobs Act ("2017 Tax Law"). Specifically, for transmission formula rates, *Order 864* requires public utilities (i) to deduct excess Accumulated Deferred Income Taxes ("ADIT") from or add deficient ADIT to their rate bases and adjust their income tax allowances by amortized excess or deficient ADIT; and (ii) to incorporate a new permanent worksheet into their transmission formula rates that will annually track ADIT information ("ADIT Worksheet"). The **ADIT Worksheet** must contain the following five specific categories of information: (i) how any ADIT accounts were re-measured and the excess or deficient ADIT contained therein ("**Category 1 Information**"); (ii) is the accounting for any excess or deficient amounts in Accounts 254 (Other Regulatory Liabilities) and 182.3 (Other Regulatory Assets) ("**Category 2 Information**"); (iii) whether the excess or deficient ADIT is protected (and thus subject to the Tax Cuts and Jobs Act's normalization requirements) or unprotected ("**Category 3 Information**"); (iv) the accounts to which the excess or deficient ADIT are amortized ("**Category 4 Information**"); and (v) the amortization period of the excess or deficient ADIT being returned or recovered through the rates ("**Category 5 Information**"). In addition, the FERC stated that it expects public utilities to identify each specific source of the excess and deficient ADIT, classify the excess or deficient ADIT as protected or unprotected, and list the proposed amortization period associated with each classification or source.

⁹⁰ *Public Util. Trans. Rate Changes to Address Accumulated Deferred Income Taxes*, 171 FERC ¶ 61,033, Order No. 864-A (Apr. 16, 2020) ("*Order 864-A*").

♦ **ER21-1709 (Versant Power (BHD Formula Rate))**. Also on September 23, 2022, the FERC accepted Versant Power's (BHD Formula Rate) compliance filing.

♦ **ER20-2219 (NEP (Tariff No. 1))**. On October 3, 2022, NEP supplemented its July 19, 2022 *Order 864* compliance filing with attachments that populate column (g) of certain worksheets with the applicable FERC account number to ensure transparency regarding the account to which excess or deficient ADIT is amortized.

XII. Misc. - Administrative & Rulemaking Proceedings

- **Interregional HVDC Merchant Transmission (AD22-13)**

On July 19, 2022, Invenergy Transmission filed a petition requesting that the FERC hold a technical conference to explore ways to potentially make available and compensate certain grid reliability and resilience benefits associated with interregional high voltage direct current ("HVDC") merchant transmission. Any comments to be considered by the FERC in its determination of any action to be taken were due on or before August 26, 2022. Comments were filed by 13 parties and included, among others, [CSC](#), [ENGIE](#), [Invenergy](#), [Phase I/II Asset Owners and IRH](#), [Joint Consumer Advocates](#), [MISO](#), [ACORE](#), [ACPA](#), [SEIA](#), and [Neptune and Hudson](#). [Invenergy](#) answered the comments filed by [MISO](#). This matter is pending before the FERC.

- **Reliability Technical Conference (Nov 10) (AD22-10)**

On November 10, 2022, the FERC will convene its annual Commissioner-led technical conference to discuss policy issues related to the reliability of the Bulk-Power System. The conference will be open for the public to attend, and there is no fee for attendance. Supplemental notices will be issued prior to the conference with further details regarding the agenda, how to register, how to participate, and the conference format.

- **New England Gas-Electric Forum (AD22-9)**

The FERC held a Forum on September 8, 2022 at the DoubleTree by Hilton in Burlington, VT. The purpose of the Forum was to discuss and achieve a greater understanding among stakeholders in defining the electric and natural gas system challenges in the New England Region. Topics discussed included the historical context of New England winter gas-electric challenges, concerns and considerations for upcoming winters such as reliability of gas and electric systems and fuel procurement issues, and whether additional information or modeling exercises are needed to inform the development of solutions to these challenges. Since the Forum, Forum materials for C. Dickerson, NPCC, and comments from NERC/NPCC were posted in eLibrary. On September 21, 2022, the FERC invited parties wishing to submit comments regarding the topics discussed at the Forum to do so on or before **November 7, 2022**.

- **Transmission Planning and Cost Management Technical Conference (AD22-8)**

On **October 6, 2022**, the FERC will convene a Commissioner-led technical conference regarding transmission planning and cost management for transmission facilities developed through local or regional transmission planning processes. The 5 panels throughout the day will address: (1) the processes by which transmission providers develop local transmission planning criteria, identify local transmission needs using those criteria, and evaluate and choose local transmission facilities to address those needs; (2) whether local transmission facility costs are adequately scrutinized; (3) the processes by which transmission providers evaluate, select, and develop regional transmission facilities for reliability; (4) whether regional transmission facilities for reliability costs are adequately scrutinized; and (5) cross-cutting themes and potential best practices for both local transmission facilities and regional reliability transmission planning and cost management, in addition to innovative approaches that could be explored further, including the possibility of establishing a role for an Independent Transmission Monitor, and mechanisms to support enhanced transparency. In a second supplemental notice issued on September 8, 2022, the FERC asked panelists to submit advance materials to provide any information related to their respective panel by September 16, 2022. Materials were submitted by representatives on behalf of: [ISO-NE](#), [CA PUC](#), [KY PSC](#), [NC Utils. Comm. Public Staff](#), [NV PUC](#), [RI PUC](#), [AEE](#), [AEP](#), [Ameren](#), [AMP/APPA](#), [Ari Peskoe](#), [L. Azar](#), [Clean Energy Buyers Assoc.](#), [Coalition of MISO Customers](#), [ITC Holdings](#), [LPPC](#), [IA Consumer Advocate](#), [J. Macey](#), [NESCOE](#), [Northern California Power Agency](#), [Northwest & Intermountain](#)

[Power Producers Coalition](#), [OH Consumers' Counsel](#), [Old Dominion Elec. Coop.](#), [PJM](#), [G. Poulus](#), [SPP](#), [Potomac Economics](#), [Southern California Edison](#), [Southern Environmental Law Center](#), and [TAPS/FMPA](#) and [WIRES](#).

On September 30 and October 4, the FERC issued supplemental notices that included a final agenda, including further details regarding the agenda and speakers, for this technical conference. An additional supplemental notice will be issued following the technical conference identifying the opportunity for interested parties to submit post-technical conference comments. The technical conference will be held at FERC headquarters in Washington, DC. There is no fee for attendance, and those unable to attend in person will be able to watch via a free webcast or the recording thereof.

- **NOI: Dynamic Line Ratings (AD22-5)**

On February 17, 2022, the FERC issued a notice of inquiry (“NOI”)⁹¹ seeking comments on (i) whether and how the required use of dynamic line ratings (“DLR”) is needed to ensure just and reasonable wholesale rates; (ii) whether the lack of DLR requirements renders current wholesale rates unjust and unreasonable; (iii) potential criteria for DLR requirements; (iv) the benefits, costs, and challenges of implementing DLRs; (v) the nature of potential DLR requirements; and (vi) potential timeframes for implementing DLR requirements. This NOI represents the first step in the FERC’s effort to gather more information about the costs and benefits, and potentially mandating the use, of DLRs. A more [detailed summary](#) was provided to the Transmission Committee and is posted on the Transmission Committee’s [webpage](#).

Initial comments were due April 25, 2022 and filed by: [ISO-NE](#); [DC Energy](#); [Eversource](#); [Clean Energy Parties](#); [Potomac Economics](#); [CT DEEP](#); [NERC](#); [US DOE](#); [CAISO](#); [MISO](#); [NYISO](#); [Org of MISO States](#); [PJM](#), [SPP](#); [SPP MMU](#); [AEP](#); [Alliant](#); [APPA](#); [APS](#); [AZ PUC](#); [Clean Energy Entities](#); [Dayton Power](#); [EEI](#); [ELCON](#); [Entergy](#); [IN Util. Reg. Comm.](#); [ITC](#); [LA DPW](#); [MISO TOs](#); [NRECA](#); [NYISO TOs](#); [PPL](#); [R Street Institute](#); [Southern Co.](#); [TAPS](#); [Tri-State](#); [Electricity Canada](#); [Electric Grid Monitoring](#); [Line Vision](#); [Idaho Power](#).

Reply comments were due on or before May 25, 2022⁹² and were filed by: [AEP](#), [Clean Energy Entities](#),⁹³ [EEI](#), [Joint Consumer Advocates](#), [MISO TOs](#), and the [R Street Institute](#). This matter is pending before the FERC.

- **Improving Generating Units Winter Readiness (AD22-4)**

On April 27-28, 2022, the FERC convened a joint technical conference with NERC and its Regional Entities to discuss how to improve the winter-readiness of generating units, including best practices, lessons learned and increased use of the NERC Guidelines, as recommended in the Joint February 2021 Cold Weather Outages Report.⁹⁴ Panels included discussion of (i) cold weather preparedness plans; (ii) planning, engineering and technologies for cold weather preparedness; (iii) implementing cold weather preparedness plans for reliable operations; and (iv) communications, coordination, training, and education for cold weather operations. Speaker materials have been posted in eLibrary.

- **Joint Federal-State Task Force on Electric Transmission (AD21-15)**

The next (fifth) meeting of the FERC-established Joint Federal-State Task Force on Electric Transmission (“Transmission Task Force”)⁹⁵ will be held on November 15, 2022, in New Orleans, LA. All interested persons were

⁹¹ *Implementation of Dynamic Line Ratings*, 178 FERC ¶ 61,110 (Feb. 17, 2022) (“*Dynamic Line Ratings NOI*”).

⁹² The *Dynamic Line Ratings NOI* was published in the Fed. Reg. on Feb. 24, 2022 (Vol. 87, No. 37) pp. 10,349-10,354.

⁹³ The “Clean Energy Entities” are the Working for Advanced Transmission Technologies Coalition (“WATT”), ACPA, AEE, and SEIA.

⁹⁴ See *The February 2021 Cold Weather Outages in Texas and the South Central United States - FERC, NERC and Regional Entity Staff Report* at pp 18, 192 (Nov. 16, 2021), <https://www.ferc.gov/news-events/news/final-report-february-2021-freeze-undercores-winterization-recommendations>.

⁹⁵ *Joint Federal-State Task Force on Electric Transmission*, 175 FERC ¶ 61,224 (June 18, 2021). The Transmission Task Force is comprised of all FERC Commissioners as well as representatives from 10 state commissions (two from each NARUC region). State commission representatives will serve one-year terms from the date of appointment by FERC and in no event will serve on the Task Force

invited to file comments in this docket suggesting agenda items by **October 7, 2022**. Task Force members will consider the suggested agenda items in developing the agenda for the November 15, 2022 public meeting.

Recent Transmission Task Force Public Meetings⁹⁶

♦ **July 20, 2022.** A fourth meeting was held in San Diego, CA, on July 20, 2022. Discussion addressed (i) interregional transmission planning & transmission project development; and (ii) the FERC's *Transmission NOPR*. A transcript of the meeting was posted in eLibrary on August 11, 2022. The FERC invited post-meeting comments addressing issues raised during and in the agenda for the July 20 meeting. Those comments were due on or before September 2, 2022. Comments were filed by [ACRE](#), [AEP](#), [Invenergy](#), [MISO](#), and [PJM](#).

• **Modernizing Electricity Market Design - Resource Adequacy (AD21-10)**

ISO/RTO Reports. On April 21, 2022, the FERC issued an order⁹⁷ directing each independent system operator ("ISO") and regional transmission organization ("RTO"), including ISO-NE, to submit on or before **October 17, 2022** a report that describes: (1) current system needs given changing resource mixes and load profiles; (2) how it expects its system needs to change over the next five and 10 years; (3) whether and how it plans to reform its energy and ancillary services ("EAS") markets to meet expected system needs over the next five and 10 years; and (4) information about any other reforms, including capacity market reforms and any other resource adequacy reforms that would help it meet changes in system needs. Public comments in response to the RTO/ISO reports may be submitted within 60 days following the filing of the reports. The FERC will review the reports and comments to determine whether further action is appropriate.

2021 Technical Conferences. The *Order Directing Reports* follows a series of staff-led technical conferences, convened in 2021 and summarized in previous Reports, addressing ISO/RTO resource adequacy⁹⁸ and energy and ancillary services markets.⁹⁹

for more than three consecutive terms. The Transmission Task Force will convene multiple formal meetings annually, with FERC issuing orders fixing the time and place and agenda for each meeting, and the meetings will be open to the public for listening and observing and on the record. The Transmission Task Force will focus on "topics related to efficiently and fairly planning and paying for transmission, including transmission to facilitate generator interconnection, that provides benefits from a federal and state perspective." New England is represented by Commissioners Riley Allen (VT PUC) and Matt Nelson (Chair, MA DPU), each of whom will be serving a second term during the September 1, 2022 – August 31, 2023 term. See Order on Nominations, *Joint Federal-State Task Force on Electric Transmission*, 180 FERC ¶ 61,030 (July 15, 2022).

⁹⁶ Summaries of the first – third meetings of the Transmission Task Force can be found in previous Reports.

⁹⁷ *Modernizing Wholesale Electricity Market Design*, 179 FERC ¶ 61,029 (Apr. 21, 2022) ("Order Directing Reports").

⁹⁸ The FERC held two staff-led technical conferences addressing resource adequacy, one on Mar. 23, 2021 (with post-conference comments focused on PJM-specific issues) and the other on May 25, 2021 (focused on the wholesale markets administered by ISO-NE). Following the Mar. 23 conference, more than 45 sets of initial comments were filed, including by: [AEE](#), [Calpine](#), [Cogentrix](#), [Dominion](#), [Exelon](#), [FirstLight](#), [LS Power](#), [NESCOE](#), [NEPGA](#), [NRG](#), [PSEG](#), [Shell](#), [Vistra](#), [CT DEEP](#), [EEI](#), [EPSA](#), and [NRECA/APPA](#). Reply comments were filed by [ACPA](#), [AEP](#), [EPSA](#), [Exelon](#), [Joint Consumer Advocates](#), [LS Power](#), [Old Dominion Electric Cooperative](#) ("ODEC"), [PJM Power Providers](#) ("P3"), [Public Interest Organizations](#) ("PIOs"), and the [Retail Electric Supply Association](#) ("RESA"). Following the May 25 conference, comments were filed by: [AEE](#), [Calpine](#), [CT Parties](#), [Dominion](#), [Eversource](#), [MMWEC](#), [NESCOE](#), [NEPGA](#), [NextEra](#), [NRG](#), [Public Interest Orgs](#), [Vistra](#), [AEMA](#), [EPSA](#), [RENEW](#).

⁹⁹ The FERC held two staff-led technical conferences addressing ISO/RTO EAS markets, one on Sept. 14, 2021; the second on Oct. 12, 2021. Transcripts of both technical conferences are posted in eLibrary. In advance of the EAS technical conferences, FERC staff issued on Sept. 7, 2021 a White Paper entitled "[Energy and Ancillary Services Market Reforms to Address Changing System Needs](#)" summarizing recent EAS markets reforms as well as reforms then under consideration. Initial comments on the topics discussed during the EAS technical conferences were filed by: [ISO-NE](#), [Appian Way Energy Partners](#), [Constellation](#), [Dominion](#), [Envir. Defense Fund](#), [FirstLight](#), [LS Power](#), [CAISO](#), [MISO](#), [NYISO](#), [PJM](#), [SPP MMU](#), [ACPA](#), [Clean Energy Organizations](#), [EEI](#), [Energy Trading Institute](#), [EPRI](#), [EPSA](#), [Middle River Power](#), [National Hydropower Assoc.](#), [NYSERDA](#), [PJM Providers Group](#), and [Public Citizen](#). Reply comments were filed by [EPRI](#), [NERC and its Regional Entities](#) and [Vistra](#).

- **NOPR: Duty of Candor (RM22-20)**

On July 28, 2022, the FERC issued a NOPR¹⁰⁰ proposing to add a new section to its regulations to require that any entity communicating with the FERC or other specified organizations (e.g. ISO/RTOs, FERC-approved market monitors, NERC and its Regional Entities, or transmission providers) related to a matter subject to FERC jurisdiction submit accurate and factual information and not submit false or misleading information, or omit material information (“Duty of Candor Requirements”). An entity would be shielded from violation of the new regulation if it has exercised due diligence to prevent such occurrences. The FERC’s current regulations prohibit, in defined circumstances, inaccurate communications to the FERC and other organizations upon which the FERC relies to carry out its statutory obligations. However, because those requirements cover only certain communications and impose a patchwork of different standards of care for such communications, the FERC believes that a broadly applicable duty of candor will improve its ability to effectively oversee jurisdictional markets. It further indicated that its proposed due ‘diligence standard’ and other limitations are intended to minimize the additional burdens to industry that come with the new Duty of Candor Requirements.

On September 1, 2022, Joint Associations¹⁰¹ requested an additional month to submit comments.¹⁰² On September 14, 2022, the FERC granted that request. Accordingly, initial comments are now due **November 11, 2022**. Thus far, one set of comments opposing the adoption of the Duty of Candor Requirements was filed by [John Fitzhenry](#).

- **NOPR: Advanced Cybersecurity Investment (RM22-19; RM21-3 (terminated by this NOPR))**

On September 22, 2022, the FERC issued a NOPR¹⁰³ proposing to provide incentive-based rate treatments for the transmission of electric energy in interstate commerce and the sale of electric energy at wholesale in interstate commerce by utilities for the purpose of benefitting consumers by encouraging investments by utilities in advanced cybersecurity technology and participation by utilities in cybersecurity threat information sharing programs, as directed by the Infrastructure Investment and Jobs Act of 2021 (“Infrastructure and Jobs Act”). This NOPR also terminated the NOPR proceeding in Docket RM21-3 (*Dec 2020 Cybersecurity Incentives NOPR*)¹⁰⁴ described in previous Reports. Initial comments on the *Advanced Cybersecurity Investment NOPR* are due on or before [30 days after publication in the *Federal Register*]; reply comments, [45 days after publication in the *Federal Register*].¹⁰⁵

- **NOPR: Extreme Weather Vulnerability Assessments (RM22-16; AD21-13)**

On June 16, 2022, as corrected on July 12, 2022, the FERC issued a notice¹⁰⁶ proposing to require transmission providers to submit one-time informational reports describing their current or planned policies and

¹⁰⁰ *Duty of Candor*, 180 FERC ¶ 61,052 (July 28, 2022) (“*Duty of Candor NOPR*”).

¹⁰¹ “Joint Associations” included the following trade associations on behalf of their respective members: the American Gas Association (“AGA”), American Public Gas Association (“APGA”), Interstate Natural Gas Association of America (“INGA”), Edison Electric Institute (“EEI”), Electric Power Supply Association (“EPSA”), Energy Trading Institute (“ETI”), Natural Gas Supply Association (“NGA”), and Process Gas Consumers Group (“PGCG”).

¹⁰² The *Duty of Candor NOPR* was published in the *Fed. Reg.* on Aug. 12, 2022 (Vol. 87, No. 155) pp. 49,784-49,793.

¹⁰³ *Incentives for Advanced Cybersecurity Investment; Cybersecurity Incentives*, 180 FERC ¶ 61,189 (Sep. 22, 2022) (“*Advanced Cybersecurity Investment NOPR*”).

¹⁰⁴ *Cybersecurity Incentives*, 173 FERC ¶ 61,240 (Dec. 17, 2020) (“*Dec 2022 Cybersecurity Incentives NOPR*”). As described in previous Reports, the *Dec 2022 Cybersecurity Incentives NOPR* proposed to establish rules for incentive-based rate treatment for voluntary cybersecurity investments by a public utility for or in connection with the transmission or sale of electric energy subject to FERC jurisdiction, and rates or practices affecting or pertaining to such rates for the purpose of ensuring the reliability of the Bulk Power System.

¹⁰⁵ The *Advanced Cybersecurity Investment NOPR* has not yet published in the *Fed. Reg.*

¹⁰⁶ *One-Time Informational Reports on Extreme Weather Vulnerability Assessments; Climate Change, Extreme Weather, and Elec. Sys. Rel.*, 179 FERC ¶ 61,196 (June 16, 2022) (“*Extreme Weather Vulnerability Assessments NOPR*”).

processes for conducting extreme weather vulnerability assessments¹⁰⁷ (how they establish a scope for their extreme weather vulnerability assessments, develop inputs, identify vulnerabilities and determine exposure to extreme weather hazards, estimate the costs of impacts, and develop mitigation measures to address extreme weather risks). Initial comments were due August 30, 2022¹⁰⁸ and were filed by over 13 parties, including among others, [Eversource](#), [NRDC](#), [NERC](#), [MISO](#), [PJM](#), and [EPSA](#). This matter is pending before the FERC.

- **NOPR: Interconnection Reforms (RM22-14)**

On June 16, 2022, the FERC issued a notice of proposed rulemaking (“NOPR”),¹⁰⁹ more than 400 pages long, that proposes reforms to the *pro forma* Large Generator Interconnection Procedures (“LGIP”), *pro forma* Small Generator Interconnection Procedures (“SGIP”), *pro forma* Large Generator Interconnection Agreement (“LGIA”), and *pro forma* Small Generator Interconnection Agreement (“SGIA”) to address interconnection queue backlogs, improve certainty, and prevent undue discrimination for new technologies. Initial comments and reply comments are due **October 13, 2022** and **November 14, 2022**, respectively.¹¹⁰ Thus far, one set of comments has been filed by the [Northwest and Intermountain Power Producers Coalition](#).

The proposed reforms fall into three main categories: (1) reforms to implement a first-ready, first-served cluster study process; (2) reforms to increase the speed of interconnection queue processing; and (3) reforms to incorporate technological advancements to the interconnection process. Within each of these categories, the FERC proposes a wide array of reforms, and requests comment.

To implement the **first-ready, first-served cluster study process**, the FERC proposes to:

- ♦ Require transmission providers offer an alternative option for an informational interconnection study that would not require a project enter the interconnection queue;
- ♦ Make cluster studies the required interconnection study method under the *pro forma* LGIP;
- ♦ Allocate the shared costs of the cluster studies so that 90% of the applicable study costs are allocated to interconnection customers on a pro rate basis based on the requested MWs included in the applicable cluster, and 10% of the applicable study costs are allocated to interconnection customers on a per capita basis based on the number of interconnection requests in the applicable cluster;
- ♦ Require transmission providers to allocate network upgrade costs to interconnection customers within a cluster using a proportional impact method, in which the transmission provider will determine the degree to which each generating facility in the cluster contributes to the need for a specific network upgrade;
- ♦ Allow interconnection customers in an earlier-in-time cluster to share the costs of network upgrades with interconnection customers who will significantly benefit from those upgrades but would not share the cost of the network upgrades solely by virtue of being in a later cluster;
- ♦ Increase study deposits based on the size of the generating facility from \$35,000 to \$250,000;

¹⁰⁷ “Extreme weather vulnerability assessments” are proposed to be defined as “analyses that identify where and under what conditions jurisdictional transmission assets and operations are at risk from the impacts of extreme weather events, how those risks will manifest themselves, and what the consequences will be for system operations”.

¹⁰⁸ The *Extreme Weather Vulnerability Assessments NOPR* was published in the *Fed. Reg.* on July 1, 2022 (Vol. 87, No. 126) pp. 39,414-39,426.

¹⁰⁹ *Improvements to Generator Interconnection Procedures and Agreements*, 179 FERC ¶ 61,194 (June 16, 2022) (“*Interconnection Reforms NOPR*”).

¹¹⁰ The *Interconnection Reforms NOPR* was published in the *Fed. Reg.* on July 5, 2022 (Vol. 87, No. 127) pp. 39,934-40,032.

- ♦ Require more stringent site control requirements, and proposes to require an interconnection customer to demonstrate 100% site control for a proposed generating facility when they submit the interconnection request;¹¹¹
- ♦ Implement a commercial readiness framework whereby interconnection customers must show demonstrable milestones towards commercial readiness in order to enter the cluster, such as an executed term sheet, reasonable evidence the project was selected in a resource plan, or a provisional LGIA;¹¹² and
- ♦ Impose withdrawal penalties when the interconnection customer withdraws from the interconnection queue.¹¹³

To **increase the speed of the interconnection queue process**, the FERC proposes to:

- ♦ Eliminate the “reasonable efforts” standard for transmission providers completing interconnection studies and instead impose firm study deadlines and establish penalties that would apply when transmission providers fail to meet these deadlines. The penalty imposed would be \$500 per day that the study is late and would be distributed to interconnection customers on a pro rata basis;
- ♦ Add an entirely *pro forma* affected system study process to address the current lack of uniformity in the study of affected systems, which results in late-stage withdrawals, re-studies and increased costs to remaining interconnection customers;
- ♦ Establish two new *pro forma* agreements, a *pro forma* Affected System Study Agreement (new Appendix 15) and a *pro forma* Affected Systems Facilities Construction Agreement (new Appendix 16); and
- ♦ Implement an optional resource solicitation study that can be performed by entities required to conduct a resource plan or solicitation. Under this proposed study process, a resource planning agency (such as a state agency or load-serving entity implementing a state mandate) would facilitate a study to group together interconnection requests associated with the qualifying resource solicitation process, and the resources vying for selection in a qualifying state resource solicitation process would be studied together for the purposes of informational interconnection studies.

Finally, as **technological advances to the interconnection process**, the FERC proposes to:

- ♦ Require transmission providers to allow more than one resource to co-locate on a shared site behind a single point of interconnection and share a single interconnection request;
- ♦ Change the way in which transmission providers assess an addition of a generating facility to an interconnection request, requiring that transmission providers evaluate a proposed addition as long as the addition does not change the requested interconnection service level;
- ♦ Enable customers with unused interconnection capacity share that surplus capacity with other resources as long as the original interconnection customer executes an LGIA or requests filing of an unexecuted LGIA;

¹¹¹ The FERC proposes to limit the option to provide a financial deposit in lieu of site control and would only allow this option when regulatory limitations prohibit the interconnection customer from obtaining site control. In such instances, the interconnection customer would submit a deposit of \$10,000 per MW, subject to a floor of \$500,000 and a ceiling of \$2 million.

¹¹² *Id.* at P 128.

¹¹³ The proposed withdrawal penalty will increase as the interconnection customer moves through the interconnection queue and proposes a chart demonstrating the possible penalties at P 144.

- ◆ Require transmission providers, at the request of the interconnection customer to use operating assumptions for interconnection studies that reflect the proposed operation of an electric storage resource or co-located storage resource; and
- ◆ Require transmission providers to evaluate grid-enhancing solutions and file an annual informational report on their use of grid-enhancing technologies.

The FERC proposes to require compliance within 180 days of a final rule in this proceeding. Compliance would require transmission providers to file updates to their *pro forma* LGIA, LGIP, SGIA and SGIP, as applicable. If you have any questions concerning the *Interconnection Reforms NOPR*, please contact Margaret Czepiel (202-218-3906; mczepiel@daypitney.com) or Eric Runge (617-345-4735; ekrunge@daypitney.com).

- **NOPR: ISO/RTO Credit Information Sharing (RM22-13)**

On July 28, 2022, the FERC issued a NOPR¹¹⁴ proposing to revise its regulations to permit ISO/RTOs to share among themselves¹¹⁵ credit-related information regarding market participants.¹¹⁶ The FERC believes that the proposed credit information sharing could improve ISO/RTOs' ability to accurately assess market participants' credit exposure and risks and enable ISO/RTOs to respond to credit events more quickly and effectively (minimizing the overall credit-related risks, including risks of unexpected defaults by market participants, in organized wholesale electric markets). The FERC proposal would not permit the information sharing to be conditioned on the specific consent of the market participant, would permit the receiving ISO/RTO to use market participant credit-related information received from another ISO/RTO to the same extent and for the same purposes that the receiving ISO/RTO may use credit-related information collected from its own market participants, and would not change the existing discretion an ISO/RTO has to act on credit-related information, regardless of the source of that information. The FERC seeks comment on whether ISO/RTOs' credit-related information sharing discretion should be limited in any specific ways or to any specific circumstances. Initial comments are due **October 7, 2022**; reply comments **November 7, 2022**.¹¹⁷

- **NOPR: Transmission System Planning Performance Requirements for Extreme Weather (RM22-10)**

On June 16, 2022, the FERC issued a notice¹¹⁸ proposing to require that NERC modify Reliability Standard TPL-001-5.1 (Transmission System Planning Performance Requirements) within one year of the effective date of a final rule in this proceeding to address reliability concerns pertaining to transmission system planning for extreme heat and cold weather events that impact the reliable operations of the Bulk-Power System. Specifically, the FERC proposed modifications to TPL-001-5.1 to require: (i) development of benchmark planning cases; (ii) planning for extreme heat and cold events using steady state and transient stability analyses expanded to cover a range of extreme weather scenarios; and (iii) corrective action plans that include mitigation for any instances where

¹¹⁴ *Credit-Related Information Sharing in Organized Wholesale Electric Markets*, 180 FERC ¶ 61,048 (July 28, 2022) ("*ISO/RTO Credit-Related Info Sharing NOPR*").

¹¹⁵ The *ISO/RTO Credit-Related Info Sharing NOPR* does propose credit-related information sharing with markets that are not Commission-jurisdictional (i.e. ERCOT, AESO, IESO or commodities and derivative markets that are subject to the jurisdiction of other regulators, including the Commodity Futures Trading Commission).

¹¹⁶ Revisions would be to 18 CFR § 35.47(h). The changes would "[p]ermit the sharing of market participant credit-related information with, and receipt of market participant credit-related information from, other organized wholesale electric markets for the purpose of credit risk management and mitigation, provided such market participant credit-related information is treated upon receipt as confidential under the terms for the confidential treatment of market participant information set forth in the tariff or other governing document of the receiving organized wholesale electric market; and permit the receiving organized wholesale electric market to use market participant credit-related information received from another organized wholesale electric market to the same extent and for the same purposes that the receiving organized wholesale electric market may use credit-related information collected from its own market participants.

¹¹⁷ The *ISO/RTO Credit-Related Info Sharing NOPR* was published in the *Fed. Reg.* on Aug. 8, 2022 (Vol. 87, No. 151) pp. 48,118-48,125.

¹¹⁸ *Transmission System Planning Performance Requirements for Extreme Weather*, 179 FERC ¶ 61,195 (June 16, 2022) ("*Extreme Weather Transmission System Planning NOPR*").

performance requirements for extreme heat and cold events are not met. Initial comments were due August 26, 2022¹¹⁹ and were filed by over 37 parties, including, among others, [ISO-NE](#), [Eversource](#), [NESCOE](#), [NRDC](#), [UCS](#), [NERC](#), [ERCOT](#), [MISO](#), [NYISO](#), [PJM](#), [ACPA](#), [EPRI](#), [EPSA](#), [NARUC](#), and [Trade Associations](#). This matter is pending before the FERC.

- **NOI: Rate Recovery, Reporting, and Accounting Treatment of Industry Association Dues and Certain Civic, Political, and Related Expenses (RM22-5)**

On December 16, 2021, the FERC issued a notice of inquiry¹²⁰ seeking comments on (i) the rate recovery, reporting, and accounting treatment of industry association dues and certain civic, political, and related expenses; (ii) the ratemaking implications of potential accounting and reporting changes; (iii) whether additional transparency or guidance is needed with respect to defining donations for charitable, social, or community welfare purposes; and (iv) a framework for guidance should the FERC determine action is necessary to further define the recoverability of industry association dues charged to utilities and/or utilities' expenses from civic, political, and related activities. Initial comments were due February 22, 2022 and were filed by [AGA](#), [APPA](#), [EEI](#), [EPRI](#), [Harvard Electricity Law Institute](#), [INGA](#), [Joint RTO Commenters](#),¹²¹ [MA AG](#), [National Grid](#), [NEI](#), [Nexamp](#), [NRECA](#), [Public Citizen](#), [Public Interest Organizations](#), [Ratepayers](#), [Sunova](#), and [UCS](#). Reply comments were due on or before March 23, 2022 and were filed by, among others: [DTE](#), [MA AG](#), [NECOS](#), [AGA](#), [EEI](#), [INGA](#), [Joint Consumer Advocates](#), and [WIRES](#). Since the last Report, [Joint RTO Commenters](#) replied to NECOS' discussion and characterization of the Initial Joint RTO Comments and a question of First Amendment constitutional law. This matter is pending before the FERC.

- **NOPR: Internal Network Security Monitoring for High and Medium Impact BES Cyber Systems (RM22-3)**

On January 20, 2022, the FERC issued a NOPR¹²² proposing to direct NERC to develop and submit for FERC approval new or modified Reliability Standards that require internal network security monitoring ("INSM")¹²³ within a trusted Critical Infrastructure Protection networked environment for high and medium impact Bulk Electric System ("BES") Cyber Systems. The FERC stated that "including INSM requirements in the CIP Reliability Standards would ensure that responsible entities maintain visibility over communications between networked devices within a trust zone (i.e., within an ESP), not simply monitor communications at the network perimeter access point(s), i.e., at the boundary of an ESP as required by the current CIP requirements. In the event of a compromised ESP, improving visibility within a network would increase the probability of early detection of malicious activities and would allow for quicker mitigation and recovery from an attack."¹²⁴

Comments on the *Internal Network Security Monitoring NOPR* were due on or before March 28, 2022.¹²⁵ Comments were filed by: the IRC, NERC, EEI, EPSA, TAPS, Bonneville Power Admin., Consumers Energy, Cynalytica, CA Department of Water Resources, Electricity Canada, Entergy, Idaho Power, Juniper Networks, ITC, Microsoft,

¹¹⁹ The *Extreme Weather Transmission System Planning NOPR* was published in the *Fed. Reg.* on June 27, 2022 (Vol. 87, No. 122) pp. 38,021-38,044.

¹²⁰ *Rate Recovery, Reporting, and Accounting Treatment of Industry Association Dues and Certain Civic, Political, and Related Expenses*, 177 FERC ¶ 61,180 (Dec. 16, 2021) ("*Dues & Expenses NOI*").

¹²¹ "Joint RTO Commenters" are PJM Interconnection, L.L.C. ("PJM"), California Independent System Operator Corp. ("CAISO"), Midcontinent Independent System Operator, Inc. ("MISO"), and Southwest Power Pool ("SPP").

¹²² *Internal Network Security Monitoring for High and Medium Impact Bulk Electric System Cyber Systems*, 178 FERC ¶ 61,038 (Jan. 20, 2022) ("*Internal Network Security Monitoring NOPR*").

¹²³ INSM is a subset of network security monitoring that is applied within a "trust zone," such as an Electronic Security Perimeter ("ESP"), and is designed to address situations where vendors or individuals with authorized access are considered secure and trustworthy but could still introduce a cybersecurity risk to a high or medium impact BES Cyber System.

¹²⁴ *Id.* at P 2.

¹²⁵ The *Internal Network Security Monitoring NOPR* was published in the *Fed. Reg.* on Jan. 27, 2022 (Vol. 87, No. 18) pp. 4,173-4,180.

North American Generator Forum, Nozomi Networks, Operational Technology Cybersecurity Coalition, the US Bureau of Reclamation, and T. Conway. This matter is pending before the FERC.

- **NOI: Reactive Power Capability Compensation (RM22-2)**

On November 18, 2021, the FERC issued a notice of inquiry¹²⁶ seeking comments on reactive power capability compensation and market design. Specifically, the FERC seeks comments on whether (i) the AEP Methodology remains a just and reasonable approach to determining reactive power revenue requirements in all circumstances; (ii) other potential alternative methodologies not based on the costs of the particular resource(s) at issue in a given proceeding should be considered or better used to develop reactive power capability revenue requirements; and (iii) resources interconnected to a distribution system and participating in wholesale markets are technically capable of providing reactive power to the transmission system in such a way that they should be eligible for reactive power capability compensation through transmission rates. Initial comments were due February 21; Reply Comments, March 23, 2022. Initial comments were filed by over 35 parties. Reply comments were filed by: Ameren, Clean Energy Coalition, DE Shaw, EDF, EEI, EPSA, Joint Customers,¹²⁷ MISO TOs, PJM IMM, PSEG, Vistra, and N. Bhushan. This matter is pending before the FERC.

- **Transmission NOPR (RM21-17)**

Following its ANOPR process,¹²⁸ the FERC issued on April 21, 2022 a NOPR¹²⁹ that would require public utility transmission providers to:

- (i) conduct long-term regional transmission planning on a sufficiently forward-looking basis to meet transmission needs driven by changes in the resource mix and demand;
- (ii) more fully consider dynamic line ratings and advanced power flow control devices in regional transmission planning processes;
- (iii) seek the agreement of relevant state entities within the transmission planning region regarding the cost allocation method or methods that will apply to transmission facilities selected in the regional transmission plan for purposes of cost allocation through long-term regional transmission planning;
- (iv) adopt enhanced transparency requirements for local transmission planning processes and improve coordination between regional and local transmission planning with the aim of identifying potential opportunities to “right-size” replacement transmission facilities; and

¹²⁶ *Rate Recovery, Reporting, and Accounting Treatment of Industry Association Dues and Certain Civic, Political, and Related Expenses*, 177 FERC ¶ 61,180 (Dec. 16, 2021) (“*Dues & Expenses NOI*”).

¹²⁷ “Joint Customers” are Old Dominion Electric Cooperative (“ODEC”), Northern Virginia Electric Cooperative, Inc. (“NOVEC”), and Dominion Energy Services, Inc. on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (“Dominion”).

¹²⁸ *See Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 176 FERC ¶ 61,024 (July 15, 2021) (“*Transmission Planning & Allocation/Generation Interconnection ANOPR*”). The FERC convened a tech. conf. on Nov. 15, 2021, to examine in detail the issues and potential reforms described in the ANOPR. Speaker materials and a transcript of the tech. conf. are posted in FERC’s eLibrary. Pre-technical conference comments were submitted by over 175 parties, including by: [NEPOOL](#), [ISO-NE](#), [AEE](#), [Anbaric](#), [Avangrid](#), [BP](#), [CPV](#), [Dominion](#), [EDF](#), [EDP](#), [Enel](#), [EPSA](#), [Eversource](#), [Exelon](#), [LS Power](#), [MA AG](#), [MMWEC](#), [National Grid](#), [NECOS](#), [NESCOE](#), [NextEra](#), [NRDC](#), [Orsted](#), [Shell](#), [UCS](#), [VELCO](#), [Vistra](#), [Potomac Economics](#), [ACORE](#), [ACPA/ESA](#), [APPA](#), [EEI](#), [ELCON](#), [Industrial Customer Orgs](#), [LPPC](#), [MA DOER](#), [NARUC](#), [NASUCA](#), [NASEO](#), [NERC](#), [NRECA](#), [SEIA](#), [State Agencies](#), [TAPS](#), [WIRES](#), [Harvard Electric Law Initiative](#), [NYU Institute for Policy Integrity](#), [New England for Offshore Wind Coalition](#), and the [R Street Institute](#). ANOPR reply comments and post-technical conference comments were filed by over 100 parties, including: by: [CT AG](#), [Acadia Center/CLF](#), [CT AG](#), [Dominion](#), [Enel](#), [Eversource](#), [LS Power](#), [MA AG](#), [MMWEC](#), [NESCOE](#), [NextEra](#), [Shell](#), [UCS](#), [Vistra](#), [ACPA/ESA](#), [AEE](#), [APPA](#), [EEI](#), [ELCON](#), [Environmental and Renewable Energy Advocates](#), [EPSA](#), [Harvard ELI](#), [NRECA](#), [Potomac Economics](#), and [SEIA](#). Supplemental reply comments were filed by [WIRES](#), and a group of [former military leaders and former Department of Defense officials](#), and [ACPA/AEE/SEIA](#).

¹²⁹ *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 179 FERC ¶ 61,028 (Apr. 21, 2022) (“*Transmission NOPR*”).

- (v) revise their existing interregional transmission coordination procedures to reflect the long-term regional transmission planning reforms proposed in this NOPR.

In addition, the *Transmission NOPR* would not permit public utility transmission providers to take advantage of the construction-work-in-progress (“CWIP”) incentive for regional transmission facilities selected for purposes of cost allocation through long-term regional transmission planning and would permit the exercise of federal rights of first refusal (“ROFR”) for transmission facilities selected in a regional transmission plan for purposes of cost allocation, conditioned on the incumbent transmission provider with the federal ROFR for such regional transmission facilities establishing joint ownership of the transmission facilities. While the ANOPR sought comment on reforms related to cost allocation for interconnection-related network upgrades, interconnection queue processes, interregional transmission coordination and planning, and oversight of transmission planning and costs, the *Transmission NOPR* does not propose broad or comprehensive reforms directly related to these topics. The FERC indicated that it would continue to review the record developed to date and expects to address possible inadequacies through subsequent proceedings that propose reforms, as warranted, related to these topics.

A number of the elements of the *Transmission NOPR*, if adopted as part of a final rule, would result in some significant changes to how the region’s transmission needs are identified, solutions are evaluated and selected, and costs recovered and allocated. A more fulsome high-level summary from NEPOOL Counsel of the *Transmission NOPR* was distributed to, and was reviewed with, the Transmission Committee, which will recommend whether NEPOOL should submit comments on the *Transmission NOPR*.

Comments. Following a number of requests for extensions of time, comments on the *Transmission NOPR* were due August 17, 2022.¹³⁰ Nearly 200 sets of comments were filed, including by [NEPOOL](#), [ISO-NE](#), [Acadia/CLF](#), [Anbaric](#), [AEE](#), [Avangrid](#), [BP](#), [Dominion](#), [Enel](#), [Engie](#), [Eversource](#), [Invenergy](#), [LSP Power](#), [MOPA](#), [MMWEC/CMEEC/NHEC/VPPSA](#), [National Grid](#), [NECOES](#), [NESCOE](#), [NextEra](#), [NRG](#), [Onward Energy](#), [Orsted](#), [PPL](#), [Shell](#), [Transource](#), [VELCO](#), [Vistra](#), [ISO/RTO Council](#), [NERC](#), [US DOJ/FTC](#), [MA AG](#), [State Agencies](#), [VT PUC/DPS](#), [Potomac Economics](#), [ACPA](#), [ACRE](#), [APPA](#), [EEI](#), [EPSA](#), [Industrial Customer Organizations](#), [LPPC](#), [NASUCA](#), [NRECA](#), [Public Interest Organizations](#), [SEIA](#), [TAPS](#), [WIRES](#), [Harvard Electricity Law Initiative](#), [New England for Offshore Wind](#), and the [R Street Institute](#).

Reply Comments. Reply comments were due **September 19, 2022**. Nearly 100 sets of reply comments were filed, including by: [ISO-NE](#), [AEE](#), [Anbaric](#), [Avangrid](#), [CT DEEP](#), [Cypress Creek](#), [Dominion](#), [ENGIE](#), [Eversource](#), [Invenergy](#), [LS Power](#), [MA AG](#), [NECOS](#), [NESCOE](#), [NextEra](#), [Shell](#), [Transource](#), [UCS](#), [ACPA](#), [ACRE](#), [APPA](#), [EEI](#), [Industrial Customer Organizations](#), [LPPA](#), [NRECA](#), [Public Interest Organizations](#), [R Street](#), and [SEIA](#).

If you have any questions concerning the *Transmission NOPR*, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com) or Margaret Czepiel (202-218-3906; mczepiel@daypitney.com).

- **NOI: Removing the DR Opt-Out in ISO/RTO Markets (RM21-14)**

On March 18, 2021, the FERC issued a NOI¹³¹ seeking comments on whether to revise its Demand Response (“DR”) Opt-Out regulations established in *Orders 719 and 719-A*. Those regulations require an ISO/RTO not to accept bids from an aggregator of retail customers (“ARC”) that aggregates DR of the customers of utilities that distributed more than 4 million MWh in the previous fiscal year, where the relevant electric retail regulatory authority prohibits such customers’ DR to be bid into ISO/RTO markets by an ARC. The FERC now seek information to help it examine the potential costs/burdens and benefits, both quantitative and qualitative, of removing the DR Opt-Out, as well as other changes relating to DR since the FERC issued *Orders 719 and 719-A*. The FERC is not seeking comment on the Small Utility Opt-In. Comments on the NOI, following an extension of time, were due on or before July 23, 2021 and were filed by nearly 30 parties, including by [AEE](#), [Voltus](#), [AEMA](#), [APPA/NRECA](#), [EEI](#), and

¹³⁰ A July 27, 2022, request by the Georgia Public Service Commission (“GA PUC”) for an additional 30 days of time to submit comments and reply comments was denied on Aug. 9, 2022.

¹³¹ *Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 174 FERC ¶ 61,198 (Mar. 18, 2021) (“DR Aggregator NOI”).

[NARUC](#). Reply comments were due on or before August 23, 2021, and were filed by [AEP](#), [Armada Power](#), [Entergy](#), [Southern Pioneer Electric](#), [Voltus](#), State Commissions from [LA/MS](#), [MI](#), [MO](#), [NC](#), [APPA/NRECA](#), Assoc. of Bus. Advocating Tariff Equity (“[ABATE](#)”), and [PIOs](#). On March 28, 2022, the Mississippi PSC moved to lodge its Protest and Response filed in a recent Complaint proceeding initiated and subsequently withdrawn by Voltus (EL21-12), to ensure its pleading is a part of the record of this proceeding. On March 29, 2022, the U.S. House Sustainable Energy and Environment Coalition (“SEEC”) Power Sector Task Force urged the FERC to proceed to a NOPR that would eliminate the demand response Opt-Out. In July, [Voltus](#) again submitted comments in support of eliminating the DR Opt-Out, with responses to those comments filed by the [Mississippi PSC](#) and [R. Borlick](#) (further supplemented on August 1, 2022 by the submission of a copy of the Supreme Court’s decision in *FERC v. EPSA*, 577 U.S. 260 (2016)). This matter remains pending before the FERC.

- **NOPR: Accounting and Reporting Treatment of Certain Renewable Energy Assets (RM21-11)**

On July 28, 2022, the FERC issued a NOPR¹³² proposing reforms to the accounting and reporting treatment of certain renewable energy assets. Specifically, the FERC proposes changes to the Uniform System of Accounts (“USoFA”) and relevant FERC forms to: (i) include new accounts for wind, solar, and other non-hydro renewable assets; (ii) create a new functional class for energy storage accounts; (iii) codify the accounting treatment of renewable energy credits; and (iv) create new accounts within existing functions for hardware, software, and communication equipment. The FERC also seeks comment on whether the Chief Accountant should issue guidance on the accounting for hydrogen. Comments on the *Renewable Energy Assets USoFA and Reporting NOPR* are due **[45 days after the date of publication in the Federal Register]**.¹³³

- **NOPR: Electric Transmission Incentives Policy (RM20-10)**

Supplemental NOPR. In light of comments already received in this proceeding,¹³⁴ the FERC issued on April 15, 2021 a *Supplemental NOPR*¹³⁵ to propose and seek comment on a revised incentive for transmitting and electric utilities that join Transmission Organizations (“Transmission Organization Incentive”). The Incentive would be reduced from 100 to 50 basis points and would be available only for three years. The FERC sought comment on whether voluntary participation should be a requirement, and if so, how “voluntary” should be determined. In addition, the FERC now proposes to require each utility that has received a Transmission Organization Incentive for three or more years to submit a compliance filing revising its tariff to remove the incentive from its transmission tariff. The *Supplemental NOPR* did not address the other proposals contained in the *March NOPR*.¹³⁶

¹³² *Accounting and Reporting Treatment of Certain Renewable Energy Assets*, 180 FERC ¶ 61,050 (July 28, 2022) (“*Renewable Energy Assets USoFA and Reporting NOPR*”).

¹³³ The *Renewable Energy Assets USoFA and Reporting NOPR* has still not yet been published in the *Fed. Reg.*

¹³⁴ Over 80 sets of comments on the *March NOPR* were filed on or before the July 1, 2020 comment date, including comments by: Avangrid, EDF Renewables, EMCOS, Eversource, Exelon, LS Power, MMWEC/NHEC/CMEEC, National Grid, NESOCE, NextEra, UCS, CT PURA, and Potomac Economics. Reply comments were filed by AEP, ITC Holding, the N. California Transmission Agency, and WIRES.

¹³⁵ *Electric Transmission Incentives Policy Under Section 219 of the Federal Power Act*, 175 FERC ¶ 61,035 (Apr. 15, 2021) (“*Supplemental NOPR*”).

¹³⁶ As previously reported, the *March NOPR* proposed revisions to the FERCs existing transmission incentives policy and corresponding regulations, including the following:

- ◆ A shift from risks and challenges to a **consumers’ benefits test** that focuses on ensuring reliability and reducing the cost of delivered power by reducing transmission congestion.
- ◆ **ROEs incentive for Economic Benefits.** A 50-basis-point adder for transmission projects that meet an economic benefit-to-cost ratio in the top 75th percentile of transmission projects examined over a sample period and an additional 50-basis-point adder for transmission projects that demonstrate *ex post* cost savings that fall in the 90th percentile of transmission projects studied over the same sample period, as measured at the end of construction.
- ◆ **ROE for Reliability Benefits.** A 50-basis-point adder for transmission projects that can demonstrate potential reliability benefits by providing quantitative analysis, where possible, as well as qualitative analysis.
- ◆ **Abandoned Plant Incentive.** 100 percent of prudently incurred costs of transmission facilities selected in a regional transmission planning process that are cancelled or abandoned due to factors that are beyond the control of the applicant. Recovery from the date that the project is selected in the regional transmission planning process.
- ◆ **Eliminate Transco Incentives.**

A more detailed summary of the NOPR was distributed to the Transmission Committee and discussed at the TC's March 25, 2020 meeting.

Comments on the *Supplemental NOPR* were due on or before June 25, 2021. Over 60 sets of comments were filed, including by the New England TOs, MMWEC/NHEC/CMMEC, NECOS, NESCOE, Potomac Economics, and CT PURA. Reply comments were due on or before July 26, 2021, with 28 sets of comments received, including by the [New England TOs](#), [NECOS](#), [NESCOE](#), [CT PURA/CT DEEP/MA AG](#), [CT AG](#), and [Public Interest Groups](#).¹³⁷ Reply comments were also posted from New England State Parties,¹³⁸ Alliant/Consumers/DTE, AEP, Pacific Gas & Electric, Joint Consumer Advocates, and the ACPA.

September 10, 2021 Workshop. The FERC convened a workshop on September 10, 2021¹³⁹ to discuss certain performance-based ratemaking approaches, particularly shared savings, that may foster deployment of transmission technologies. The notice states that the workshop will explore: the maturity of the modeling approaches for various transmission technologies; the data needed to study the benefits/costs of such technologies; issues pertaining to access to or confidentiality of this data; the time horizons that should be considered for such studies; and other issues related to verifying forecasted benefits. The workshop also discussed whether and how to account for circumstances in which benefits do not materialize as anticipated and may explore other performance-based ratemaking approaches for transmission technologies seeking incentives under FPA section 219, particularly market-based incentives. The FERC issued an agenda for the workshop, which included the final workshop program and expected speakers, on August 23, 2021. The FERC supplemented that notice on September 9, 2021. On October 13, 2021, the FERC posted a transcript of the workshop in eLibrary.

Notice Inviting Post-Workshop Comments. On October 18, 2021, the FERC issued a notice inviting those interested to file post-workshop comments to address the issues raised during the workshop concerning incentives and shared savings. Comments were due on or before January 14, 2022 and were filed by APPA, CAISO, Clean Energy Parties,¹⁴⁰ EDF Renewables, EEI, the Industrial Energy Consumers of America ("IECA"), National Grid, PJM IMM, TAPS.

These matters are pending before the FERC. If you have any questions concerning these matters, please contact Eric Runge (617-345-4735; ekrunge@daypitney.com).

- ***Voltus Petition for a FERC Technical Conference on Order 2222 (RM18-9)***

On December 22, 2022, Voltus, Inc. ("Voltus") requested that the FERC convene a technical conference regarding *Order 2222*-related issues sometime in the months of February or March, 2022. Specifically, Voltus requested the technical conference to allow for a collective discussion of key issues arising from the ISO/RTO *Order 2222* compliance proposals, including certain regional variability, roles of industry participants, narrowing perceived knowledge gaps, and subsequent FERC guidance, all of which Voltus asserts

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- ◆ ***Transmission Organization Incentive.*** A 50-basis-point increase for transmitting utilities that turn over their wholesale facilities to a Transmission Organization and *only for the first three years after transferring operational control of its facilities*. The FERC seeks comment as to whether participation must be voluntary to receive the incentive, and if so, how the CFERC should determine whether the decision to join is voluntary.
 - ◆ ***Transmission Technologies Incentives.*** Eligible for both a stand-alone, 100-basis-point ROE incentive on the costs of the specified transmission technology project and specialized regulatory asset treatment. Pilot programs presumptively eligible (though rebuttable).
 - ◆ ***250-Basis-Point Cap.*** Total ROE incentives capped at 250 basis points in place of current "zone of reasonableness" limit.
 - ◆ ***Updated Date Reporting Processes.*** Information to be obtained on a project-by-project basis, information collection expanded, updated reporting process.

¹³⁷ "Public Interest Groups" are NRDC, Sierra Club, Sustainable FERC Project, and Western Grid Group.

¹³⁸ "New England State Parties" are CT PURA, CT DEEP and the MA AG.

¹³⁹ Notice of Workshop, *Electric Transmission Incentives Policy Under Section 219 of the Federal Power Act*, Docket Nos. RM20-10 and AD19-19 (Apr. 15, 2021).

¹⁴⁰ The "Clean Energy Parties" are: Working for Advanced Transmission Technologies ("WATT Coalition"), ACPA, AEE, American Council on Renewable Energy ("ACORE"), NRDC, and the Sustainable FERC Project.

supports the request for a technical conference. On January 7, 2022, the FERC issued a notice of Voltus' request, inviting comments on Voltus' request on or before February 7, 2022. Comments supporting Voltus' request were filed by: [AEE](#), [AEMA](#), [APPA/NRECA](#), [EEI](#), [ISO-RTO Council](#), [MISO](#), [SPP](#), [Sunrun](#), [Ameren](#), [Camus Energy](#), [Energy Web Foundation](#), [Entegri Energy Partners](#), [Environmental Law and Policy Center](#), [Fermata LLC](#), [Google](#), [Leapfrog Power](#), [Nuvve Holding](#), [Tesla](#), [U Delaware EV Research and Development Group](#), and [Utilidata](#). Voltus' request remains pending before the FERC.

XIII. FERC Enforcement Proceedings

Electric-Related Enforcement Actions

- **ISO-NE (Salem Harbor) (IN18-8)**

On September 30, 2022, the FERC approved a Stipulation and Consent Agreement with ISO-NE¹⁴¹ that resolved OE's Part 1b investigation into ISO-NE's capacity payments to Salem Harbor before the new Salem Harbor Generating Station project ("Project") had been built or had commenced commercial operation. OE determined, among other things, that ISO-NE violated the ISO-NE Tariff by (i) failing to determine a revised COD and other CPS milestones; (ii) failing to submit a Demand Bid into the 2017 ARA3; (iii) issuing an inaccurate Qualified Capacity Value for Salem Harbor; and (iv) restricting the IMM's access to information about Salem Harbor.

Under the Agreement, in which ISO-NE neither admits nor denies the alleged violations, ISO-NE must **pay a \$500,000 civil penalty** to the United States Treasury, make new investments in its compliance program at an estimated cost of up to **\$350,000**, and submit one annual compliance monitoring report, in accordance with the terms of the Agreement, with the requirement of a second annual report at OE's option. In setting the remedy, which was a downward departure from the FERC's penalty guidelines, OE and the Commission took into consideration the following: (a) ISO-NE was not the only Entity whose conduct contributed to the market harm resulting from the matters covered by the investigation, (b) ISO-NE is a non-profit entity funded by fee-paying entities (ISO-NE customers), and (c) that a financial penalty might be passed on to Market Participants, potentially compounding the harm from what OE concluded were ISO-NE's violations.¹⁴² The FERC specifically noted that "each ISO/RTO and its management must adhere to the requirements of its Commission-approved tariff, which includes permitting any market monitor the ability to function in a manner consistent with that market monitor's role and obligations under that tariff".¹⁴³ Following issuance of the *ISO-NE Salem Harbor Enforcement Order*, ISO-NE posted a [statement](#) on the Settlement to its website and notified Participants that it plans to address this matter at the October 6 Participants Committee meeting.

If you have any questions concerning this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **Salem Harbor (IN18-8)**

On June 27, 2022, the FERC approved a Stipulation and Consent Agreement with Salem Harbor Power Development LP ("Salem Harbor")¹⁴⁴ that resolved OE's Part 1b investigation into Salem Harbor's receipt of capacity payments from ISO-NE for its New Salem Harbor Generating Station project ("Project") during the 2017-18 Capacity Commitment Period, a period during which the Project had neither been built nor commenced commercial operation. OE determined, among other things, that Salem Harbor failed to provide "complete updated version[s] of [its] critical path schedule ("CPS") as required by sections III.13.3.2 and

¹⁴¹ *ISO New England Inc.*, 180 FERC ¶ 61,223 (Sep. 30, 2022) ("*ISO-NE Salem Harbor Enforcement Order*").

¹⁴² *Id.* at PP 101-103.

¹⁴³ *Id.* at P 104.

¹⁴⁴ *Salem Harbor Power Development LP*, 179 FERC ¶ 61,228 (June 27, 2022) ("*Salem Harbor Order*").

III.13.3.2.1 of the ISO-NE Tariff, that narratives Salem Harbor submitted to ISO-NE made false claims regarding the Project's schedule trajectory and omitted numerous important and relevant details regarding the status of the Project and its construction-related delays, and that its CPS submission violated Salem Harbor's Duty of Candor under the FERC's Market Behavior Rules.¹⁴⁵ Under the Settlement, in which Salem Harbor neither admits nor denies the alleged violations, and subject to limitations of the Bankruptcy Code and in accordance with the treatment afforded to Allowed General Unsecured Claims pursuant to a plan to be approved by the Bankruptcy Court in Salem Harbor's ongoing Chapter 11 Cases, Salem Harbor must **disgorge \$26.7 million**,¹⁴⁶ and **pay a \$17.1 million civil penalty** to the United States Treasury.¹⁴⁷ If you have any questions concerning this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **PacifiCorp (IN21-6)**

On April 15, 2021, in the FERC's first-ever Show Cause Order addressing alleged violations of NERC Reliability Standards,¹⁴⁸ the FERC directed PacifiCorp to show cause why it should not be found to have violated FPA section 215(b)(1) and section 39.2 of the FERC's regulations by failing to comply with Reliability Standard FAC 009-1 (Establish and Communicate Facility Ratings), Requirement R1, and the successor Reliability Standard FAC-008-3 (Facility Ratings), Requirement R6 (collectively, "FAC-009-1 R1"), which requires a transmission owner to establish and have facility ratings that are consistent with its Facility Ratings Methodology ("FRM"). An Enforcement investigation found that clearance measurements on a majority of PacifiCorp's transmission lines were incorrect under the National Electric Safety Code, which were used to calculate PacifiCorp's facility ratings, thus making PacifiCorp's facility ratings inconsistent with its FRM. Enforcement alleges that PacifiCorp was aware of incorrect clearances on its system since at least 2007 when FAC-009-1 R1 became mandatory, but failed to identify and remedy them in a timely manner, and PacifiCorp's violations began on August 31, 2009, when it implemented its FRM policy, and at least some of the violations continued until August 2017 when PacifiCorp completed remediation of all of its incorrect clearances to make them consistent with its FRM. Enforcement also pointed to the role of the violations in the Wood Hollow, Utah wildfire that lasted from June 23 to July 1, 2012. In light of these alleged violations, the FERC directed PacifiCorp to show cause why it should not be assessed civil penalties in the amount of **\$42 million**.

On July 16, 2021, PacifiCorp answered the PacifiCorp Show Cause Order, denying the alleged violations of FAC-009. Enforcement filed its reply on September 14, 2021. This matter remains pending before the FERC. (Should the FERC choose to pursue a civil penalty against PacifiCorp for the alleged violations, PacifiCorp has already exercised its right to adjudicate these allegations in federal district court.) If you have any questions concerning this matter, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

Natural Gas-Related Enforcement Actions

- **Rover Pipeline, LLC and Energy Transfer Partners, L.P. (CPCN Show Cause Order) (IN19-4)**

On January 20, 2022, the FERC issued an order establishing a hearing to determine whether Rover Pipeline, LLC ("Rover") and its parent company Energy Transfer Partners, L.P. ("ETP" and collectively with Rover,

¹⁴⁵ 18 CFR § 35.41(b) (2022).

¹⁴⁶ ISO-NE was directed to distribute the disgorgement *pro rata* to network load, subject to the limitations of the Bankruptcy Code and the order of the Bankruptcy Court.

¹⁴⁷ In recommending the remedies, OE considered the roles that multiple individuals and entities played in ISO-NE not submitting a demand bid on Salem Harbor's behalf into ARA3. Neither the Agreement nor the *Salem Harbor Order* asserted violations by any individual or any entity other than Salem Harbor. However, the FERC reserves its right to make a determination as to the facts or issues of law that might give rise to any violation by any other individual or entity. *Salem Harbor Order* at P 58.

¹⁴⁸ *PacifiCorp*, 175 FERC ¶ 61,039 (Apr. 15, 2021) ("*PacifiCorp Show Cause Order*").

“Respondents”) violated section 157.5 of the FERC’s regulations and to ascertain certain facts relevant for any application of the FERC’s Penalty Guidelines.¹⁴⁹

As previously reported, on March 18, 2021, the FERC issued a show cause order¹⁵⁰ in which it directed Rover Pipeline, LLC (“Rover”) and Energy Transfer Partners, L.P. (“ETP” and together with Rover, “Respondents”) to show cause why they should not be found to have violated Section 157.5 of the FERC’s regulations by misleading the FERC in its Application for Certificate of Public Convenience and Necessity (“CPCN”) under NGA section 7(c).¹⁵¹ The FERC directed Respondents to show cause why they should not be assessed civil penalties in the amount of **\$20.16 million**. On April 5, 2021, the FERC extended by 60 days, to June 18, 2021, the deadline for Respondents’ answer. On June 18, 2021, Rover and ETP answered the *Rover/ETP Show CPCN Cause Order*, asserting that the FERC should dismiss this matter and decline to initiate an enforcement action. On July 21, 2021, Enforcement Staff answered Rover/ETP’s answer, stating the evidence supports a finding that Rover violated the FERC’s Regulations and should be assessed the civil penalty identified in the *Rover/ETP Show Cause Order*. Rover answered the July 21 answer on September 15, 2021.

Procedural Schedule Suspended. As previously reported, ALJ Joel DeJesus will be the presiding judge for hearings in this matter. On May 24, 2022, the Honorable Judge Karen Gren Scholer of the U.S. District Court for the Northern District of Texas issued an order staying this proceeding. Consistent with that order and out of an abundance of caution, Judge DeJesus suspended the procedural schedule until such time as the Court’s stay is lifted and the parties provide jointly a proposed amended procedural schedule.

- **Rover and ETP (Tuscarawas River HDD Show Cause Order) (IN17-4)**

On December 16, 2021, the FERC issued a show cause order¹⁵² in which it directed Rover and ETP (together, “Respondents”) to show cause why they should not be found to have violated NGA section 7(e), FERC Regulations (18 C.F.R. § 157.20); and the FERC’s Certificate Order,¹⁵³ by: (i) intentionally including diesel fuel and other toxic substances and unapproved additives in the drilling mud during its horizontal directional drilling (“HDD”) operations under the Tuscarawas River in Stark County, Ohio, in connection with the Rover Pipeline Project;¹⁵⁴ (ii) failing to adequately monitor the right-of-way at the site of the Tuscarawas River HDD operation; and (iii) improperly disposing of inadvertently released drilling mud that was contaminated with diesel fuel and hydraulic oil. The FERC directed Respondents to show why they should not be assessed civil penalties in the amount of **\$40 million**.

¹⁴⁹ *Rover Pipeline, LLC, and Energy Transfer Partners, L.P.*, 178 FERC ¶ 61,028 (Jan. 20, 2022) (“*Rover/ETP Hearings Order*”).

¹⁵⁰ *Rover Pipeline, LLC, and Energy Transfer Partners, L.P.*, 174 FERC ¶ 61,208 (Mar. 18, 2021) (“*Rover/ETP CPCN Show Cause Order*”).

¹⁵¹ Specifically, Rover stated that it was “committed to a solution that results in no adverse effects” to the Stoneman House, an 1843 farmstead located near Rover’s largest proposed compressor station. In truth, the OE Staff Report alleges, Rover was simultaneously planning to purchase the house with the intent to demolish it, if necessary, to complete its pipeline. The OE Staff Report alleges that Rover purchased the house in May 2015 and demolished the house in May 2016. The OE Staff Report further finds that despite taking these actions during the year and a half that Rover’s application was pending before the FERC, Rover did not notify the FERC that it purchased the Stoneman House, intended to destroy the Stoneman House, and did destroy the Stoneman House. The OE Staff Report therefore concludes that Rover violated section 157.5’s requirement for full, complete and forthright applications, through its misrepresentations and omissions, when it decided not to tell FERC that it had purchased the house and was considering demolishing it, and when Rover demolished it in May 2016 without notifying FERC.

¹⁵² *Rover Pipeline, LLC, and Energy Transfer Partners, L.P.*, 177 FERC ¶ 61,182 (Dec. 16, 2021) (“*Rover/ETP Tuscarawas River HDD Show Cause Order*”).

¹⁵³ *Rover Pipeline LLC*, 158 FERC ¶ 61,109 (2017), *order on clarification & reh’g*, 161 FERC ¶ 61,244 (2017), *Petition for Rev., Rover Pipeline LLC v. FERC*, No. 18-1032 (D.C. Cir. Jan. 29, 2018) (“*Certificate or Certificate Order*”).

¹⁵⁴ The Rover Pipeline Project is an approximately 711 mile long interstate natural gas pipeline designed to transport gas from the Marcellus and Utica shale supply areas through West Virginia, Pennsylvania, Ohio, and Michigan to outlets in the Midwest and elsewhere.

On March 21, 2022, Respondents answered and denied the allegations in the *Rover/ETP CPCN Show Cause Order*. On April 20, 2022, OE Staff answered Respondents' March 21 answer. On May 13, Respondents submitted a surreply, reinforcing their position that "there is no factual or legal basis to hold either [Respondent] liable for the intentional wrongdoing of others that is alleged in the Staff Report." Also since the last Report, the FERC denied Respondents' request for rehearing of the FERC's January 21, 2022 designation notice.¹⁵⁵ This matter is pending before the FERC.

- **BP (IN13-15)**

On December 17, 2020, the FERC issued *Opinion 549-A*,¹⁵⁶ a 159-page decision addressing arguments raised on rehearing requested of *Opinion 549*.¹⁵⁷ *Opinion 549-A* modifies the discussion in *Opinion 549*, but reaches the same the result (ultimately requiring BP to pay a **\$20.16 million civil penalty (roughly \$24.4 million with accrued interest) and disgorge \$207,169**). Of note, *Opinion 549-A* denied BP's motion to dismiss this enforcement action as time barred (by the five-year statute of limitations set forth in 28 U.S.C. § 2462), finding BP waived any statute of limitations defense by failing to raise it earlier in this proceeding.¹⁵⁸ *Opinion 549-A* revised Ordering Paragraph (C) to direct the disgorged profits to non-profits that disburse the Low Income Home Energy Assistance Program of Texas funds, rather than to the Texas Department of Housing.¹⁵⁹

On December 29, 2020, BP filed a notice that it intends to appeal *Opinion 549-A* to the Fifth Circuit Court of Appeals and paid the civil penalty amount on December 28, 2020, under protest and with full reservation of rights pending the outcome of judicial review of that Opinion. On January 19, BP filed a notice that it disgorged \$250,295 (\$207,169 principal plus interest), divided equally (\$83,431.67) among the following 3 entities identified in the "2016 Comprehensive Energy Assistance Program Subrecipient List": Dallas County Dept. of Health and Human Services (serving Dallas); El Paso Community Action, Project Bravo (Serving El Paso); and Panhandle Community Services (serving Armstrong and numerous other counties), again under protest and with full reservation of rights pending the outcome of judicial review of *Opinion 549/549-A*.

- **Total Gas & Power North America, Inc. et al. (IN12-17)**

On April 28, 2016, the FERC issued a show cause order¹⁶⁰ in which it directed Total Gas & Power North America, Inc. ("TGPNA") and its West Desk traders and supervisors, Therese Tran f/k/a Nguyen ("Tran") and Aaron Hall (collectively, "Respondents") to show cause why Respondents should not be found to have violated NGA Section 4A and the FERC's Anti-Manipulation Rule through a scheme to manipulate the price of natural gas at four locations in the southwest United States between June 2009 and June 2012.¹⁶¹

¹⁵⁵ *Rover Pipeline, LLC, and Energy Transfer Partners, L.P.*, 179 FERC ¶ 61,090 (May 11, 2022) ("*Designation Notice Rehearing Order*"). The "Designation Notice" provided updated notice of designation of the staff of the FERC's Office of Enforcement ("OE") as non-decisional in deliberations by the FERC in this docket, with the exception of certain staff named in that notice.

¹⁵⁶ *BP America Inc. et al.*, Opinion No. 549-A, 173 FERC ¶ 61,239 (Dec. 17, 2020) ("*BP Penalties Allegheny Order*").

¹⁵⁷ *BP America Inc.*, Opinion No. 549, 156 FERC ¶ 61,031 (July 11, 2016) ("*BP Penalties Order*") (affirming Judge Cintron's Aug. 13, 2015 Initial Decision finding that BP America Inc., BP Corporation North America Inc., BP America Production Company, and BP Energy Company (collectively, "BP") violated Section 1c.1 of the FERC's regulations ("Anti-Manipulation Rule") and NGA Section 4A (*BP America Inc. et al.*, 152 FERC ¶ 63,016 (Aug. 13, 2015) ("*BP Initial Decision*").

¹⁵⁸ *BP Penalties Allegheny Order* at P 1.

¹⁵⁹ *Id.* at P 319.

¹⁶⁰ *Total Gas & Power North America, Inc.*, 155 FERC ¶ 61,105 (Apr. 28, 2016) ("*TGPNA Show Cause Order*").

¹⁶¹ The allegations giving rise to the Total Show Cause Order were laid out in a September 21, 2015 FERC Staff Notice of Alleged Violations which summarized OE's case against the Respondents. Staff determined that the Respondents violated NGA section 4A and the Commission's Anti-Manipulation Rule by devising and executing a scheme to manipulate the price of natural gas in the southwest United States between June 2009 and June 2012. Specifically, Staff alleged that the scheme involved making largely uneconomic trades for physical natural gas during bid-week designed to move indexed market prices in a way that benefited the company's related positions. Staff

The FERC also directed TGPNA to show cause why it should not be required to disgorge unjust profits of **\$9.18 million**, plus interest; TGPNA, Tran and Hall to show cause why they should not be assessed civil penalties (TGPNA - **\$213.6 million**; Hall - **\$1 million** (jointly and severally with TGPNA); and Tran - **\$2 million** (jointly and severally with TGPNA)). In addition, the FERC directed TGPNA's parent company, Total, S.A. ("Total"), and TGPNA's affiliate, Total Gas & Power, Ltd. ("TGPL"), to show cause why they should not be held liable for TGPNA's, Hall's, and Tran's conduct, and be held jointly and severally liable for their disgorgement and civil penalties based on Total's and TGPL's significant control and authority over TGPNA's daily operations. Respondents filed their answer on July 12, 2016. OE Staff replied to Respondents' answer on September 23, 2016. Respondents answered OE's September 23 answer on January 17, 2017, and OE Staff responded to that answer on January 27, 2017.

Hearing Procedures. On July 15, 2021, the FERC issued an order establishing hearing procedures to determine whether Respondents violated the FERC's Anti-Manipulation Rule, and to ascertain certain facts relevant for any application of the FERC's Penalty Guidelines.¹⁶² On July 27, Chief Judge Cintron designated Judge Suzanne Krolikowski as the Presiding ALJ and established an extended Track III Schedule¹⁶³ for the proceeding.

Discovery in this case is ongoing and is now scheduled to close on December 2, 2022. Further, pursuant to an August 30, 2022 order of the Chief Judge, hearings (estimated to last 3-4 weeks) are scheduled to begin **January 23, 2023** and an initial decision is thereafter due **July 10, 2023**. Several procedural deadlines in support of that schedule were adjusted for a third time by Judge Krolikowski in an order issued on September 9, 2022.

XIV. Natural Gas Proceedings

For further information on any of the natural gas proceedings, please contact Joe Fagan (202-218-3901; jfagan@daypitney.com).

New England Pipeline Proceedings

The following New England pipeline projects are currently under construction or before the FERC:

- **Iroquois ExC Project (CP20-48)**
 - ▶ 125,000 Dth/d of incremental firm transportation service to ConEd and KeySpan by building and operating new natural gas compression and cooling facilities at the sites of four existing Iroquois compressor stations in Connecticut (Brookfield and Milford) and New York (Athens and Dover).
 - ▶ Three-year construction project; service request by November 1, 2023.
 - ▶ On March 25, 2022, after procedural developments summarized in previous Reports, the FERC issued to Iroquois a certificate of public convenience and necessity, authorizing it to construct and operate the proposed facilities.¹⁶⁴ The certificate was conditioned on: (i) Iroquois' completion of construction of the proposed facilities and making them available for service within **three years** of the date of the; (ii) Iroquois' compliance with all applicable FERC regulations under the NGA; (iii) Iroquois' compliance with the environmental conditions listed in the appendix to the order; and (iv) Iroquois' filing written statements affirming that it has executed firm service agreements for volumes and service terms equivalent to those in its precedent agreements, prior to commencing construction. The March 25, 2022 order also approved, as modified, Iroquois' proposed incremental recourse rate and incremental

alleged that the West Desk implemented the bid-week scheme on at least 38 occasions during the period of interest, and that Tran and Hall each implemented the scheme and supervised and directed other traders in implementing the scheme.

¹⁶² *Total Gas & Power North America, Inc. et al.*, 176 FERC ¶ 61,026 (July 15, 2021).

¹⁶³ The hearing in this proceeding will be convened within 55 weeks (Aug. 15, 2022) and the initial decision issued within 76 weeks (January 9, 2023) of the issuance of the Chief Judge's order.

¹⁶⁴ *Iroquois Gas Transmission Sys., L.P.*, 178 FERC ¶ 61,200 (2022) (*Iroquois Certificate Order*).

fuel retention percentages as the initial rates for transportation on the Enhancement by Compression Project.

- ▶ On April 18, 2022, Iroquois accepted the certificate issued in the *Iroquois Certificate Order*.
- ▶ On June 17, 2022, in accordance with the *Iroquois Certificate Order*, Iroquois submitted its Implementation Plan, documenting how it will comply with the FERC's Certificate conditions.
- ▶ The Project is targeted for a 4th quarter, 2023 in-service date.

Non-New England Pipeline Proceedings

The following pipeline projects could affect ongoing pipeline proceedings in New England and elsewhere:

- **Northern Access Project (CP15-115)**

- ▶ The New York State Department of Environmental Conservation ("NY DEC") and the Sierra Club requested rehearing of the *Northern Access Certificate Rehearing Order* on August 14 and September 5, 2018, respectively. On August 29, National Fuel Gas Supply Corporation and Empire Pipeline ("Applicants") answered the NY DEC's August 14 rehearing request and request for stay. On April 2, 2019, the FERC denied the NY DEC and Sierra Club requests for rehearing.¹⁶⁵ Those orders have been challenged on appeal to the US Court of Appeals for the Second Circuit (19-1610).
- ▶ As previously reported, the August 6, 2018 *Northern Access Certificate Rehearing Order* dismissed or denied the requests for rehearing of the *Northern Access Certificate Order*.¹⁶⁶ Further, in an interesting twist, the FERC found that a December 5, 2017 "Renewed Motion for Expedited Action" filed by National Fuel Gas Supply Corporation and Empire Pipeline, Inc. (the "Companies"), in which the Companies asserted a separate basis for their claim that the NY DEC waived its authority under section 401 of the Clean Water Act ("CWA") to issue or deny a water quality certification for the Northern Access Project, served as a motion requesting a waiver determination by the FERC,¹⁶⁷ and proceeded to find that the NY DEC was obligated to act on the application within one year, failed to do so, and so waived its authority under section 401 of the CWA.
- ▶ The FERC authorized the Companies to construct and operate pipeline, compression, and ancillary facilities in McKean County, Pennsylvania, and Allegany, Cattaraugus, Erie, and Niagara Counties, New York ("Northern Access Project") in an order issued February 3, 2017.¹⁶⁸ The Allegheny Defense Project and Sierra Club (collectively, "Allegheny") requested rehearing of the *Northern Access Certificate Order*.
- ▶ Despite the FERC's *Northern Access Certificate Order*, the project remained halted pending the outcome of National Fuel's fight with the NY DEC's April denial of a Clean Water Act permit. NY DEC found National Fuel's application for a water quality certification under Section 401 of the Clean Water Act, as well as for stream and wetlands disturbance permits, failed to comply with water regulations aimed at protecting wetlands and wildlife and that the pipeline failed to explore construction alternatives. National Fuel appealed the NY DEC's decision to the 2nd Circuit on the grounds that the denial was improper.¹⁶⁹ On February 2, 2019, the 2nd Circuit vacated the decision of the NY DEC and remanded the case with instructions for the NY DEC to more clearly articulate its basis

¹⁶⁵ *Nat'l Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 167 FERC ¶ 61,007 (Apr. 2, 2019).

¹⁶⁶ *Nat'l Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 164 FERC ¶ 61,084 (Aug. 6, 2018) ("*Northern Access Rehearing & Waiver Determination Order*"), *reh'g denied*, 167 FERC ¶ 61,007 (Apr. 2, 2019).

¹⁶⁷ The DC Circuit has indicated that project applicants who believe that a state certifying agency has waived its authority under CWA section 401 to act on an application for a water quality certification must present evidence of waiver to the FERC. *Millennium Pipeline Co., L.L.C. v. Seggos*, 860 F.3d 696, 701 (D.C. Cir. 2017).

¹⁶⁸ *Nat'l Fuel Gas Supply Corp.*, 158 FERC ¶ 61,145 (2017) ("*Northern Access Certificate Order*"), *reh'g denied*, 164 FERC ¶ 61,084 (Aug 6, 2018) ("*Northern Access Certificate Rehearing Order*").

¹⁶⁹ *Nat'l Fuel Gas Supply Corp. v. NYSDEC et al.* (2d Cir., Case No. 17-1164).

for the denial and how that basis is connected to information in the existing administrative record. The matter is again before the NY DEC.

- ▶ On November 26, 2018, the Applicants filed a request at FERC for a 3-year extension of time, until February 3, 2022, to complete construction and to place the certificated facilities into service. The Applicants cited the fact that they “do not anticipate commencement of Project construction until early 2021 due to New York’s continued legal actions and to time lines required for procurement of necessary pipe and compressor facility materials.” The extension request was granted on January 31, 2019.
- ▶ On August 8, 2019, the NY DEC again denied Applicants request for a Water Quality Certification, and as directed by the Second Circuit,¹⁷⁰ provided a “more clearly articulate[d] basis for denial.”
- ▶ On August 27, 2019, Applicants requested an additional order finding on additional grounds that the NY DEC waived its authority over the Northern Access 2016 Project under Section 401 of the CWA, even if the NY DEC and Sierra Club prevail in their currently pending court petitions challenging the basis for the Commission’s Waiver Order.¹⁷¹
- ▶ On October 16, 2020, Applicants requested, due to ongoing legal and regulatory delays, an additional 2-year extension of time, until December 1, 2024, to complete construction of the Project and enter service. More than 50 sets of comments on the requested extension were filed and on December 1, 2020, the FERC dismissed, without prejudice, Applicants’ request for an extension of time,¹⁷² finding the request premature. The FERC reiterated its encouragement that pipeline applicants requesting extensions “file their requests no more than 120 days before the deadline to complete construction”, so that the FERC has the relevant information available to determine whether good cause exists to grant an extension of time and whether the FERC’s prior findings remain valid.¹⁷³
- ▶ On January 28, 2022, Applicants again requested an additional extension of time, this time until December 31, 2024, to complete construction of the Project and enter service. Comments on that request were due on or before February 16, 2022. Many individual comments and protests were received.
- ▶ On June 29, 2022, the FERC granted Applicants’ request for an additional extension of time. Applicants now have until December 31, 2024 to construct and place the Project into service.¹⁷⁴
- ▶ A request for rehearing of the *Northern Access Project Add’l Extension Order* was denied by operation of law.¹⁷⁵
- ▶ On September 6, 2022, the Sierra Club petitioned the DC Circuit for review of the *Northern Access Project Add’l Extension Order* (see Section XVI below).

¹⁷⁰ Summary Order, *Nat’l Fuel Gas Supply Corp. v. N.Y. State Dep’t of Env’tl. Conservation*, Case 17-1164 (2d. Cir., issued Feb. 5, 2019).

¹⁷¹ See *Sierra Club v. FERC*, No. 19-01618 (2d Cir. filed May 30, 2019); *NYSDEC v. FERC*, No. 19-1610 (2d. Cir., filed May 28, 2019) (consolidated).

¹⁷² *National Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 173 FERC ¶ 61,197 (Dec. 1, 2020).

¹⁷³ *Id.* at P 10.

¹⁷⁴ *National Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 179 FERC ¶ 61,226 (June 29, 2022) (“*Northern Access Project Add’l Extension Order*”).

¹⁷⁵ *National Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 180 FERC ¶ 62,099 (Aug. 30, 2022).

XV. State Proceedings & Federal Legislative Proceedings

- **Maine - NECEC Transmission LLC et al. v. Bureau of Parks and Lands et al. (BCD-21-416)**

On August 30, 2022, the Maine Supreme Judicial Court concluded that the legislation enacted as a result of the passage of Maine’s November 2, 2021 ballot question,¹⁷⁶ and that effectively halted construction of the NECEC Project,¹⁷⁷ was unconstitutional to the extent it required the legislation to be applied retroactively to the certificate of public convenience and necessity (“CPCN”) issued for the Project if NECEC had acquired vested rights to proceed with Project construction (by undertaking substantial construction consistent with and in good-faith reliance on the CPCN before the Initiative was enacted). The Court remanded to the Business and Consumer Docket the factual question of whether NECEC performed substantial construction in good faith according to a schedule that was not created or expedited for the purpose of generating a vested rights claim (which it suggested appeared to be the case from the limited record developed in connection with the request for preliminary injunctive relief in this matter).

- **New England States’ Vision Statement**

In October 2020, the six New England states released their “[Vision Statement](#)”, outlining their vision for “a clean, affordable, and reliable 21st century regional electric grid” and committing to engage in a collaborative and open process, supported by NESCOE, intended to advance the principles discussed in the Vision Statement. As part of that effort, the following series of online technical forums to discuss the issues presented in the Vision Statement were held:

| | |
|--------------|----------------------------------|
| Jan 13, 2021 | Wholesale Market Reform |
| Jan 25, 2021 | Wholesale Market Reform |
| Feb 2, 2021 | Transmission Planning |
| Feb 25, 2021 | Governance Reform |
| Mar 18, 2021 | Equity and Environmental Justice |

Written comments on the topics and discussions addressed in the on the equity and environmental justice topics and discussions were, following an extension, due by May 13, 2021. Comments submitted are posted on [NewEnglandEnergyVision.com](https://newenglandenergyvision.com). Recordings of the technical forums, as well as draft notices, agendas, and additional information on these sessions, are also available on the New England States’ Vision Statement website (<https://newenglandenergyvision.com/>).

Report to the Governors. On June 29, 2021, the NESCOE Managers published their Progress Report to the New England Governors Regarding “Advancing the New England Energy Vision”. The Report was further discussed at the August 5, 2021 Participants Committee meeting. View Report [here](#).

¹⁷⁶ The ballot question, approved by 59% of Maine voters, which summarized the citizen’s initiative pursued under Maine’s constitutional provision for direct initiative of legislation (ME. Const. Art. IV, pt. 3, § 18), read: “Do you want to ban the construction of high-impact electric transmission lines in the Upper Kennebec Region and to require the Legislature to approve all other such projects anywhere in Maine, both retroactively to 2020, and to require the Legislature, retroactively to 2014, to approve by a two-thirds vote such projects using public land?”

¹⁷⁷ The New England Clean Energy Connect (“NECEC”) project (the “NECEC Project”) is designed to transmit power generated in Québec through Maine and into Massachusetts. The Project includes a new 145.3-mile, high-voltage direct current (“HVDC”) transmission line, proposed to run from the Maine-Québec border in Beattie Township, ME to a new converter station in Lewiston, ME and from there to an existing substation by a new 1.2-mile, high-voltage alternating current transmission line.

ISO-NE Board Response. On September 23, 2021, the ISO-NE Board responded to the New England States' Vision Statement and Advancing the Vision Report. A copy of that response was included with the materials for the October 7, 2021 Participants Committee meeting and is posted on the ISO-NE website [here](#).

XVI. Federal Courts

The following are matters of interest, including petitions for review of FERC decisions in NEPOOL-related proceedings, that are currently pending before the federal courts (unless otherwise noted, the cases are before the U.S. Court of Appeals for the District of Columbia Circuit ("DC Circuit")). An "***" following the Case No. indicates that NEPOOL has intervened or is a litigant in the appeal. The remaining matters are appeals as to which NEPOOL has no organizational interest but that may be of interest to Participants. For further information on any of these proceedings, please contact Pat Gerity (860-275-0533; pmgerity@daypitney.com).

- **2nd Revised Narragansett LSA Orders (22-1161, 22-1108) (consolidated)**

Underlying FERC Proceeding: ER22-707¹⁷⁸

Petitioner: Green Development

Status: Initial Submissions Submitted; Revised Briefing Scheduled Established

On June 15, 2022, Green Development petitioned the DC Circuit for review of the FERC's 2nd Revised Narragansett LSA Orders.¹⁷⁹ On June 17, 2022, the Court directed Green Development to file, and Green Development filed, a Docketing Statement, Statement of Issues, any Procedural Motions, and the underlying decisions from which the appeal arises. The FERC filed the Certified Index to the Record on July 28, 2022.

Since the Last Report, Green Development filed, on August 15, 2022, a Statement of Issues and Docketing Statement. On August 30, 2022, the Court established a revised briefing schedule that calls for the following: Petitioner's Brief (October 11, 2022); Respondent's Brief (December 12, 2022); Intervenor for Respondent's Brief (December 19, 2022); Petitioner's Reply Brief (January 9, 2023); Deferred Appendix (January 17, 2023); and Final Briefs (January 31, 2023). New England Power Company's August 10, 2022 motion for leave to intervene was granted on August 29, 2022.

¹⁷⁸ *ISO New England Inc. and New England Power Co. d/b/a National Grid*, 178 FERC ¶ 61,115 (Feb. 18, 2022) ("2nd Rev Narragansett LSA Order"). *ISO New England Inc. and New England Power Co. d/b/a National Grid*, 179 FERC ¶ 62,035 (Apr. 18, 2022) (notice of denial of rehearing by operation of law and providing for further consideration). Together, these orders referred to as the "2nd Revised Narragansett LSA Orders".

¹⁷⁹ The 2nd Revised Narragansett LSA is a Local Service Agreement ("LSA") among New England Power, Narragansett and ISO-NE. The LSA reflects the construction of the new Iron Mine Hill Road Substation and related transmission modifications, and the assessment to Narragansett of a Direct Assignment Facilities Charge ("DAF Charge") associated with the facilities. The Iron Mine Hill Road Substation, a new 115 kV/34.5 kV substation (including modifications necessary to loop Narragansett's existing 115 kV H17 transmission line through the new substation) will connect to a new 34.5 kV distribution feeder, which will serve as the point of interconnection for several distributed generation projects being developed by Green Development, LLC ("Green Development"), located in North Smithfield, Rhode Island.

- **Mystic II (ROE & True-Up)**
(21-1198; 21-1222, 21-1223, 21-1224, 22-1001, 22-1008, 22-1026, 22-1215) (consolidated)
Underlying FERC Proceeding: EL18-1639-010, -011,¹⁸⁰ -013¹⁸¹ -017¹⁸²
Petitioners: Mystic, CT Parties,¹⁸³ MA AG, ENECOS
Status: Continued Abeyance Requested; Motion to Sever and Dismiss 22-1215 Pending

As previously reported, this case was initiated when, on October 8, 2021, Mystic petitioned the DC Circuit Court of Appeals for review of the FERC's orders setting the base ROE for the Mystic COS Agreement at 9.33%. The *Mystic ROE Order* and subsequent FERC orders addressing the Mystic ROE issues have all also been appealed by various parties and consolidated under 21-1198. Docketing Statements and Statements of Issues to be Raised, and the Underlying Decision from which the various appeals arise have been filed as new dockets have been opened and then consolidated with 21-1198. As previously reported, the Certified Index to the Record was due, and filed by the FERC, on February 22, 2022. On March 10, 2022, MMWEC and NHEC filed a notice of intent to participate in support of FERC in Case Nos. 21-1198, 22-1008, and 22-1026 and in support of Petitioners in the remaining consolidated cases, and filed a statement of issues. On March 17, 2022, CT Parties moved to intervene, and those interventions were granted on May 4, 2022.

As previously reported, on July 8, 2022, Connecticut Parties and ENECOS jointly moved to hold these proceedings in abeyance until 30 days after the DC Circuit issued an opinion in *MISO Transmission Owners v. FERC*, 16-1325 ("*MISO TOs*") (see below). They requested abeyance on the basis that the consolidated petitions in this proceeding and *MISO TOs* both involve challenges to the FERC's ROE methodology (the FERC set the ROE used in calculating Constellation's rates using the methodology challenged in *MISO TOs*). Although Constellation opposed the abeyance request, the Court granted the abeyance request on July 27, 2022, directing the Parties to file motions to govern future proceedings within 30 days of the court's disposition of *MISO TOs*.

As previously reported, the Court has since decided *MISO TOs*. However, the parties agreed that it was premature to return the cases to the Court's active docket, and asked that the Court on September 8, 2022 to (1) keep the ROE petitions for review in abeyance and (2) direct that motions to govern future proceedings be filed (a) within three weeks of the issuance of the mandate in *MISO TOs* if no petitions for rehearing of that decision are filed, or (b) within three weeks of a court order granting or denying any petitions for rehearing of *MISO TOs* that may be filed. Also since the last Report, Mystic moved, on September 7, to voluntarily dismiss Case No. 22-1215, which had been consolidated with these cases. The motion was unopposed and preceded any briefing in Case No. 22-1215.

¹⁸⁰ *Constellation Mystic Power, LLC*, 176 FERC ¶ 61,019 (July 15, 2021) ("*Mystic ROE Order*"); *Constellation Mystic Power, LLC*, 176 FERC ¶ 62,127 (Sep. 13, 2021) ("*September 13 Notice*") (Notice of Denial By Operation of Law of Rehearings of Mystic ROE Order).

¹⁸¹ *Constellation Mystic Power, LLC*, 178 FERC ¶ 61,116 (Feb. 18, 2022) ("*Mystic ROE Second Allegheny Order*"); *Constellation Mystic Power, LLC*, 178 FERC ¶ 62,028 (Jan. 18, 2022) ("*January 18 Notice*") (Notice of Denial By Operation of Law of Rehearings of Mystic ROE Second Allegheny Order).

¹⁸² *Constellation Mystic Power, LLC*, 179 FERC ¶ 61,011 (Apr. 28, 2022) ("*Mystic First CapEx Info. Filing Order*"); *Constellation Mystic Power, LLC*, 179 FERC ¶ 62,179 (June 27, 2022) ("*June 27 Notice*") (Notice of Denial By Operation of Law of Rehearings of *Mystic First CapEx Info. Filing Order*).

¹⁸³ In this appeal, "CT Parties" are the Connecticut Public Utilities Regulatory Authority ("CT PURA"), Connecticut Department of Energy and Environmental Protection ("CT DEEP"), and the Connecticut Office of Consumer Counsel ("CT OCC").

- **Mystic I (Original Cost Test, Capital Structure, Everett Cost Recovery, Clawback, True-Up Mechanism) (20-1343; 20-1361, 20-1362; 20-1365, 20-1368; 21-1067; 21-1070)(consolidated)**
Underlying FERC Proceeding: EL18-1639¹⁸⁴
Petitioners: Mystic (20-1343), NESCOE (20-1361, 21-1067), MA AG (20-1362), CT Parties (20-1365, 20-1368, 21-1070)

Status: Decision Issued; Mandate Not Yet Issued

As previously reported, Mystic, NESCOE, MA AG, and CT Parties separately petitioned the DC Circuit Court of Appeals for review of the FERC's orders addressing the COS Agreement among Mystic, Constellation and ISO-NE.¹⁸⁵ The cases were consolidated into Case No. 20-1343. Following briefing, oral argument was held on May 5, 2022 before Judges Srinivasan, Henderson and Rao.

On August 23, 2022, the Court issued its decision holding that:

- Mystic's petition for review be dismissed in part and denied in part;
- State Petitioners' petitions for review on the cost allocation issue be granted;
- the clawback portions excluding Everett costs and the challenged delay provision of the orders under review be vacated; and
- the cases be remanded for the FERC to address NESCOE's request for clarification about revenue credits and for clarification of the apparent contradictions in the FERC's December 2020 Rehearing Order.

The Court ordered that issuance of the mandate be withheld until seven days after disposition of any timely petition for rehearing or petition for rehearing en banc. As of the date of this Report, the mandate has not issued.

- **CASPR (20-1333, 21-1031) (consolidated)****
Underlying FERC Proceeding: ER18-619¹⁸⁶
Petitioners: Sierra Club, NRDC, RENEW Northeast, and CLF
Status: Being Held in Abeyance (until March 1, 2024)

As previously reported, the Sierra Club, NRDC, RENEW Northeast, and CLF petitioned the DC Circuit Court of Appeals on August 31, 2020 for review of the FERC's order accepting ISO-NE's CASPR revisions and the FERC's subsequent *CASPR Allegheny Order*. Appearances, docketing statements, a statement of issues to be raised, and a statement of intent to utilize deferred joint appendix were filed. A motion by the FERC to dismiss the case was dismissed as moot by the Court, referred to the merits panel (Judges Pillard, Katsas and Walker), and is to be addressed by the parties in their briefs.

Petitioners have moved to hold this matter in abeyance three times. The Court has granted each request. The most recent request was submitted on July 22, 2022 (third abeyance request) and moved the Court to hold this matter in abeyance until March 1, 2024, the date on which the elimination of MOPR is to be implemented, with motions to govern due 30 days thereafter. The Court granted the third abeyance request on July 25, 2022.

¹⁸⁴ July 2018 Order; July 2018 Rehearing Order; Dec 2018 Order; Dec 2018 Rehearing Order; Jul 17 Compliance Order.

¹⁸⁵ The COS Agreement is to provide compensation for the continued operation of the Mystic 8 & 9 units from June 1, 2022 through May 31, 2024.

¹⁸⁶ *ISO New England Inc.*, 162 FERC ¶ 61,205 (Mar. 9, 2018) ("CASPR Order").

- **Opinion 531-A Compliance Filing Undo (20-1329)**

Underlying FERC Proceeding: ER15-414¹⁸⁷

Petitioners: TOs' (CMP et al.)

Status: Being Held in Abeyance

On August 28, 2020, the TOs¹⁸⁸ petitioned the DC Circuit Court of Appeals for review of the FERC's October 6, 2017 order rejecting the TOs' filing that sought to reinstate their transmission rates to those in place prior to the FERC's orders later vacated by the DC Circuit's *Emera Maine*¹⁸⁹ decision. On September 22, 2020, the FERC submitted an unopposed motion to hold this proceeding in abeyance for four months to allow for the Commission to "a future order on petitioners' request for rehearing of the order challenged in this appeal, and the rate proceeding in which the challenged order was issued remains ongoing before the Commission." On October 2, 2020, the Court granted the FERC's motion, and directed the parties to file motions to govern future proceedings in this case by February 2, 2021. On January 25, 2021, the FERC requested that the Court continue to hold this petition for review in abeyance for an additional three months, with parties to file motions to govern future proceedings at the end of that period. The FERC requested continued abeyance because of its intention to issue a future order on petitioners' request for rehearing of the order challenged in this appeal, and the rate proceeding in which the challenged order was issued remains ongoing before the FERC. Petitioners consented to the requested abeyance. On February 11, 2021, the Court issued an order that that this case remain in abeyance pending further order of the court. On April 21, 2021, the FERC filed an unopposed motion for continued abeyance of this case *because* the Commission intends to issue a future order on Petitioners' request for rehearing of the challenged Order Rejecting Compliance Filing, and because the remand proceeding in which the challenged order was issued remains ongoing.

On May 4, 2021, the Court ordered that this case remain in abeyance pending further order of the Court, directing the FERC to file a status report by September 1, 2021 and at 120-day intervals thereafter. The parties were directed to file motions to govern future proceedings in this case within 30 days of the completion of agency proceedings. The FERC's last status report, indicating that the proceedings before the Commission remain ongoing and that this appeal should continue to remain in abeyance, was filed on August 11, 2022. The next status report is due on or before **December 9, 2022**.

Other Federal Court Activity of Interest

- **Northern Access Project (22-1233)**

Underlying FERC Proceeding: CP15-115¹⁹⁰

Petitioners: Sierra Club

Status: Filing of Initial Submissions Underway

On September 6, 2022, the Sierra Club petitioned the DC Circuit for review of *Northern Access Project Add'l Extension Order*. Sierra Club must file a Docketing Statement, Statement of Issues, any Procedural Motions, and the underlying decision from which the appeal arises by October 11, 2022. Dispositive motions, if any, and a Certified Index to the Record must be filed by October 24, 2022.

¹⁸⁷ *ISO New England Inc.*, 161 FERC ¶ 61,031 (Oct. 6, 2017) ("Order Rejecting Filing").

¹⁸⁸ The "TOs" are CMP; Eversource Energy Service Co., on behalf of its affiliates CL&P, NSTAR and PSNH; National Grid; New Hampshire Transmission; UI; Unitil and Fitchburg; VTransco; and Versant Power.

¹⁸⁹ *Emera Maine v. FERC*, 854 F.3d 9 (D.C. Cir. 2017) ("*Emera Maine*").

¹⁹⁰ *National Fuel Gas Supply Corp. and Empire Pipeline, Inc.*, 179 FERC ¶ 61,226 (June 29, 2022) ("*Northern Access Project Add'l Extension Order*").

- **Order 872 (20-72788,* 21-70113; 20-73375, 21-70113) (consol.) (9th Cir.)**

Underlying FERC Proceeding: RM19-15¹⁹¹

Petitioners: SEIA et al.

Status: Oral Argument Held March 8, 2022; Awaiting Decision

On September 17, 2020, SEIA petitioned the 9th Circuit Court of Appeals for review of *Order 872*.¹⁹²

Briefing is complete and oral argument was held March 8, 2022 before Judges Nguyen, Miller and Bumatay. This matter is pending before the Court.

- **Opinion 569/569-A: FERC's Base ROE Methodology (16-1325, 20-1182, 20-1240, 20-1241, 20-1248, 20-1251, 20-1267, 20-1513) (consol.)**

Underlying FERC Proceeding: EL14-12; EL15-45¹⁹³

Petitioners: MISO TOs, Transource Energy, Dec 23 Petitioners et al.

Status: Decision Issued on August 9, 2022; Mandate Issued October 4, 2022 (underlying FERC orders vacated; cases remanded to FERC to reopen proceedings)

The MISO TOs, Transource and "Dec 23 Petitioners",¹⁹⁴ among others, appealed *Opinion 569/569-A*. The MISO TOs' case was consolidated with previous appeals that had been held in abeyance, with the lead case number assigned as 16-1325. Following completion of briefing, oral argument was held on November 18, 2021 before Judges Srinivasan, Katsas and Walker.

On August 9, 2022, the Court issued its decision granting customers' petitions for review, dismissing transmission owners' petitions for review, vacating the underlying FERC orders, and remanding the cases to the FERC to reopen proceedings. In reaching its decision, the Court found that the "FERC failed to offer a reasoned explanation for its decision to reintroduce the risk-premium model [] after initially, and forcefully, rejecting it. Because FERC adopted that significant portion of its model in an arbitrary and capricious fashion, the new [ROE] produced by that model cannot stand. We therefore vacate FERC's orders." Because the Court ordered the FERC to vacate its prior rate orders, it dismissed the remaining surviving challenges (e.g. refund and authority issues), which can be resolved in and following the FERC proceedings that will ensue following this remand. Of course, this decision and those proceedings to follow are expected to impact multiple proceedings in which the FERC this now-vacated ROE methodology, including the Mystic ROE proceeding pending before the DC Circuit and the New England ROE cases that are pending before the FERC and from which the ROE issue originated.

¹⁹¹ *Transcontinental Gas Pipe Line Co., LLC*, 159 FERC ¶ 62,181 (Feb. 3, 2017); *Transcontinental Gas Pipe Line Co., LLC*, 161 FERC ¶ 61,250 (Dec. 6, 2017).

¹⁹² *Order 872* approved pricing and eligibility revisions to the FERC's long-standing regulations implementing sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 ("PURPA"), including: state flexibility in setting QF rates; a decrease (to 5 MW) to the threshold for a rebuttable presumption of access to nondiscriminatory, competitive markets; updates to the "One-Mile Rule"; clarifications to when a QF establishes its entitlement to a purchase obligation; and provision for certification challenges.

¹⁹³ *Transcontinental Gas Pipe Line Co., LLC*, 159 FERC ¶ 62,181 (Feb. 3, 2017); *Transcontinental Gas Pipe Line Co., LLC*, 161 FERC ¶ 61,250 (Dec. 6, 2017).

¹⁹⁴ "Dec 23 Petitioners" are: Assoc. of Bus. Advocating Tariff Equity; Coalition of MISO Transmission Customers: IL Industrial Energy Consumers; IN Industrial Energy Consumers, Inc.; MN Large Industrial Group; WI Industrial Energy Group; AMP; Cooperative Energy; Hoosier Energy Rural Elec. Coop.; MS Public Service Comm.; MO Pub. Svc. Comm.; MO Joint Mun. Electric Utility Comm.; Org. of MISO States, Inc.; Southwestern Elec. Coop., Inc.; and Wabash Valley Power Assoc.

- **Algonquin Atlantic Bridge Project Orders (21-1115*, 21-1138, 21-1153, 21-1155 consol.) and (22-1146, 22-1147 consol.)**
Underlying FERC Proceeding: CP16-9-012¹⁹⁵
Petitioners: LS Power, Algonquin, INGA
Status: Cases 22-1146/47 Deconsolidated and Briefing Schedule Set; Remaining Cases (21-1115 et al.) Being Held in Abeyance Pending Disposition of 22-1146/47

On May 3, 2021, Algonquin petitioned the DC Circuit Court of Appeals for review of the *Briefing Order* and the *April 19 Notice of Denial of Rehearings by Operation of Law*. Appearances, docketing statements and a statement of issues were due and filed June 4, 2021. Also on June 4, 2021, the FERC filed an unopposed motion to hold this proceeding in temporary abeyance, until August 2, 2021, including the filing of the certified index to the record, because “the May 3 petition for review no longer reflects the [FERC]’s latest determination in this matter.” The Court granted the first abeyance motion. On November 15, 2021, the Court granted a third abeyance motion by the FERC, directing the parties to file motions to govern future proceedings by January 31, 2022. On January 31, 2022, Algonquin and INGA asked the Court to extend the abeyance by an additional 120 days (to May 31, 2022). On February 15, 2022, the Court issued an order extending the abeyance and directing the Petitioners to file motions to govern future proceedings by May 31, 2022. On May 31, 2022, Petitioners asked the Court to continue to hold this proceeding in abeyance pending the First Circuit’s disposition of Algonquin’s pending motions to transfer that Court’s cases 20-1458 and 22-1201 (which also challenge the FERC’s authorization of the “Atlantic Bridge Project”).

On June 30, the First Circuit transferred cases 20-1458 and 22-1201 to the DC Circuit. The DC Circuit docketed those cases as 22-1146 and 22-1147, consolidated them with its cases challenging the Atlantic Bridge Project orders (with 21-1115 remaining the lead case), and directed the parties to file a proposed briefing schedule. On July 19, the parties filed a proposal that cases 22-1146 and 22-1147 be severed, proposed a revised briefing format and schedule for those cases, and asked the Court to continue to hold the remaining cases in abeyance (asserting that abeyance may avoid the need for briefing and adjudication of the issues that Algonquin and INGAA would press).

On August 16, 2022, the Court deconsolidated 22-1146 and 22-1147 from 21-1115 et al., which is to remain in abeyance pending a further order of the Court. The Court consolidated Cases 22-1146 and 22-1147 together and issued a briefing schedule that calls for Joint Brief of Petitioners by October 28, 2022; Respondent Brief by January 12, 2023, Joint Brief of Intervenors by January 26, 2023, Joint Reply Brief of Petitioners by February 16, 2023, Deferred Joint Appendix by March 2, 2023, and Final Briefs by March 9, 2023. The date of oral argument and the composition of the merits panel will be provided at a later date.

¹⁹⁵ *Briefing Order; April 19 Notice of Denial of Rehearings by Operation of Law.*

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