



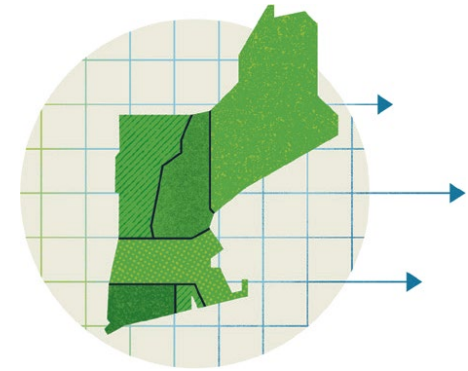
Updated 2024 Annual Work Plan

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Objectives and Highlights



- This report reflects updates to the *2024 Annual Work Plan (2024 AWP)* since its publication in October 2023
 - The Update demonstrates the coordinated efforts by the ISO and stakeholders in adjusting schedules, resources, and priorities to accomplish projects of great significance to the region
- Potential impacts to this year’s work plan may stem from FERC’s Order on the further two-year FCA 19 delay in June and FERC’s final rule on NOPR RM21-17 (*Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*) anticipated this spring
 - Also of note are the ISO’s staffing challenges, having recently lost multiple members of teams working on key markets initiatives and the hiring of more entry-level staff
- Stakeholders can submit new requests for the ISO’s 2025 AWP through the NEPOOL priorities process, which kicked off in March 2024
 - Over the following months, the requests are discussed, narrowed, and a final list is chosen for incorporation into the 2025 plan
 - The AWP focuses on larger initiatives and also does not represent the ISO’s full workload, including project implementation work or the extensive day-to-day operations related to running the grid, the markets, and its organization

Anchor Projects on Track



- **Extended/Longer-Term Transmission Planning Phase 2:** Stakeholder discussions are now concluding from 2023; a FERC filing is expected in Q2 2024, with a Q3 effective date
- **Energy Adequacy Threshold Determination:** The ISO reported results from the Probabilistic Energy Adequacy Tool (PEAT) in 2023; stakeholder discussions to continue in Q2 2024 on establishing a Regional Energy Shortfall Threshold (REST), with a proposal presented by end of year
 - Analysis of scope, timing, and feasibility of regional solutions to maintain/achieve a REST would follow in 2025 as needed
- **Day-Ahead Ancillary Services Initiative (DASI) Implementation:** Development of software and implementation processes on track for Q1 2025
 - Stakeholder discussion began in Q1 2024 on DASI Conforming Changes, with a filing expected by end of Q2 2024
- **nGem Real-Time Market Clearing Engine:** Development of the new real-time market clearing engine software and infrastructure is on track for Q2 2025 implementation

Anchor Projects on Track, cont'd



- **FERC Order No. 2023:** Compliance with the Order is on track to meet the FERC-mandated April 3 filing date, a May 1 eligibility date, and the ISO's request for a May 31 effective date
 - NEPOOL work plan priority requests related to ISO Planning Procedures affected by Order No. 2023 are grouped together here:
 - **Assess Interconnection Standard for Charging of Electric Storage Resources (ESRs):** Updates made in Q1 2024 to PP5-6 (*Interconnection Planning Procedure for Generation and Elective Transmission Upgrades*) and proposed changes under Order No. 2023 Compliance address the stakeholder request to further describe modeling requirements for inverter-based resources and update load levels used in interconnection studies
 - **Improvements to the Proposed Plan Application (PPA) Process for TO-LED PPA Studies (including for Distributed Generation Interconnections):** Coordination work kicked off in Q1 2024, with 1) an educational webinar on the ISO's Order No. 2023 compliance proposal and the impact on Affected System Operator (ASO) Studies, and 2) stakeholder discussions of further updates to Planning Procedures to conform with Order No. 2023 changes and to incorporate the coordination process for ASO studies going forward

Notable Initiatives on Track



- **Day-Ahead and Real-Time Energy Shortage Pricing Assessment:** The ISO’s evaluation continues, with potential for stakeholder discussions to begin as early as Q3 2024; timing may be impacted by outcomes and developments related to the two-year further delay of FCA 19
- **Flexible Response Services Assessment:** The ISO’s evaluation continues, with stakeholder discussions targeted to begin in 2025
- **Evaluate Tie Benefits and HQICCs:** Stakeholder discussions targeted to continue into Q4 2024; study results will inform any potential initiatives that follow
- **Economic Planning for the Clean Energy Transition (EPCET) Pilot Study:** Stakeholder discussions are concluding; a summary report is planned for Q2
- **Evaluate Single Source Contingency Limit Increase:** Study scope is under development with PJM and NYISO; work continues in 2024 and potentially into 2025; study results will inform possible initiatives that follow



Notable Initiatives on Track, cont'd



- **Inverter-Based Resource (IBR) Integration & Modeling:** In 2024, the ISO plans to establish guidelines for inclusion of IBR models into electromagnetic transient (EMT) modeling processes and associated model repositories
- **Cloud Computing and Cyber Security:** Projects are on track for 2024 implementation
- **Synchrophasor Enhancements for Future Grid:** Work is on track for 2024 and extending into 2025



Updated Anchor Projects: Resource Capacity Accreditation (RCA) and Alternative FCM Commitment Horizons

Scopes and schedules refined since 2024 AWP publication



- **RCA in the FCM:** Stakeholder discussions have continued from 2023 on capacity accreditation reforms for the 19th Forward Capacity Auction (FCA 19) for the 2028-2029 Capacity Commitment Period (CCP 19)
 - On Jan. 2, 2024, FERC accepted a one-year delay of the auction, from Feb. 2025 to 2026
- **Assessing Alternative FCM Commitment Horizons:** After an evaluation and discussion period, the ISO made the recommendation in Q1 2024 to develop a capacity auction that runs closer to the capacity commitment period (prompt) and restructuring the CCP from annual to sub-annual (seasonal) commitment periods, starting with FCA 19/CCP 19
 - Consistent with the above recommendation, the ISO proposed a further two-year delay of the capacity auction to provide maximum flexibility to 1) design a prompt and seasonal market for CCP 19, and 2) develop RCA reforms for CCP 19 in the context of a prompt and seasonal market
 - Stakeholder discussions of the further delay proposal are now concluding, with a filing expected in April 2024; FERC’s Order is anticipated in June

Updated Anchor Projects: RCA and Alternative FCM Commitment Horizons, cont'd



- If FERC **accepts** the further delay, ISO will pause stakeholder discussions to evaluate scope and phasing of work, and develop a work plan for a combined accreditation design with a prompt/seasonal capacity market to implement for CCP 19
 - With stakeholder support of a further delay, the ISO plans to design a market constraint approach for gas resources in the combined design
 - The ISO will also place early focus on developing the retirement components of the design and bring those designs to stakeholders early in the process
 - The timing of when the auction(s) would run to be determined as part of detailed design
- If FERC **rejects** the further delay, ISO would target implementing RCA under the forward market construct for FCA 19 in Feb. 2026 (the approved one-year delay), with a FERC filing in Q4 2024
 - To help ensure success, the proposal will focus solely on **three core components** of the accreditation reforms currently under discussion in the stakeholder process (these components remain applicable when pivoting from forward to prompt/seasonal):
 - 1) **MRI-based accreditation**, 2) **RAA modeling/seasonal risk**, 3) **modeling limited energy resources**
 - Beyond these core components, cannot add to scope in a Q4 2024 filing
 - Ongoing filings will be required to address details for FCA 19/CCP 19 and beyond

2024 Timelines of Possible Paths

Full RCA Design with Prompt/Seasonal Capacity Market Construct

| | | | | |
|--|---|---|---|---------------------------------------|
| March, April, May Further discussion on RCA core design proposal | June Contingent on timing of FERC Order, may need to begin discussion of RCA core design Tariff language | July, August, September Pause and develop RCA-prompt/seasonal work plan | October Discuss work plan with stakeholders | November Commence work plan |
|--|---|---|---|---------------------------------------|

Complete stakeholder & regulatory process on further delay proposal

- March MC vote
- April PC vote
- April FERC filing
- June FERC Order

FERC Accepts Further Delay

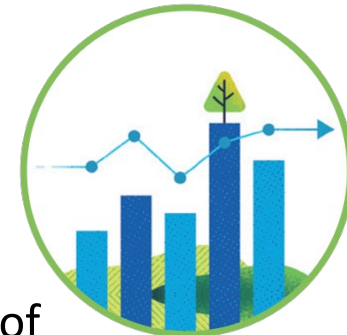
FERC Denies Further Delay

| | | | | | |
|--|---|---|--|--|--|
| March, April, May Further discussion on RCA core design proposal | June Begin discussion of RCA core design Tariff language | July, August Continue discussion of Tariff language, amendments | September MC vote on RCA core design | October PC vote and file with FERC | November-on Ongoing filings required to address details for FCA 19/CCP 19 and beyond |
|--|---|---|--|--|--|

If FERC does not accept RCA design, ISO would run FCA 19 without RCA in Feb. 2026

Updated Notable Initiatives

Scopes and schedules changed since 2024 AWP publication



- **Transmission Asset Condition Process Improvements and Sizing for the Clean Energy Transition:** Stakeholder discussion of Transmission Owner proposals on asset condition process improvements continue from 2023 and have extended further into 2024; FERC Order RM21-17 is expected to influence discussions on future-sizing
- **Work on FCM-Related Initiatives:** These stakeholder-requested initiatives are affected by FCM prompt/seasonal considerations and are therefore deferred pending a prompt/seasonal market design:
 - FCM Retirement Reforms: Return to Service
 - FCM Financial Assurance Policy/Entry-Related Improvement
- **Storage Modeling Market Enhancements Assessment:** The ISO continues to evaluate opportunities to more efficiently integrate energy storage resources into the energy and ancillary service markets, beyond FERC Order 841 (*Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*)
 - Timing of stakeholder discussions is no longer estimated to begin in 2024 and will be reassessed as part of the 2025 AWP

Potential New FERC Initiative

FERC actions are always accommodated but can impact AWP






- A final rule from FERC is anticipated in early 2024 on its Notice of Proposed Rulemaking RM21-17: Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection
- ISO analysis of and action on the Order will depend on compliance timelines, but will likely require resources be directed to this initiative for the second half of 2024



Other Timely Effort: Implement New England Clean Energy Connect (NECEC) External Interface



- The ISO has started work across the company to incorporate the NECEC interface in December 2025
- Work involves potential changes to the ISO Tariff and schedules, agreements, dispatch instructions, transaction scheduling, EMS modeling, operation planning, resource adequacy, market rules and modeling, settlements, manuals and operating procedures, software and databases, and all references to interfaces in existing documentation and materials

| 2024 AWP Update | Q2 | Q3 | Q4 |
|---|--|----|----|
|  <p>Markets Related</p> | RCA-Prompt/Seasonal | | |
| | Day-Ahead and Real-Time Energy Shortage Pricing Assessment | | |
| | Flexible Response Services Assessment | | |
| | Storage Modeling Market Enhancement Assessment | | |
|  <p>Planning & Operations</p> | Regional Energy Shortfall Threshold (REST) | | |
| | Order No. 2023 | | |
| | LTTS Phase 2 | | |
| | EPCET | | |
| | Tie Benefits & HQICCs Assessment | | |
| | Transmission Asset Condition Process Improvement/Sizing Considerations | | |
| | Single Source Contingency Limit Assessment | | |
| | Other Initiatives & Continuing Business | | |
|  <p>Capital Priorities</p> | DASI Implementation | | |
| | nGEM Real-Time Market Clearing Engine | | |
| | Inverter-Based Resource Integration & Modeling | | |
| | Synchrophasor Enhancements for Future Grid | | |
| | Cloud Computing & Cyber Security | | |