

ISO New England's Draft 2026 Annual Work Plan (AWP)

For Discussion at the October 9, 2025, NEPOOL Participants Committee Meeting

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2026 Objectives and Highlights

Anchor Projects and Related Core Implementations are the highest priority initiatives across the ISO for securing and advancing a reliable, cost-effective electric power system through innovation and collaboration



- Capacity Auction Reforms: Restructuring capacity auction timing and capacity market accreditation methodologies to ensure resource adequacy, reliability, and costeffectiveness in step with updated conditions facing the power system's resource mix
- Asset Condition Reviewer: Supporting state/stakeholder request for the development of a robust process for additional, independent review of Transmission Owners' asset condition project proposals for refurbishing aging transmission facilities
- Longer-Term Transmission Planning Implementations and Compliance:
 Completing the first LTTP competitive solicitation to meet state clean-energy goals and continuing compliance with FERC Order No. 1920
- Dynamic Operating Reserves: Assessing dynamically-determined quantities of reserves to address operational uncertainties resulting from continued growth in PV, intermittent resources, and variability in real-time net load
- IT Implementation of Major Initiatives: Developing the software and systems needed to implement FERC Order No. 2222, Order No. 881, and the nGEM real-time market clearing engine that is foundational to supporting an exponentially complex system
- Notable Initiatives target modernization, advance efficiency, and help manage risks across markets, planning, operations, and software structures

Regional Focus on Anchors Is Essential

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



- Anchors and implementations will utilize the majority of ISO resources in 2026 and beyond due to their breadth
 - Upfront agreement on priority work, including NEPOOL and state priorities, are intended to keep listed projects and schedules on track
 - Increased or expanded stakeholder requests, regional policy interests, and new issues can affect project schedules of planned efforts
 - Unknown timing and topics of Federal Energy Regulatory Commission (FERC) actions (orders, notices of proposed rulemaking) and policy directives can shift priorities
- 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 and resourcing, 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

Multi-Functional Anchor Project

Restructuring capacity auction timing and accreditation methods

- Capacity Auction Reforms (CAR)
 - CAR consists of dozens of interconnected markets- and system
 planning-related initiatives, which could normally be their own anchor
 projects or notable initiatives, that must be planned and coordinated in a
 synchronized manner
 - Stakeholder discussions on CAR's two remaining core reforms are expected to continue through 2026 and be filed with FERC in Q4 (see <u>slide 47</u> for the 2026 stakeholder process schedule)
 - Seasonal Auctions: Transitions the capacity auction from procuring capacity annually to procuring capacity for seasons to address the distinct reliability challenges of winter/summer
 - Accreditation Reforms: Reshapes the capacity market accreditation methodologies to more accurately reflect current and developing resource capabilities and how those capabilities contribute to resource adequacy
 - Implementation work will continue until the ISO runs the new capacity auction for a CCP that begins in 2028 (CCP 19)
 - As with the current capacity market, the ISO anticipates future refinements and conforming changes will be needed to reach a steady state design; in 2027, the ISO will begin working on its next stage of longer-term CAR roadmap items for further enhancements

Planning Anchor Projects

Transmission planning implementations and compliance





- Transmission Owners (TOs) have been proposing a growing number of asset condition projects (ACPs) to refurbish deteriorating transmission facilities
- Historically, the ISO has had limited involvement in the TOs' ACP proposals and is supportive of state and stakeholder requests for the development of a robust process for additional, independent review of ACP proposals
- Following preliminary discussions with state and TO representatives regarding ACP oversight, the ISO has committed to take on an advisory role as an Asset Condition Reviewer (ACR), as discussed with stakeholders at the June Participants Committee (PC) meeting
- The ISO provided an <u>introductory presentation</u> at the September 2025
 Participants Committee meeting; the ISO then expects to bring a framework proposal to stakeholders for additional discussion and feedback in Q1 2026 and have the permanent ACR role in place by end of 2026
- In parallel in 2025-2026, the ISO plans to use a consultant to begin reviewing some ACP proposals in an interim phase and facilitate stakeholder review and discussion of the consultant's feedback

Planning Anchor Projects, cont'd

Transmission planning implementations and compliance

- Implementing the New England States' First Competitive Solicitation for LTTP Solution (2025 LTTP RFP)
 - On December 13, 2024, the New England states submitted a request for a competitively-selected transmission solution to address their future, clean energy needs in connection with the <u>2050 Transmission Study</u>
 - The 2025 study is the first Longer-Term Transmission Study requested by the states under the region's innovative new <u>Longer-Term Transmission Planning</u> (<u>LTTP</u>) framework
 - On March 31, 2025, the ISO issued the first LTTP RFP
 - The deadline for Qualified Transmission Project Sponsors to submit a proposal in response to the RFP is September 30, 2025
 - After its evaluation of the proposals, the ISO is targeting identification of a preferred solution as early as September 2026
 - Upon completing, reviewing, and adjusting for any lessons learned from the 2025 cycle, the LTTP process could then proceed with a subsequent cycle, which would seek stakeholder input

Planning Anchor Projects, cont'd

Transmission planning implementations and compliance

- FERC Order No. 1920, 1920-A, 1920-B Compliance
 - On February 10, 2025, FERC accepted the ISO's two-year extension request, with regional and interregional compliance now due June 2027, for a 2029 effective date
 - The ISO requested the extension so that it could implement and gain experience from conducting the first LTTP RFP and other high priority initiatives
 - While New England's new LTTP framework accepted by FERC in July 2024 went far in complying with the order, notable differences must be addressed
 - Stakeholder discussions on compliance are targeted to begin in Q3 2026
 - Further Inclusion of Grid Enhancing Technologies (GETs) Into Transmission
 Planning, a NEPOOL and NESCOE Priority request from the 2025 AWP: On June 18,
 2025, the ISO held a Planning Advisory Committee day-long technical session for
 exploring the latest GETs advancements and opportunities; Order No. 1920
 compliance work is expected to include discussion of a process for further including
 GETs into transmission planning assessments
 - Transmission Sizing for the Clean Energy Transition, a NEPOOL and NESCOE
 Priority request from the 2025 AWP: The Asset Condition Reviewer role is
 anticipated to inform the sizing discussions; Order No. 1920 compliance work is
 expected to include discussion of a process for when to consider future-sizing as a
 way to address long term needs

Markets Anchor Project

Addressing operational uncertainty through markets

Dynamic Operating Reserves for a Changing System

- The ISO has identified the system's continued need for flexible response capabilities to address operational uncertainties resulting from the region's continued growth in PV and wind intermittent power resources, and the increasing variability in the system's real-time net load (see the March 2025 ISO memorandum to the NEPOOL Markets Committee)
- In 2025-2026, the ISO is assessing and commencing development of dynamic, operating reserve demand curves for incremental quantities of existing real-time reserve products (10- and 30-minute reserves), in amounts that vary during the operating day based on the system's near-term potential ramping needs
- Additionally, the ISO is evaluating a potential new longer-response reserve product (60- or 90-minute), possibly with dynamically-determined demand quantities, to address operational uncertainties (unanticipated supply and demand changes) during the operating day
- The ISO expects to provide an update to stakeholders on its continued assessment in Q1 2026; stakeholder discussions are targeted to begin in Q4 2026

Technology Anchor/Implementation Projects

IT development and implementation of market and reliability initiatives to manage an exponentially complex future grid

nGEM Real-Time Market Clearing Engine

- The ISO has been working to replace its 20+ year old Market Management System (MMS) with the next Generation Electricity Management (nGEM) platform, foundational to supporting a system with a growing number/type of grid assets, new and more complex market features, multiplying security threats, and advancing IT technologies
- Implementation of the real-time MCE software and infrastructure is targeted for Q2 2026; additional phases of nGEM implementation are expected through 2028
- Order No. 2222: Participation of DER Aggregations in Wholesale Markets
 - The ISO is developing the software and systems changes needed to implement the order compliance in Q4 2026; see <u>participant training</u> and <u>readiness</u> resources
- Order No. 881: Ambient Adjusted Line Ratings for Transmission Lines
 - The ISO is developing the software and systems changes needed to implement the order compliance in Q4 2026, see <u>participant training and readiness</u> resources

NOTABLE INITIATIVES

Notable Operations Initiative

Identifying energy shortfall risks from extreme weather events as grid supply and demand trends change, in time to address those risks



First Run of Formalized <u>PEAT/REST</u> Processes

- The ISO is committed to continuously assessing the probability of limited-energy shortfall risk under extreme weather events using the Probabilistic Energy Adequacy Tool (PEAT), comparing the modeled tail risk to the Regional Energy Shortfall Threshold (REST), and reporting its findings
- By the end of 2025, the ISO, in discussion with stakeholders, expects to finalize changes to OP-21 that memorialize the definition of the REST and establish the timing/methods by which the PEAT/REST processes will be run each year; the ISO also plans to conduct an initial winter season assessment and report results in Q4
- Beginning in 2026, the ISO will operationalize the annual processes:
 - **Seasonal Energy Assessments**: Each year, the ISO will report to stakeholders presummer and pre-winter results
 - Long-Term (5- and 10-year) Energy Assessments: Each year, the ISO will develop baseline input assumptions and scenario sensitivities with stakeholders in Q1 and report results in Q4
- Proactive risk-to-action pipeline: Risk-trend data from the Long-Term Energy
 Assessments will guide evaluation of whether the possibility of exceeding the REST
 in those timeframes requires development of regional solutions to mitigate modeled
 risks and, if so, when to begin to develop solutions; these efforts would be signaled
 in future AWPs

Notable Planning Initiatives

Generator interconnection implementations and enhancements



- In compliance with the FERC's Final Rule, the Transitional Capacity Network Resource Group Study commenced in April 2025 and will conclude in November 2025
- The Transitional Serial Interconnection Facilities Studies (TSIFS) begins in October 2025, with the study report expected in January 2026 (if one or more projects requested participation in the TSIFS)
- The Transitional Cluster Study also begins in October 2025, with the interim report to be issued in June 2026, and the final report in August 2026
 - ISO held a Transitional Cluster Study forum on August 27, 2025, to clarify the purpose of the TCS Agreement, outline all required components of a fully executed agreement, and explain the data submission process; see all Order No. 2023 participant training and readiness resources
- The Cluster Request Window for the first (regular) Cluster Study will open in October 2026, which will kick off the rest of the Cluster Study Process

Notable Planning Initiatives, cont'd

Generator interconnection implementations and enhancements



Evaluating Surplus Interconnection Service Rules, a NEPOOL Priority Request for the 2026 AWP

- The Open Access Transmission Tariff includes surplus rules that permit new resources to interconnect to the system at the same site as an existing generator, using the existing resource's Unused Capability through assigned Interconnection Service and a streamlined Interconnection Study process; however, limited use has been made of these rules by participants
- In Q1 2026, the ISO plans to kickoff a stakeholder discussion to identify the objectives, issues, and scenarios driving stakeholders' inquiries around existing and future access and use of assigned Interconnection Service rules
- The ISO will then conduct a gap analysis of the use cases against the existing interconnection rules to determine the scope of potential solutions, which it will discuss with stakeholders along with the associated timing for any stakeholder and regulatory processes, as well as an implementation schedule for proposed solutions

Notable Markets Initiatives

Improving market signals and incentives for a reliable future grid

Pay-for-Performance Revisions

- The PFP rules implemented in 2018 have led to improved generator performance during capacity scarcity conditions; however, some targeted changes may be necessary, such as those that could result from the New England Power Generators Association (NEPGA) 2025 FERC filing on recent outcomes in the Forward Capacity Market
 - The ISO may assess and discuss with stakeholders possible cost-allocationrelated revisions to the Stop-Loss Mechanism and Balancing Ratio, depending on FERC action on NEPGA's filing

Day-Ahead Ancillary Services Assessment

 The ISO plans to continue assessing and reporting competitiveness and performance, including reporting in Q1/Q2 2026 (after a full year of the <u>market's</u> <u>implementation</u>) on findings and any potential recommendations for enhancements

Notable Technology & Security Initiatives

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

operations studies to assist establishing operating limits

- Inverter-Based Resource (IBR) Integration & Modeling: In 2026, the
 ISO will continue the multi-year efforts in developing long-term solutions
 for an electromagnetic transient (EMT) model management process and model
 repository; the ISO will also apply advanced EMT simulation techniques in more
- Synchrophasor Enhancements for Future Grid: By Q4 2026, the ISO expects to implement the enhanced synchrophasor infrastructure in the CIP production environment to enable its operational use and better monitor the dynamic performance of IBRs and DERs during grid events in real-time, including the oscillation management tools/process and newly designed PMU situational awareness displays in the control room; the ISO will also enhance the post-event analysis capabilities through a new state-of-the-art cloud-hosted synchrophasor application
- Integrated Market Simulator (IMS): In 2026, the ISO expects to introduce rolling time window and new reserve modeling capability into the IMS, implement and benchmark the energy storage model with production system, and start deploying IMS in a cloud environment

Notable Technology & Security Initiatives, cont'd

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

- Cloud Computing: The ISO's transition to a cloud environment continues to be a major effort over the next several years to minimize technology infrastructure maintenance costs, speed deployment of software, increase scalability and flexibility, and enable faster computing performance needed to reliably operate a modern system as resource data grows
- Cyber Security: The ISO has made significant cyber security investments to date and over the next several years will continue to invest in improved monitoring, detection, and recovery tools to keep pace with increasingly sophisticated attack threats
- Artificial Intelligence: AI has become a transformative technology, and the ISO is preparing for its proliferation; policies have been updated, governance processes are established, and multiple initiatives are underway providing experience to both business and IT teams

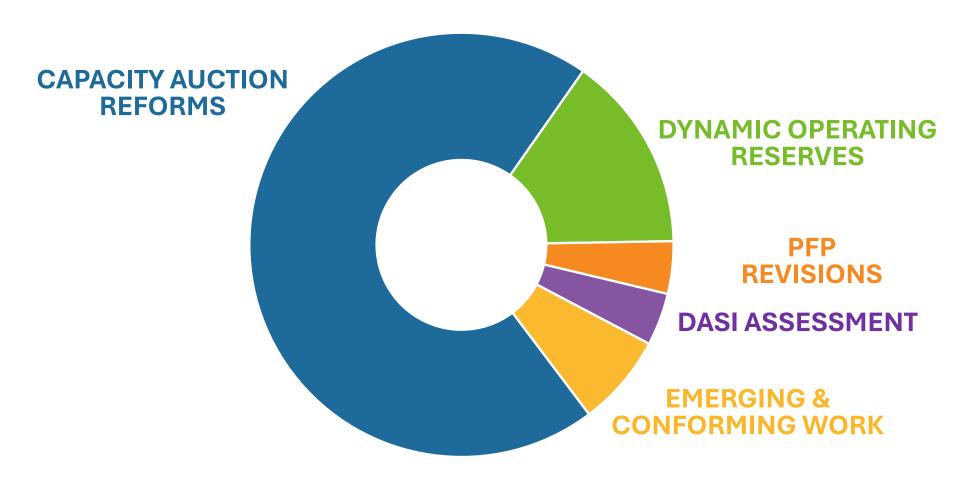
WORK PLAN PRIORITIZATION

Prioritization Process

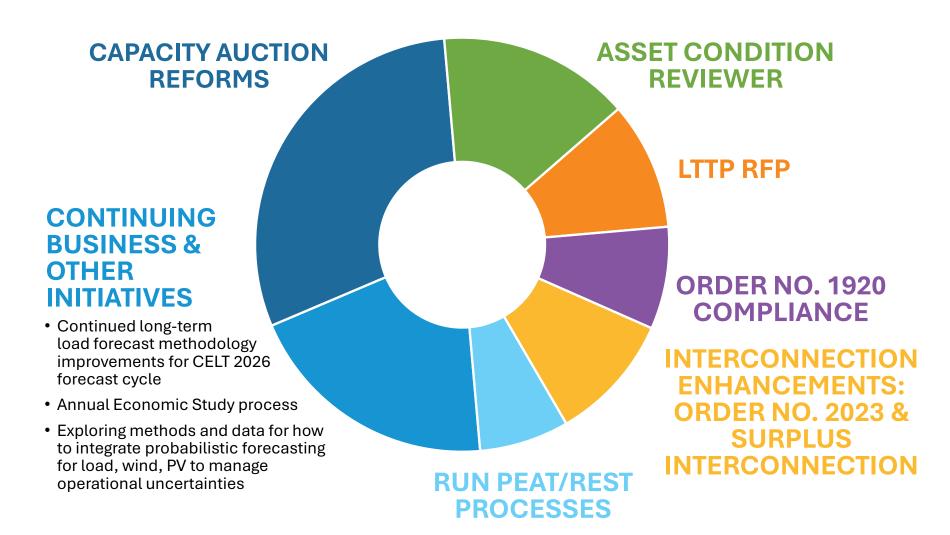
- The ISO adjusts its priorities as needed to best maintain reliable operations, robustly plan for a changing grid, and ensure competitive wholesale markets
- Planned projects are impacted as scopes shift or new projects emerge

Changes in **Industry** Regional Reprioritization **Priorities** Additions from Changes from ISO or **FERC** stakeholders Reprioritization

Markets-Related Priorities Include:



Planning/Operations Priorities Include:



Capital Project Priorities Include:

SOFTWARE AND SYSTEMS IMPLEMENTATIONS

- MW Dependent Fuel Price Adjustment (Dynegy Compliance) (Nov. 2026* implementation)
- Order No. 2222 (Nov. 2026 implementation)
- Order 881: Ambient Adjusted Line Ratings (Dec. 2026 implementation)
- Storage as a Transmission-Only Asset (March 2027 implementation)
- Enterprise Software Upgrades

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INFRASTRUCTURE ENHANCEMENTS

- Enterprise Core Network Refresh
- Short-Term Load Forecast Replacement
- Energy Management Platform 3.5 Upgrade
- EMS CFE Refresh
- Adoption of NERC CIP Compliance of Synchrophasor Systems
- Integrated Market Simulator Enhancement

CYBERSECURITY, CLOUD COMPUTING, AI

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IBR MODELING/INTEGRATION, SYNCHROPHASOR ENHANCEMENTS, IMS

