

# ISO & RTO MARKET DESIGN AND MARKET OPERATIONS TECHNICAL FORUM AND COLLABORATIVE (2025–2027)



## PROJECT HIGHLIGHTS

- Open discussion and promotion of collaboration research areas of technical market design and market operations across regions.
- Education on regional differences in specific technical topics.
- Coordination across technical peers.
- Expand the knowledge base of ISO staff for improvement in individual region initiatives.
- High priority topical working groups and technical presentations.
- Access to EPRI experts to provide support in market design technical details in other regions.

## Background, Objectives, and New Learnings

Wholesale electricity markets have evolved substantially since they were introduced in the 1990s. The designs in the North America have become complex, combining the physics of the production and delivery of electricity with the theories and practices of economics. The reliability of the bulk power system is tightly tied to the way the electricity system is operated at timescales ranging from multiple year-ahead planning to second-to-second balancing. The design of these markets, as well as the implementation of the market clearing software that produce auction schedules, prices, monitoring procedures, and detailed settlement rules require an in-depth knowledge of numerous competencies including electric power system engineering, economics, finance, and regulatory fields.

In addition, the designs of each market region in North America have each evolved somewhat independently. This is mostly due to the stakeholder process in each region, the unique differences in the characteristics of the power system or regulatory conditions in the area, or other reasons. Timelines for new changes to the design of individual market regions may be staggered due to characteristics that push for the market design initiative that may soon be characteristics of other regions. Understanding of other region's experiences in various market design initiatives that they have faced in the past can provide tremendous benefits for the region evaluating the designs in the present. These regions can avoid similar hurdles and have a reasonable starting point for design. It often may be difficult to find the correct contacts in other regions or know the right material to read that describes a particular implementation. In addition, implementation details are not always written into market tariffs or business practice manuals.

The objective of this work is to provide the facilitation of a collaborative group of market design technical experts from all of the North American Independent System Operators and Regional Transmission Organizations. The group would have a structured set of goals and would meet via phone or web conferences numerous times throughout the year to discuss new initiatives and design challenges. The group would meet once a year in person, when feasible, with a structured agenda to discuss the highest priority technical market design issues of the present. The EPRI team would facilitate this group, the forum, and deliverables that come out of the forum.

## Benefits

---

The establishment of this collaborative group and the technical market design and operation collaborative will provide the following benefits to participants:

- Annual forum of top experts in market design to develop new concepts and ideas to challenges that can help market design initiatives and projects in individual market regions. The forum will typically take place in the fall each year.
- Educational opportunity to learn technical market design details and why they exist in different regions that can provide support for initiatives and projects in individual region.
- Access to a large network of technical market design experts in all regions with specific technical areas they are most knowledgeable in.
- Opportunity for newer ISO staff to learn market design topics and details by listening to the forum, reviewing forum deliverables, and having opportunity to contact experts from other regions.
- Access to EPRI market design experts with knowledge on technical market design details across regions.
- Improved market design throughout North America that fosters competitive, fair, and efficient electricity market that ensures power system reliability is maintained.

## Project Approach and Summary

---

### 1. Annual Technical Market Design and Market Operations Forum

EPRI will complete the logistics, agenda, and invitations for the technical forum. The EPRI team will also provide facilitation during the forum. The lead will work closely with the participants to gather information on the highest priority topics. This may also include inviting guests when appropriate to give talks on specific research ideas that have not been discussed in the ISOs yet, but that may be applicable.

### 2. Technical Working Groups

EPRI will organize and facilitate at least four ISO/RTO technical working groups throughout the year. These currently are focused on emerging technologies, price formation, reserve and flexibility, and capacity accreditation, but may change based on priorities of the participants, as discussed during each year's

forum. Meetings typically meet bi-monthly with different ISOs or others presenting on relevant sub-topics each discussion.

### 3. Annual Report

EPRI will provide the annual ISO/RTO Collaborative report to members at the end of each year. The report will contain the non-attributed meeting minutes from the annual ISO/RTO Market Design Technical Forum, summary of key issues from the year, and a summary of the activities in each of the working groups.

## Deliverables

---

Deliverables include annual technical forum, four working group meetings, and the annual report.

## Price of Project

---

The price for participation will be \$36,000 per participant for the three-year commitment or \$15,000 per participant per year for single year commitment.

## Project Status and Schedule

---

The project will last 36 months, with a start date of January 2025. The forum will take place in Fall each year from 2025–2027.

## Who Should Join

---

The forum is open to ISO/RTO members only.

## Contact Information

---

For more information, contact the EPRI Customer Assistance Center at 800.313.3774 ([askepri@epri.com](mailto:askepri@epri.com)).

### Technical Contact

Nikita Singhal at 650.855.7916 ([nsinghal@epri.com](mailto:nsinghal@epri.com))

### Member Support Contacts

Dan Tavani at 704.595.2714 ([dtavani@epri.com](mailto:dtavani@epri.com))

Jeff Hlavac at 402.314.1049 ([jhlavac@epri.com](mailto:jhlavac@epri.com))

David Welch at 702.208.8276 ([dwelch@epri.com](mailto:dwelch@epri.com))

Brian Long at 704.408.8139 ([blong@epri.com](mailto:blong@epri.com))