



Memorandum

To: ISO Board of Governors and Western Energy Markets
Governing Body

From: Elliot Mainzer, President and Chief Executive Officer

Date: April 22, 2026

Re: **Decision on Market Surveillance Committee appointments**

This memorandum requires ISO Board of Governors and WEM Governing Body action.

EXECUTIVE SUMMARY

The Market Surveillance Committee (MSC) provides expertise and advice to the ISO Board of Governors, WEM Governing Body, ISO Management, and staff on issues related to the design and operation of the ISO markets. Dr. Scott Harvey and Dr. Benjamin Hobbs retired from the MSC in March after decades of service.

The tariff and governing documents require the ISO CEO to appoint MSC members, subject to joint approval by the ISO Board of Governors and WEM Governing Body. I have identified two candidates for appointment and propose that the Board of Governors and WEM Governing Body approve the appointment of both candidates to the MSC.

Dr. Ross Baldick, Professor Emeritus of Electrical and Computer Engineering, at the University of Texas at Austin, possesses a highly relevant combination of technical expertise in power systems, economic expertise in restructured electricity markets, and longstanding engagement with market design, market power mitigation, and locational marginal pricing. His career spans more than three decades of research, teaching, and work directly aligned with the mission of the MSC. Based on his demonstrated independence, academic rigor, and practical experience with organized wholesale electricity markets, Dr. Baldick would be a strong contributor to the MSC's oversight, analytical, and advisory functions.

Dr. Jacob Mays, Assistant Professor in the School of Civil and Environmental Engineering at Cornell University, is a leading scholar in the design and analysis of electricity markets, with a particular emphasis on stochastic optimization, statistical learning, and market performance in uncertainty conditions. His academic expertise and professional experience align closely with the analytical, advisory, and independent oversight responsibilities of the MSC. Dr. Mays' work reflects a capacity to rigorously

evaluate market outcomes, assess rule performance, and identify structural risks in complex, rapidly evolving electricity markets.

Both candidates possess the qualifications and capabilities that will make them exceptional members of the MSC to guide ISO-operated markets as they evolve to respond to the demands and requirements of the Western Interconnection.

The MSC Charter, Section 2.C., requires members to be appointed to staggered three-year terms. Currently, there are two vacant seats, one with two years remaining, and one that is a full three-year term. Therefore, I request that the ISO Board of Governors and WEM Governing Body approve the appointments of both Dr. Jacob Mays and Dr. Ross Baldick as members of the MSC and authorize execution of contracts to fill these two seats for the remaining two- and full three-year terms.

BACKGROUND

The ISO tariff requires that the MSC be comprised of three or more experts whose combined professional experience encompasses the following:

- Economics, with an emphasis on antitrust, competition, and market power issues in the electricity industry;
- Operational aspects of generation and transmission in electricity markets;
- Antitrust or competition law in regulated industries; and
- Financial expertise relevant to energy or other commodity trading.

The tariff (appendix O, section 9) also outlines strict criteria for independence that forbid a member of the MSC from, among other things, having a material financial interest in a market participant, engaging in market transactions, and receiving outside compensation for providing commercial services in any legal or regulatory proceeding relating to the ISO. The MSC has a specific tariff-assigned role to provide independent external expertise in monitoring the ISO market and to provide independent expert advice and recommendations to ISO Management, the Board, the Governing Body and the Federal Energy Regulatory Commission (FERC) on market performance and design.

With the departure of Dr. Harvey and Dr. Hobbs, the MSC is currently comprised of one member, James Bushnell, whose term expires on March 31, 2027.

The tariff authorizes MSC members to develop and publish opinions and reports at the request of ISO Management, or independently, when deemed appropriate by the Committee. While MSC processes do not constitute a stakeholder process, Committee members have shown a keen interest in listening to stakeholder concerns. Historically, the MSC has served as an impartial source of information on market issues, primarily for the ISO, but also for state policymakers, the FERC and the news media. ISO Management and the FERC have adopted a number of Committee recommendations since its inception.

Formal reviews and recommendations by the MSC are provided in written opinions to the ISO Officers, WEM Governing Body and ISO Board of Governors, and, when appropriate, filed with the FERC. MSC opinions are also available to the public through the ISO website. The MSC has been consistently recognized by industry and the public as being useful and effective due in large part to the stature of its members as nationally recognized experts as well as their perceived independence. Both characteristics have led to the MSC being shown considerable deference by state and federal regulators.

DISCUSSION AND ANALYSIS

Dr. Ross Baldick

Dr. Baldick possesses highly relevant combination of deep technical expertise in power systems, rigorous economic analysis of restructured electricity markets, and longstanding engagement with market design, market power mitigation, and locational marginal pricing. His career spans more than three decades of research, teaching, and applied work directly aligned with the mission of the MSC. Based on his demonstrated independence, academic rigor, and practical experience with organized wholesale electricity markets, Dr. Baldick would be an exceptionally strong contributor to the MSC's oversight, analytical, and advisory functions.

The MSC is charged with providing independent, expert assessment of market outcomes, identifying potential market power or design flaws, and advising on rule changes that promote efficiency, reliability, and fairness. Dr. Baldick's career has focused precisely on these issues. His research agenda centers on analysis of restructured electricity markets, transmission constraints, price formation, and strategic behavior by market participants, all of which are foundational to effective market surveillance.

Notably, Dr. Baldick has led and contributed to multiple funded research projects concerned with market power assessment, bidding strategies in electricity auctions, and transmission constrained market equilibrium. His projects include work supported by the National Science Foundation on tools for assessment of market power and strategic behavior in constrained electricity markets. These topics align directly with the analytical responsibilities of the MSC.

A defining qualification for MSC membership is sophisticated understanding of market power detection and mitigation within wholesale markets that use locational marginal pricing. Dr. Baldick is internationally recognized in this area. He has published extensively on locational marginal pricing, congestion management, and the interaction between network constraints and strategic bidding behavior. His work bridges economic theory and operational reality, a critical capability for interpreting observed market outcomes and distinguishing legitimate scarcity pricing from potential manipulation.

In addition, Dr. Baldick has worked on offer analysis tools and supply function equilibrium models that are directly relevant to market monitoring functions. These

analytical approaches reflect the same types of techniques used by independent market monitors and surveillance committees at market operators across North America.

Dr. Baldick's experience extends well beyond theoretical analysis. He has maintained longstanding engagement with market operators and stakeholders, including funded collaborations with the Electric Reliability Council of Texas (ERCOT) and the Midcontinent Independent System Operator (MISO). His work on unit commitment, dispatch optimization, and market rule impacts demonstrates practical familiarity with the challenges faced by system operators balancing reliability, efficiency, and market integrity.

The credibility of the MSC depends on its perceived independence and technical authority. Dr. Baldick's status as a Professor Emeritus, with no commercial market participation or financial stake in ISO market outcomes, strongly supports this independence. His election as a fellow of the Institute of Electrical and Electronics Engineers (IEEE) and receipt of the 2015 IEEE Power & Energy Society Outstanding Power Engineering Educator Award further attest to his professional standing and peer recognized contributions to the field. Additionally, his service as a former editor of IEEE Transactions on Power Systems and as chair of the IEEE Power Engineering Society System Economics Subcommittee demonstrates long experience in objective evaluation of complex technical and economic work — precisely the mindset required for market surveillance and assessment of market performance.

Dr. Baldick's work on the principles-based modeling of renewable integration costs and large-scale grid optimization provides valuable perspective on whether observed market outcomes reflect design intent or unintended consequences — an increasingly important distinction as the markets continue to evolve.

Dr. Jacob Mays

Dr. Jacob Mays, Assistant Professor in the School of Civil and Environmental Engineering at Cornell University, is a leading scholar in the design and analysis of electricity markets, with a particular emphasis on stochastic optimization, statistical learning, and market performance under uncertainty. His academic expertise and direct professional experience align closely with the analytical, advisory, and independent oversight responsibilities of the MSC. Dr. Mays's work reflects a strong capacity to evaluate market outcomes rigorously, assess rule performance, and identify structural risks in complex, rapidly evolving electricity markets.

The MSC is responsible for providing independent, technically rigorous analysis of market outcomes, identifying potential inefficiencies or vulnerabilities, and advising on market rule changes to promote efficiency, reliability, and fairness. Dr. Mays's research focuses on the design and analysis of electricity markets, making his scholarly agenda directly relevant to these responsibilities. His work applies modern optimization and statistical tools to understand how market rules perform in practice, particularly under uncertainty and operational stress.

Dr. Mays's focus on stochastic optimization and statistical learning brings analytical approaches well suited to contemporary challenges faced by the markets that the ISO operates, including variable renewable generation, uncertain load patterns, and increasingly complex participation by flexible and distributed resources. These tools are particularly valuable for assessment of market outcomes and forward-looking evaluation of proposed market design changes.

Modern market surveillance requires more than traditional market power screening. It increasingly demands understanding of how uncertainty, risk, and imperfect information influence bidding behavior and price formation. Dr. Mays's research background in industrial engineering, operations research, and energy systems equips him to analyze these effects with rigor.

As a tenure track academic with no commercial stake in ISO market outcomes, Dr. Mays offers independence and objectivity fundamental to the legitimacy of market surveillance. His academic role at a major research university underscores his commitment to transparent, peer-reviewed analysis and methodological rigor.

In addition, his prior experience as a management consultant outside the electricity sector demonstrates familiarity with complex operational systems, data driven performance evaluation, and organizational decision making. This background further strengthens his ability to assess real world market behavior while maintaining analytical impartiality.

Motion

Moved, that the ISO Board of Governors and WEM Governing Body approve the appointments of Dr. Jacob Mays and Dr. Ross Baldick to the ISO Market Surveillance Committee to fill a vacant seat for a remaining two year term to end March 31, 2028, and to fill a vacant seat for a three-year term to end March 31, 2029; and

Moved, that the Chief Executive Officer is authorized and directed to enter into appropriate consulting agreements with Dr. Jacob Mays and Dr. Ross Baldick to compensate each of them for their participation on the ISO Market Surveillance Committee.