

Memorandum

To: ISO Board of Governors

From: Steve Berberich, President and Chief Executive Officer

Date: January 29, 2015

Re: Decision on Market Surveillance Committee Reappointment

This memorandum requires Board action.

EXECUTIVE SUMMARY

The Market Surveillance Committee is an advisory committee to the ISO Board of Governors that provides independent expertise and recommendations on market design and monitoring issues to ISO Management and the Board. The tariff requires that the Chief Executive Officer nominate MSC members, for the Board to appoint.

This year, I am nominating Dr. James Bushnell to be reappointed to the MSC. Dr. Bushnell is a nationally recognized expert in electricity market design with considerable experience in energy economics.

Dr. Bushnell has been a valued member of the MSC for 13 years and is currently an Associate Professor in the Department of Economics at University of California, Davis. He previously served as a member of the Economic Assessment and Allocation Committee for the California Air Resources Board and also a member of the Market Monitoring Committee for the California Power Exchange. Dr. Bushnell is an expert in the field of energy policy with an emphasis on market incentives and impact of market power.

Dr. Bushnell has proven that he is highly qualified to serve as a member of the MSC. Therefore, I request that the Board reappoint Dr. Bushnell as a member of the MSC and authorize execution of a contract with Dr. Bushnell for a three-year term from April 1, 2015 through March 31, 2018.

Moved, that the ISO Board of Governors reappoints Dr. James Bushnell to the Market Surveillance Committee for a three-year term beginning April 1, 2015 through March 31, 2018; and

Moved, that the Chief Executive Officer is authorized and directed to enter into an appropriate consulting agreement with Dr. James Bushnell to compensate him for participation on the Market Surveillance Committee.

DISCUSSION AND ANALYSIS

The tariff requires that the Market Surveillance Committee 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 also outlines strict criteria for independence that require each member of the MSC to have no material affiliation, through employment, consulting or otherwise, with any market participant or affiliate thereof, and to have no material financial interest in any market participant or affiliate thereof. The MSC has a specific tariff-assigned role to provide independent external expertise in monitoring the ISO's market and to provide independent expert advice and recommendations to Management, the Board and the Federal Energy Regulatory Commission on market performance and design. The MSC is currently comprised of four members:

- James Bushnell (Member), term expires on March 31, 2015
- Shmuel Oren (Member), term expires on March 31, 2015
- Benjamin Hobbs (Chair), term expires on March 31, 2016
- Scott Harvey (Member), term expires on March 31, 2017

The tariff authorizes MSC members to develop and publish opinions and reports at the request of Management, the Board, or independently, when deemed appropriate by the Committee. Formal reviews and recommendations by the MSC are provided in written opinions to Management, the Board, and, when appropriate, filed with FERC. MSC opinions are also available to the public through the ISO website. While MSC processes do not constitute a stakeholder process, Committee meetings provide an additional forum for stakeholder input and discussion, and 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 FERC and state policymakers. The MSC has been consistently recognized by the 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 independence.

The tariff provides that the MSC shall be comprised of three or more members. Both Dr. Bushnell's and Dr. Oren's contracts expire on March 15, 2015. However, with the reappointment of Dr. Bushnell only, I am recommending that after March 31, 2015, the MSC be reduced to three members from the current four serving members.

Dr. James Bushnell

Dr. James Bushnell, a member of the MSC since 2002, is currently an Associate Professor of Economics at the University of California, Davis. Previously he was an Associate Professor of Economics at Iowa State University, where he held the Cargill Chair in Energy Economics and was the Director of the Biobased Industry Center. He was also a member of the California Air Resources Board's Economic Assessment and Allocation Committee. Dr. Bushnell served as a Research Scientist for over 18 years and as Research Director for over 10 years at the University of California Energy Institute, Berkeley, CA. He is a former member of the Market Monitoring Committee of the California Power Exchange. His research interests include game theoretic optimization models, industrial organization and regulatory economics, energy policy, and environmental economics. He has published numerous articles on the economics of electricity deregulation and has testified extensively on energy policy issues. Much of his research has focused on examining the market incentives, in particular; market rules and structures created and in developing empirical methods for measuring the impact of market power on deregulated electricity markets.

Other MSC Members

Dr. Bushnell's background and experience makes him an excellent complement to the skills and talents of the two other MSC members whom with he would serve, Dr. Benjamin Hobbs and Dr. Scott Harvey. A summary of these other MSC members' biographies is included in Attachment A.

MANAGEMENT RECOMMENDATION

For these reasons, I request that the Board reappoint Dr. James Bushnell as a member of the Market Surveillance Committee and authorize execution of a consulting agreement with Dr. Bushnell for a three-year term effective April 1, 2015 through March 31, 2018.



Attachment A

Summary Biographies of MSC Members Dr. Benjamin Hobbs and Dr. Scott Harvey

Dr. Benjamin F. Hobbs, a member of the MSC since 2002, is the Theodore & Kay Schad Professor of Environmental Management in the Whiting School of Engineering at Johns Hopkins University, where he has been since 1995. He also holds a joint appointment in the Department of Applied Mathematics and Statistics. During 2009-2010, he was a visiting Senior Research Associate in the Electricity Policy Research Group in the Department of Economics and Judge Business School at the University of Cambridge, UK. He is a former Professor of Systems Engineering and Civil Engineering at Case Western Reserve University. He has previously held positions at Brookhaven National Laboratory and Oak Ridge National Laboratory. He is a member of the Public Interest Advisory Committee for the Gas Technology Institute.

His research interests include stochastic electric power planning models, including transmission planning; power systems operations and economics; multi-objective and risk analysis; ecosystem management; and mathematical programming models for simulating imperfect energy markets. Dr. Hobbs has published numerous journal articles and magazine articles on these topics and has co-authored two books. Dr. Hobbs has a Ph.D. in Environmental Systems Engineering from Cornell University, and is a Fellow of the IEEE.

Dr. Hobbs's current 3-year term expires on March 31, 2016.

Dr. Scott Harvey, a member of the MSC since 2011, is a consultant for FTI Consulting in the Economic Consulting segment in Boston. Prior to joining FTI Consulting, he was a consultant for 12 years with LECG and 11 years with Putnam, Hayes & Bartlett, Inc. He has been actively involved at FTI Consulting, LECG, and Putnam, Hayes & Bartlett with the restructuring of the PJM, New York and New England Power Pools, the development of the MISO Stage 2 congestion management system implemented in April 2005, and the development and implementation of the California ISO's MRTU market design in April 2009.

Dr. Harvey has consulted on market design and performance issues for the New York ISO since its start up, including overseeing the price validation and correction process for the New York market through 2008 and consulted for the California ISO from late 2004 through the implementation of the MRTU market. He has also consulted on a variety of market design and performance issues for the Midwest ISO, ISO New England, PJM, and the Ontario IESO. He is currently a member of the Midwest ISO's market advisory committee and continues to consult for the New York ISO on a wide variety of issues.

In addition to his consulting experience in the electricity industry, he has been actively involved in antitrust analysis in the oil and gas industries, particularly the review by the antitrust agencies of mergers, acquisitions and joint ventures. Before joining Putnam, Hayes & Bartlett, he was with the Bureau of Economics of the Federal Trade Commission from 1977 to 1987 where he concentrated on antitrust issues in the oil and gas industries.

Dr. Harvey received a B.A. in Economics from the University of Illinois Champaign-Urbana and a PhD in Economics from the University of California, Berkeley.

Dr. Harvey's current 3-year term expires on March 31, 2017.