

Memorandum

To: ISO Board of Governors
From: Yakout Mansour, President and Chief Executive Officer
Date: March 18, 2009
Re: *Decision on Reappointment of Market Surveillance Committee Member*

This memorandum requires Board action.

Executive Summary

Dr. James Bushnell has served as a member of the California Independent System Operator Corporation (the ISO) Market Surveillance Committee (MSC) since 2002. His term as a committee member expires on March 31, 2009. During his tenure on the MSC, Dr. Bushnell has provided invaluable expertise and advice to the ISO Board of Governors (the Board), Management and staff on numerous market issues relating to the operation of the current ISO markets and the market redesign and technology upgrade (MRTU). Under the tariff, appointments to the MSC are made by the CEO, subject to approval by the Board. Therefore, I request that the Board reappoint Dr. Bushnell as a member of the MSC and authorize execution of a contract for a three-year term on the same terms as his current contract.

Motion:

Moved, that the Board reappoint Dr. James Bushnell to the ISO Market Surveillance Committee for a term to end March 31, 2012; 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 his participation on the ISO Market Surveillance Committee, as detailed in the memorandum dated March 18, 2009.

Background

The tariff (Appendix P2, Section P2.2.2.1) 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 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 markets and to provide independent expert advice and recommendations to Management, the Board and the Federal Energy Regulatory Commission (FERC) on market performance and design. The MSC is currently comprised of three members:

- Frank Wolak (Chairman), term expires on March 31, 2011,
- Benjamin Hobbs (Member), term expires on March 31, 2010, and
- James Bushnell (Member), term expires on March 31, 2009.

The tariff authorizes MSC members to develop and publish opinions and reports at the request of Management, or independently, when deemed appropriate by the MSC. While MSC meetings 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. Management and the FERC have adopted a number of MSC recommendations since its inception. Formal reviews and recommendations by the MSC are provided in written opinions to Management, the Board, 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 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 perceived independence. Both characteristics have led to the MSC being shown considerable deference by state and federal regulators.

Dr. James Bushnell has been a member of the MSC since 2002. He has served as a Research Scientist for over ten years at the University of California Energy Institute, Berkeley, CA, and currently serves as the Research Director of the California Energy Institute at Berkeley. He also serves as Lecturer at the Haas School of Business, Berkeley on Energy and Environmental Markets. 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 market incentives, market rules and structures created, and in developing empirical methods for measuring the impact of market power on deregulated electricity markets.

Dr. Bushnell has a Ph.D. in Industrial Engineering and Operations Research and a B.S. in Economics and Industrial Engineering. In his current term as member of the MSC, he has provided the ISO, and particularly the ISO Department of Market Monitoring (DMM), expert advice on critical aspects of market design. He continues to help the DMM and the ISO MRTU team on critical design issues, especially on the design and implementation of virtual bidding.

Dr. Bushnell's experience provides an excellent complement to the remaining MSC members, Dr. Frank Wolak and Dr. Benjamin Hobbs. A summary of their biographies is included in Attachment A.

For these reasons, I request that the Board reappoint Dr. James Bushnell as a member of the MSC and authorize execution of a contract for a three-year term on the same conditions as his current contract.

CONCLUSION

Management recommends that the Board approve the reappointment of Dr. James Bushnell to the ISO Market Surveillance Committee as set forth above.

Attachment A

Summary Biographies of MSC Members Dr. Frank Wolak and Dr. Benjamin Hobbs

Dr. Wolak, the chairman of the MSC since its inception in 1998, is a Professor of Economics at Stanford University. His fields of research are industrial organization, regulatory economics, energy economics and econometric theory. He specializes in the study of methods for introducing competition into infrastructure industries – telecommunications, electricity, water delivery and postal delivery services – and on assessing the impacts of these competition policies on consumer and producer welfare. Dr. Wolak is a visiting scholar at University of California Energy Institute and a Research Associate of the National Bureau of Economic Research (NBER).

He earned a B.A. in Economics from Rice University in 1979, a M.A. in Economics in 1980 from University of New Mexico, and a S.M. in Applied Mathematics from Harvard University. In 1985, he obtained a PhD in Economics from Harvard University.

Dr. Wolak's current term expires on March 31, 2011.

Dr. Hobbs, a member of the MSC since 2002, is a Professor of Geography and Environmental Engineering and Chairman of the Department of Geography and Environmental Engineering at the Johns Hopkins University, Baltimore, Maryland with a joint appointment in the JHU Department of Mathematical Sciences. Dr. Hobbs has published widely on environmental and water resources systems and on electric power market economics, regulation, and systems analysis. This area of expertise includes use of engineering economic models to simulate imperfectly competitive energy markets, and decision analysis of alternatives under uncertainty and multiple objectives. He teaches courses on microeconomics, decision analysis, and optimization, with emphases on environmental and power sector applications. He also serves as Scientific Advisor to the Policy Studies Unit of the Netherlands Energy Centre (ECN) and on the Public Interest Advisory Committee of the Gas Technology Institute. Dr. Hobbs is on the editorial boards of the ASCE Journal of Infrastructure Systems; Energy, The International Journal; The Electricity Journal; and the IEEE Transactions on Power Systems. He is a Senior Member of IEEE and Member of ASCE.

He earned a B.S. degree at South Dakota State University in 1976 and a M.S. in Resources Management and Policy in 1978 from SUNY, Syracuse. In 1983, he obtained a PhD in Environmental Systems Engineering from the School of Civil and Environmental Engineering at Cornell University, with minors in Resources Economics and Operations Research.

Dr. Hobbs' current term expires on March 31, 2010.