

# Memorandum

**To:** ISO Board of Governors  
**From:** Yakout Mansour, President and Chief Executive Officer  
**Date:** March 18, 2008  
**Re:** *Approval of Reappointment of Market Surveillance Committee Member*

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*This memorandum requires Board action.*

## Executive Summary

The term of Dr. Frank Wolak as the chairman of the Market Surveillance Committee (MSC) expires on March 31, 2008. Dr. Wolak has provided invaluable expertise and advice to the Board, Management, and staff on many issues related to the operation of the current CAISO markets and the Market Redesign and Technology Upgrade (MRTU) proposals. In particular, the Committee issued opinions on the following topics during 2007:

- Long-Term Congestion Revenue Rights
- Recent Changes to the ISO Congestion Revenue Rights
- Interim Measures to Address Day-Ahead Underscheduling under MRTU
- Start-Up and Minimum Load Bid Caps under MRTU
- Long-Term Resource Adequacy under MRTU
- Interim Capacity Payment Mechanism under MRTU
- Load-Based and Source-Based Trading of Carbon Dioxide in California

Dr. Wolak has been the chairman of the MSC since its inception in 1998 and has provided valuable input on all MSC activities. In addition to providing valuable recommendations to Management and the Board, MSC members are recognized as experts by numerous agencies including FERC, the California Public Utilities Commission, and the California State Legislature, and their input is sought in many venues. Their expertise and credibility is important in developing sound policy for market redesign changes and the development of the infrastructure critical to a viable and efficient wholesale energy market.

The CAISO Tariff requires that the President and CEO, following approval by the Board of Governors, make appointments to the MSC. Therefore, I request that the ISO Board of Governors re-appoint Dr. Frank

Wolak as the chairman of the MSC and authorize execution of a contract for a three-year term on the same terms and conditions as his current contract and a salary as determined by the Board.

## MOTION

***MOVED, that the ISO Board of Governors reappoint Dr. Frank Wolak to the CAISO Market Surveillance Committee as chairman for a term to end March 31, 2011; and***

***MOVED, that the ISO Board of Governors authorize Management to enter into a contract with Dr. Frank Wolak for this purpose, with a salary as approved by the ISO Board of Governors.***

## Background

The CAISO Tariff requires that the MSC be comprised of three or more experts whose combined professional experience encompass 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.

(See CAISO Tariff Appendix P2, Section P2.2.2.1)

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 CAISO's markets and to provide independent expert advice and recommendations to Management, the Board and FERC on market performance and design. The MSC is currently comprised of three members:

- Frank Wolak (Chairman), term expires on March 31, 2008
- James Bushnell (Member), term expires on March 31, 2009
- Benjamin Hobbs (Member), term expires on March 31, 2010

The Tariff authorizes MSC members to develop and publish opinions and reports at the request of the Management, or independently, when deemed appropriate by the MSC. Historically, the MSC has served as an impartial source of information on market issues, primarily for the CAISO, 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 the Management, the Board, and, when appropriate, filed with the FERC. MSC opinions are also available to the public through the CAISO 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. Frank Wolak is a Professor of Economics at Stanford University. He received his undergraduate degree from Rice University, and an S.M. in Applied Mathematics and Ph.D. in Economics from Harvard University. His fields of research are industrial organization and empirical economic analysis. He specializes in the study of privatization, competition and regulation in network industries such as electricity, telecommunications, water supply, natural gas and postal delivery services. He is the author of numerous academic articles on these topics. He is a Research Associate of the National Bureau of Economic Research and a Visiting Researcher at the University of California Energy Institute in Berkeley. Professor Wolak has served as a consultant to the California and U.S. Departments of Justice on market power issues in the telecommunications, electricity, and natural gas markets. He has also served as a consultant to the Federal Communications Commission and Postal Rate Commission on issues relating to regulatory policy in network industries.

Since April of 1998 Dr. Wolak has been Chairman of the MSC. In this capacity, he has testified numerous times at the FERC, and at various Committees of the US Senate and House of Representatives on issues relating to market monitoring and market power in electricity markets. Topics addressed in this testimony include: FERC's role in the design of the California electricity market, the factors leading to the California electricity crisis, the role of the Enron trading strategies in the California electricity crisis, and lessons from the California electricity crisis and Enron bankruptcy for the design of effective regulatory oversight of wholesale energy markets.

Dr. Wolak has also worked on the design and regulatory oversight of the electricity markets internationally, including markets in Europe, Australia/Asia, Latin America, and the US (CAISO, NY-ISO, PJM, ISO-NE). He lectures internationally on issues related to electricity market monitoring and regulatory oversight. He has contributed to the design of market monitoring and regulatory oversight protocols in a number of electricity markets. He was commissioned by the Colombian government to design an independent market monitoring committee for the Colombian electricity supply industry. He was commissioned by the Inter-American Development Bank to develop market monitoring protocols for the Central American electricity market. The Swedish competition authority commissioned him write a research report on the design of the interface between competition policy and electricity market monitoring in European countries. He also worked on the design of the market monitoring protocols for the Philippines electricity market.

Dr. Wolak's experience provides an excellent complement to the remaining MSC members, Dr. Benjamin Hobbs and Dr. James Bushnell. A summary of their biographies is provided below.

## **Summary Biographies of Current MSC Members, Dr. Benjamin Hobbs, and Dr. James Bushnell**

**Dr. Bushnell**, a member of the MSC since 2002, is currently the Research Director of the University of California Energy Institute at Berkeley. He also serves as Lecturer at the Haas School of Business at UC Berkeley. He is a former member of the Market Monitoring Committee of the California Power Exchange (CALPX). His research interests include 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 in particular market rules and structures 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 with a B.S. in Economics and Industrial Engineering. In his tenure as a member of the MSC, he has provided the ISO, and particularly the DMM, expert advice on critical aspects of market design, comparing market performance across different ISO's and market power. He continues to help the DMM and the ISO MRTU team on critical design issues, especially on the design and implementation of scarcity pricing and convergence bidding.

Dr. Bushnell's three-year term expires on March 31, 2009.

**Dr. Hobbs**, a member of the MSC since 2002, is a Professor of Geography & Environmental Engineering and Applied Mathematics & Statistics in the Whiting School of Engineering, at Johns Hopkins University since 1995. 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 presently Scientific Advisor to The Energy Research Centre of the Netherlands and a member of the Public Interest Advisory Committee for the Gas Technology Institute. His research interests include stochastic electric power planning models, environmental and energy systems analysis and economics, multi-objective and risk analysis, ecosystem management, and mathematical programming models of imperfect energy markets. Dr. Hobbs has published numerous journal articles and magazine articles on these topics, co-authored two books and is a Fellow of the IEEE.

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 Ph.D. 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' three-year term expires on March 31, 2010.