

# Memorandum

**To:** ISO Board of Governors  
**From:** Yakout Mansour, President and Chief Executive Officer  
**Date:** December 7, 2010  
**Re:** **Decision on Market Surveillance Committee Appointments**

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*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

The California Independent System Operator Corporation's Market Surveillance Committee (MSC) is an external market advisor that provides independent expertise and recommendations on market design and monitoring issues to the Chief Executive Officer and Governing Board. The ISO tariff requires that the Chief Executive Officer, subject to approval by the Board, make appointments to the MSC.

For 2011, I am nominating two new members for the MSC: Dr. Steven Stoft and Dr. Scott Harvey. Both these nominees are nationally recognized experts in electricity market design with over 23 years of experience in energy economics. Each nominee also has extensive consulting experience working specifically on issues involving wholesale electric market design and performance in California and other ISOs across the country.

Dr. Stoft has specialized in electricity market analysis and design since 1997, when he worked as an economist with the Federal Energy Regulatory Commission. From 2001 through 2008, he served as an advisor to the California Electricity Oversight Board on a variety of market design issues, including options for forward capacity procurement obligations. From 2004 to 2006, he worked with ISO New England as a lead architect of their forward capacity market. From 1999 to the present, Dr. Stoft has consulted for the market monitor of the PJM Interconnection. In recent years, Dr. Stoft has performed extensive research and consulting in the area of energy policy and climate change.

Dr. Harvey has worked as a consultant specializing in electricity market analysis and design since 1996. He has extensive experience working on market design issues on behalf of the New York ISO, ISO New England, PJM Interconnection, and the Ontario IESO. Dr. Harvey

worked on the development of the Midwest ISO and has been an external member of the Midwest ISO's Market Advisory Committee since 2008. Dr. Harvey served as a consultant to the California ISO from 2004 through implementation of its new nodal market design in 2009. In this capacity, Dr. Harvey provided valuable expertise and advice to the Board of Governors and Management and staff on numerous market issues relating to market design, implementation readiness, and future market enhancements.

Therefore, I request that the Board appoint Dr. Stoft and Dr. Harvey as members of the MSC and authorize execution of contracts with Dr. Stoft and Dr. Harvey for three-year terms from April 1, 2011 through March 31, 2014.

Motion 1:

***Moved, that the ISO Board of Governors appoints Dr. Steven Stoft to the ISO Market Surveillance Committee for a three-year term beginning April 1, 2011 through March 31, 2014; and***

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

Motion 2:

***Moved, that the ISO Board of Governors appoints Dr. Scott Harvey to the ISO Market Surveillance Committee for a three-year term beginning April 1, 2011 through March 31, 2014; and***

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

## **BACKGROUND**

The ISO tariff (Appendix P2, Section P2.2.2.1) 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 ISO 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 on market performance and design. The MSC is currently comprised of three members:

- Frank Wolak (Chairman), term expires on March 31, 2011
- James Bushnell (Member), term expires on March 31, 2012
- Benjamin Hobbs (Member), term expires on March 31, 2013

The tariff authorizes MSC members to develop and publish opinions and reports at the request of Management, 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 the 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 ISO tariff provides that the MSC shall be comprised of three or more members. With the appointment of Dr. Stoft and Dr. Harvey in April 2011, the MSC will consist of four members due to the expiration of Dr. Frank Wolak's term in March 2011. The MSC consisted of four members between 2003 and 2006, but has otherwise consisted of three members since its inception in 1998.

***Dr. Steven Stoft***

Steven Stoft has over 23 years of experience as an energy economist and has specialized in electric market design and analysis since 1997. From 2001 through 2008, he served as an Advisor to the California Electricity Oversight Board on a variety of market design issues, including options for forward capacity procurement obligations. From 2002 to 2003, he served as the expert economic witness before FERC for California's Public Utilities Commission in proceedings regarding \$40 billion in long-term contracts signed during the electricity crisis.

From 2004 to 2006, he played a lead role in designing ISO New England's capacity market and served as ISO New England's expert economic witness, successfully defending the proposed capacity market design before FERC. From 1999 to the present, Dr. Stoft has consulted for the market monitor of the PJM Interconnection. During this period, he has also consulted for a variety of generation entities in the Alberta power market, and he is currently consulting for the World Bank on transmission investment policy related to renewable energy.

Prior to working as an independent consultant, Dr. Stoft served in the Office of Economic Policy at FERC, was a research associate at the University of California's Energy Institute, a staff scientist at Lawrence Berkeley National Laboratory focusing on appliance standards, and an assistant professor at Boston University.

In 2002, Dr. Stoft published one of the first comprehensive textbooks on electric market design, *Power System Economics: Designing Markets for Electricity*, which has been translated into Chinese and Russian. In 2008, he published his second book, *Carbonomics*, which reflects his extensive work in the field of energy and climate policy in more recent years.

Dr. Stoft holds a B.S. in Engineering Mathematics and a Ph. D. in Economics, both from the University of California, Berkeley.

***Dr. Scott Harvey***

Dr. Scott Harvey has over 23 years of experience as an energy consultant, including extensive consulting experience since 1996 working in the restructuring of the PJM, New York, and New England Power Pools, the development of the Midwest ISO, and development of the California ISO's new nodal market design.

Dr. Scott Harvey has served as Director in the Cambridge Massachusetts office of LECG since 1998. In this capacity, 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. He has also consulted on a variety of market design and performance issues for the Midwest ISO, including the development of the Midwest ISO congestion pricing system. Dr. Harvey has been an external member of the Midwest ISO's Market Advisory Committee since 2008. He has also worked on a variety of market design issues on behalf of the ISO New England, PJM Interconnection, and the Ontario IESO.

Dr. Harvey served as a consultant to the California ISO from 2004 through implementation of its new nodal market design in 2009. In this capacity, Dr. Harvey provided valuable expertise and advice to the Board of Governors and Management and staff on numerous market issues relating to market design, implementation readiness and future market enhancements.

Prior to joining LECG, Dr. Harvey was a consultant for 11 years with Putnam, Hayes & Bartlett, Inc. 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 PHB, 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 earned his B.A. in Economics from the University of Illinois Champaign, Urbana, and his Ph. D. in Economics from the University of California, Berkeley.

#### ***Other MSC Members***

The backgrounds of Dr. Stoft and Dr. Harvey would make an excellent complement to the skills and talents of the two other MSC members with whom they would serve, Dr. James Bushnell and Dr. Benjamin Hobbs. A summary of these other MSC members' biographies is included in Attachment A.

#### **MANAGEMENT RECOMMENDATION**

For these reasons, I request that the Board appoint Dr. Steven Stoft and Dr. Scott Harvey as members of the MSC and authorize execution of a consulting agreement with Dr. Stoft and Dr. Harvey for three-year terms effective April 2011 through March 2014.



## Attachment A

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

**Dr. James Bushnell**, a member of the MSC since 2002, has been an Associate Professor of Economics at Iowa State University since 2009, where he holds the Cargill Chair in Energy Economics and is Director of the Biobased Industry Center. He is also a member of the California Air Resources Board's Economic Assessment and Allocation Committee. Dr. Bushnell served as a Research Scientist for over 15 years and as Research Director 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 (CALPX). 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.

Dr. Bushnell's current 3-year term expires on March 31, 2012.

**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, 2013.