



Stanford University

TomKat Center for Sustainable Energy
Precourt Institute for Energy
SLAC National Accelerator Laboratory
Energy and Environment Affiliates Program
Civil and Environmental Engineering
Department of Electrical Engineering

Stanford SmartGrid Seminar

Challenges in Electricity Markets

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Federal Energy Regulatory Commission



1:00pm-2:00pm, Thursday, Apr 30, Y2E2 270

Abstract: We examine the history of government energy policy, the forecasting paradox, the geopolitics of energy policy and recent surprises. Next, we examine the failures and successes in the evolution of electricity markets, and potential improvements from a smarter grid. Finally, we ask the question have we gotten better at seeing the future.

Bio: Richard P. O'Neill is the Chief Economic Advisor at the Federal Energy Regulatory Commission. From 1988 to 2000 he was the Chief Economist and Director of the Office of Economic Policy. From 1986 to 1988 he was the Director of the Commission's Office of Pipeline and Producer Regulation. His work has focused on open access, restructuring, competition, performance-based benchmarked incentive regulation, market power mitigation and market design. From 1978 to 1986, he directed oil and gas analysis, including the development of software systems, oil and gas resource analysis, energy modeling systems, analysis of natural gas markets, and oil and gas forecasting at the Energy Information Administration. From 1973 to 1978, he taught and did research in computer science and applied mathematics on the computer science and business faculty of Louisiana State University. From 1969 to 1973, he taught and did research in the areas of operations research and statistics on the business school faculty of the University of Maryland. He has a B.S. in chemical engineering, an MBA and a Doctorate in operations research (with minors in mathematics, statistics, economics and accounting) all from the University of Maryland. He has worked with several countries, states, the World Bank, energy companies and computer companies in the development of mathematical software, energy modeling, forecasting, regulation, privatization, restructuring and market design. His published work has appeared in academic and professional journals and books in the areas of Applied Mathematics, Optimization, Operations Research, Management Science, Computer Science, Energy, Electrical Engineering, Economics, and Law.