



Sponsored Seminar

Rob Lempert

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Longer Range Global Policy and the Future
Human Condition

Professor, Pardee RAND Graduate School

Presenting on:



“Robust Decision Making: Approach and Applications”

February 12, 2012

12 noon

(Lunch served at 11:50 am)

129 Baker Conference Room

Department of Engineering and Public Policy

Seminar Abstract: Robust Decision Making (RDM) is an iterative, quantitative, decision support methodology designed for conditions of deep uncertainty, where parties to a decision do not know—or agree on—the best model for relating actions to consequences nor the likelihood of future events. Rather than using models and data to describe a best-estimate future, RDM runs simulation models for hundreds to hundreds of thousands of different sets of assumptions to describe how plans perform over many plausible futures. The approach then uses statistics and visualizations on the resulting large database of model runs to help decision makers characterize those future conditions in which their plans will perform well and poorly. This information then helps decision makers to identify plans more robust to a wide range of future conditions and to adjudicate tradeoffs among alternative robust options. This seminar will describe the RDM approach and its application to areas such as water management, flood risk management, climate, and energy policies. The subsequent workshop will provide hands on training with RDM method and tools.

Speaker Bio: Robert Lempert is a senior scientist at the RAND Corporation and Director of the Frederick S. Pardee Center for Longer Range Global Policy and the Future Human Condition. His research focuses on decisionmaking under conditions of deep uncertainty, with an emphasis on climate change, energy, and the environment. Lempert and his research team assist a number of natural resource agencies in their efforts to include climate change in their long-range plans. Lempert is a Fellow of the American Physical Society, a member of the Council on Foreign Relations, a member of the U.S. National Academy of Sciences Panel on Assessing the Impact of Climate Change on Political and Social Stresses, and a lead author for Working Group II of the United Nation's Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report and for the IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. Lempert was the Inaugural EADS Distinguished Visitor in Energy and Environment at the American Academy in Berlin. A professor of policy analysis in the Pardee RAND Graduate School, Lempert is an author of the book *Shaping the Next One Hundred Years: New Methods for Quantitative, Longer-Term Policy Analysis*. Lempert received his Ph.D. in applied physics, S.M. in applied physics and science policy from Harvard University.

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