



Climate and Energy Decision Making Sponsored Seminar

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Presenting on:

Supply Curves for Conserved Electricity

April 5th, 2011

12 noon

(Lunch served at 11:50 am)

129 Baker Conference Room
Department of Engineering and Public Policy

Seminar Abstract: In the discussed paper, we introduce a new top-down approach to modeling the effects of publicly financed energy-efficiency programs on electricity consumption and carbon dioxide emissions. The approach draws on a partial-adjustment econometric model of electricity demand and represents the results of a reverse auction for electricity savings from different levels of public investment. The model is calibrated to recent estimates of the cost-effectiveness of rate payer-funded efficiency programs at reducing electricity consumption. The results suggest that supply curves for conserved electricity are upward sloping, convex, and dependent on policy design and electricity prices. Under the scenarios modeled, electricity savings of between 1 and 3 percent are achievable at a marginal cost of \$50 per megawatt hour (MWh) and a corresponding average cost of \$25–\$35/MWh.

Speaker Bio: Karen L. Palmer is a Senior Fellow and the Associate Director for Electricity of the Center for Climate and Electricity Policy at Resources for the Future in Washington, DC. Dr. Palmer received her Ph.D. in economics from Boston College in 1990. Prior to her graduate studies she worked as a research economist at DRI McGraw Hill in Lexington, MA. Dr. Palmer specializes in the economics of environmental regulation and of public utility regulation and her research interests include electricity restructuring, environmental regulation of the electricity sector, policies to promote renewables and clean energy sources and the cost effectiveness of energy efficiency programs. She is a co-author of the book, *Alternating Currents: Electricity Markets and Public Policy*, published by RFF Press in 2002.

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