

**2010 DOE - NARUC
National Electricity Forum
Washington Renaissance Hotel
Washington, DC**

FINAL AGENDA

Wednesday, February 17, 2010

7:30 am – 5:00 pm **REGISTRATION**
Grand Ballroom Foyer

OPENING SESSION

8:00 am – 8:15 am **WELCOME REMARKS**
Grand Ballroom South

Honorable David Coen, Commissioner, Vermont Public Service Board and President, NARUC
Honorable Patricia Hoffman, Principal Deputy Assistant Secretary and Assistant Secretary Nominee for Electricity Delivery and Energy Reliability, U.S. Department of Energy

8:15 am – 8:30 am **KEYNOTE ADDRESS**
Honorable Kristina Johnson, Under Secretary of Energy, U.S. Department of Energy

8:30 am – 8:45 am **SPECIAL ADDRESS**
Honorable Lisa Jackson, Administrator, U.S. Environmental Protection Agency

8:45 am – 10:30 am **KEYNOTE PANEL**
Grand Ballroom South

Is a New Paradigm Needed to Manage the Electricity System in a Clean Energy Economy? Views from the Nation's Thought Leaders

While the current state of the economy has temporarily lessened pressures on the electricity infrastructure, those pressures have only been pushed forward in time, not eliminated. Over the next couple of decades, it seems likely that the infrastructure will not only need to increase the total resource base to meet rising demand, but also to do so while simultaneously transforming itself into a new system that delivers “clean” power and services via a “smart” grid. New generating technologies must be integrated, many of which solve some problems but create others. A possible move to heavy use of “plug-in hybrids,” for example has the potential to radically change the nature of the needs that the electricity infrastructure must meet. Government-sponsored demonstration projects of new technologies must move from one-off installations handled via special rules to standard components of the grid that are managed routinely as a part of the basic service.

Are today's industry approaches for planning, financing, building, siting, and paying for distribution, transmission, generation, demand response, energy efficiency, and energy storage resources adequate for completing this transition? If not, what new approaches in each of these areas will be necessary? The Keynote panelists will discuss what the transition to this new clean energy world will entail, what will comprise the new electricity infrastructure, and how the systems will be operated.

The Keynote Panelists will address some of these questions:

- What is your definition of a clean energy economy?
- What is your view on what devices, structures and regional systems are needed to achieve a clean energy economy?
- What are the major drivers in a clean energy economy?
- How should the new energy economy be financed?
- What will be the game changers in this new electric power system?
- What are the barriers to moving to a new clean energy economy?
- What will be the role of government in the clean energy economy?
- What are the long-term expected financial drivers for enabling a clean energy economy?
- Will there be a shift in how energy is financed, given the changes in the marketplace over the past year?
- How can state and federal tax policies affect investments in clean energy?
- What will be the impact to consumers?

Speakers:

Dan Bakal, Director of Electric Power Programs, Ceres

Honorable Garry Brown, Chairman, New York Public Service Commission and Chair, NARUC Committee on Electricity

John Podesta, President and Chief Executive Officer, Center for American Progress

Thomas King, President, National Grid USA

Carl Pope, Executive Director, Sierra Club

Honorable Jon Wellinghoff, Chairman, Federal Energy Regulatory Commission

Moderator:

Susan Tierney, Principal, Analysis Group, Inc.

10:30 am – 10:45 am **NETWORKING BREAK**

Grand Ballroom Foyer

Building New Electricity Infrastructure: Balancing The Roles of Coordinated Planning and Market-based Processes

10:45 am – 12:15 pm

Grand Ballroom South

Many electric infrastructure facilities have long lead-times, and changes to the infrastructure require careful planning to minimize unintended consequences. Large-scale multiregional planning and even interconnection-wide planning is getting more emphasis today, particularly in relation to the possible designation of renewable energy zones and the development of the transmission needed to deliver renewable energy to load centers. Some analysts, however, are concerned that “central planning” is too deterministic

and could lead to premature hard-wiring of technological choices, and they want greater reliance on market processes. Others regard market processes as inherently short-term and believe that over-reliance on them would skew the development process away from large-scale, strategically significant decisions and projects. Can these two approaches be harmonized in some productive manner, so that we get the best of what both have to deliver?

The panel may be asked the following questions:

- Is coordinated planning critical for delivering remotely located renewable energy to markets? Are there examples where long-term coordinated planning has worked well in conjunction with market-based decision making? Are there best practices to follow?
- What should be the long-term role of DOE and other federal agencies in long-term system planning? What role should DOE have in market design and operations?
- Presumably interconnection-level analyses must precede any form of interconnection-level planning. Would market-based decision-making be enhanced by the availability of information from such analyses?
- What are some of the possible meanings of the term “interconnection-level transmission plan”? What are the possible effects, positive and negative, of such plans?

Speakers:

Honorable Lauren Azar, Commissioner, Wisconsin Public Service Commission

Christian Brosseau, President, HQ Energy Services US, Hydro Québec

Doug Larson, Executive Director, Western Interstate Energy Board

Honorable Marc Spitzer, Commissioner, Federal Energy Regulatory Commission

Gordon van Welie, Chief Executive Officer, Independent System Operator-New England

Moderator:

David Meyer, Senior Policy Advisor, Office of Electricity Delivery and Energy Reliability, U. S. Department of Energy

LUNCH: An International Perspective on the Clean Energy Environment

12:30 pm – 1:30 pm

Renaissance Ballroom

Speaker:

The Honorable Gaétan Caron

Chair and Chief Executive Officer, National Energy Board of Canada

Vice Chair, NARUC Committee on International Relations

Chair and CEO Gaétan Caron will speak on the ongoing efforts in Canada to develop clean energy economies and how the U.S. can learn from best practices employed abroad.

Carbon Restrictions: What Steps Will the Economy Actually Take in a Carbon Constrained World?

1:30 pm – 3:00 pm

Grand Ballroom South

Federal legislation mandating substantial reductions in carbon emissions will have a profound impact on the electricity power system and how it is operated. Federally-mandated allowance allocations may pick winners and losers and will influence generation decisions, siting decisions, and transmission planning. The panel will discuss how the system will be operated under carbon rules and how such rules will impact the deployment of innovative technologies. The panel will discuss the implications of low-carbon policies for the electricity industry, and what such policies will mean for utilities, regulators, and consumers.

The panelists may be asked to address the following questions:

- What will the implications be for the electricity sector when carbon emission mandates become law?
- How will consumers be affected, and how should this be addressed?
- How will carbon mandates impact efforts to modernize the Nation's electricity grid?
- What role will new technologies play in the future? How viable are these technologies, and what is the timeline for deployment?
- What should be the plan if CCS fails?

Speakers:

Richard Cowart, Principal, Regulatory Assistance Project

William McCollum, Chief Operating Officer, Tennessee Valley Authority

Honorable Richard Morgan, Commissioner, District of Columbia Public Service Commission

William D Schulze, Ph.D., Kenneth Robinson Professor of Applied Economics and Public Policy,
Department of Applied Economics and Management, Cornell University

Moderator:

Peter Behr, Journalist, *E&E News*

3:00 pm – 3:15 pm **NETWORKING BREAK**
Grand Ballroom Foyer

Wild Cards: Innovative Technologies that Might Transform the Electricity Industry

3:15 pm – 4:45 pm

Many of the technologies that will power a clean energy economy in the electric sector are still under development. Decisions made in the near term about which generation resources to select and which transmission lines to build will have long-lasting impacts on the structure of the system. At the same time, investments in the research, development and deployment of game-changing innovative technologies, such as offshore wind, plug-in hybrid electric vehicles (PHEVs), concentrated solar power, small modular-nuclear reactors, and “net zero” energy buildings have the potential to alter future needs and the benefits of today’s investment decisions. Among other things, it is imperative that regulators and industry make near-term decisions that enable long-term technological advancements. The panel will discuss these opportunities and how difficult RD&D investment decisions can be made to help transform the electricity industry

The panelists may be asked the following questions:

- What undeveloped technologies might play a transformative role? What will be needed to evaluate their practical potential? How would you handicap the potential of each technology?
- How do we “get it right”? What if we invest heavily in the “wrong” technologies? How do we move forward in an atmosphere of technological uncertainty, without foreclosing the ability to deploy “superior” technologies if and when they are developed?

- If deployment of PHEVs in the next decade achieves the high levels of some projections, major changes to the electric system infrastructure will be required. What near-term actions are needed to support the deployment of PHEVs? What is the “chicken” and what is the “egg”?
- What role beyond R&D should DOE play in encouraging the development and deployment of any of these wild cards?
- How should rate regulators balance the need to protect utilities that are early adopters of new technologies from losses and the need to protect utility customers from paying for investors’ mistakes?

Speakers:

Dan Arvizu, Director, National Renewable Energy Laboratory

Honorable Arun Majumdar, Director, Advanced Research Project Agency-Energy, U.S. Department of Energy

Peter Mandelstam, President, Bluewater Wind, and Chair, American Wind Energy Association Offshore Wind Working Group

Arshad Mansoor, Vice President, Electric Power Research Institute

Honorable Warren F. Miller, Assistant Secretary for Nuclear, U.S. Department of Energy

Moderator:

Sam Baldwin, Chief Technology Officer, Office of Energy Efficiency and Renewable Energy, U. S. Department of Energy

RECEPTION

5:00 pm – 6:30 pm
Renaissance Ballroom

WINE & CHEESE RECEPTION

Thursday, February 18, 2010

7:30 am – 8:00 am **CONTINENTAL BREAKFAST**
Grand Ballroom Foyer

7:30 am – 12:00 pm **REGISTRATION**
Grand Ballroom Foyer

An Evolving Grid – Will a Smarter Grid Matter?

8:00 am – 9:40 am
Grand Ballroom South

8:00 am – 8:10 am **FCC PRESENTATION ON BROADBAND SMART GRID INITIATIVE**
Nick Sinai, Energy and Environment Director, FCC

8:10 am – 9:40 am **SMART GRID PANEL DISCUSSION**

The urge to jump on the smart grid train has exploded in recent months, particularly in light of funding for new smart grid projects provided by the American Reinvestment and Recovery Act. However, despite the enthusiasm from all quarters, details on exactly how the technologies will be used and how that use will be of benefit are remarkably hazy. Panelists will explore which changes to the grid infrastructure will have the greatest impact on the move to a new clean energy economy. The panel will discuss the opportunities for innovative technologies to be deployed in the next decade, what impacts the evolving grid will have on consumer prices, and what changes in regulatory policy are needed to ensure that progress occurs in the most cost-effective manner. Panelists will also be asked to discuss how smart grid technologies might present opportunities or challenges for the transmission and delivery of electricity. In addition to discussing the grid infrastructure, the panel will discuss the role that distributed generation and micro-grids will play in a new smart grid.

The panel may be asked the following questions:

- What will the smart grid look like? What public policies are needed to ensure a successful shift to a smart grid?
- Are micro-grids the wave of the future? Do they ensure a greater degree of reliability than regional grids?
- What actions can be taken now that will get the deployment of existing smart grid technologies started?
- How will the expanded deployment of AMI technologies aid in ensuring reliability?
- What is the scale of investment needed to expand both smart grid and transmission on a national scale?
- How do we ensure that today's needed assets – the latest and greatest meter or other smart grid component - don't become tomorrow's stranded assets?
- Will / should regulators wait until manufacturing costs are lower before approving these newer systems?
- Can software updates at nominal incremental costs to users be developed for meter and other smart grid components?

Speakers:

Nancy Brockway, Principal, NBrockway & Associates

Honorable Paul Centolella, Commissioner, Ohio Public Utilities Commission

Robert Gilligan, Vice President for Transmission & Distribution, GE Energy

Professor Mark Johnson, Director of Industry and Innovation Programs, Future Renewable Electricity Energy Delivery and Management Systems Center
Anne Pramaggiore, President, ComEd

Moderator:

Honorable Pat Oshie, Commissioner, Washington Utilities and Transportation Committee and Chair, NARUC Committee on Energy Resources and the Environment

The Role of Energy Efficiency in the Clean Energy Economy

9:40 am – 11:10 am

Grand Ballroom South

As the electricity infrastructure evolves toward a clean energy economy, energy efficiency programs can offset the need for new generation and transmission infrastructure to some degree. Yet, there is uncertainty as to whether market participants and consumers have the right incentives to embrace energy efficiency opportunities. Uncertainty about the acceptance and impacts of energy efficiency creates uncertainty about the investments needed in other types of infrastructure, many of which require long lead times to develop. To achieve clean energy economy goals, it is imperative that energy efficiency programs be an integral part of system planning, that such programs focus on customers' needs, and that they improve customers' understanding of how the programs work.

The panel will discuss the implications of energy efficiency program planning for overall system planning. Issues to be discussed include the challenges to extensive deployment; the role of government, energy industry participants and consumers; and the linkages between energy efficiency planning and transmission and generation investment decisions. The panel will discuss these issues in the context of transforming the Nation's electricity delivery system in the clean energy economy.

The panel will discuss the following questions:

- Can energy efficiency reduce transmission needs?
- Can energy efficiency programs compete with other technologies or are efforts to deploy innovative technologies too strong?
- What happens to energy efficiency after the massive one-time push from the American Recovery and Reinvestment Act?
- Is ratepayer-funded energy efficiency still relevant given other funding streams?
- Can the Nation deploy energy efficiency at a much larger scale? If so, should it be done?
- If energy efficiency is the key to a clean energy economy, should it be nationally mandated?
- How can large and small consumers be encouraged or incented to undertake energy efficiency?
- Should federal energy efficiency standards be considered in conjunction with renewable energy standards or should they be separate?
- Are utilities structured/equipped to implement energy efficiency programs or are such programs best implemented and administered by independent entities?

Speakers:

Terry Boston, Chief Executive Officer, PJM Interconnection LLC

Honorable Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency, U.S. Department of Energy

Joseph Kelliher, Executive Vice President, Federal Regulatory Affairs, FPL Group

Chris Miller, President, Piedmont Environmental Council

Honorable John Savage, Commissioner, Oregon Public Utility Commission

Moderator:

Steven Nadel, Director, American Council for an Energy Efficiency Economy

11:10 am – 11:25 am **NETWORKING BREAK**

Grand Ballroom Foyer

Electric Generation Resource Investments: Pursuing a Long-term Goal for a Clean Energy Economy in the Face of Transitory Trends

11:25 am – 12:55 pm

Grand Ballroom South

Electric generation infrastructure is long-lived, while decisions on infrastructure investment may be determined by transitory trends. Such near term trends include the state of the economy, the prices of fuels today, the changing landscape of evolving environmental laws and regulations, the public's attitude toward coal and nuclear power, and the policies of the Congress and the Administration. Investments in electric power generation, major transmission grid expansion projects, and innovative new technologies—or the lack of such new investments—over the next ten years will shape the U.S. electric power industry as far into the future as 2050. As we develop long-term national goals for a new clean energy economy, we must take account of the transitory factors that help shape investment decisions. In particular, the amount of the Nation's future reliance on natural gas for new electric power generation—a fuel with a recent history of substantial price variability—may be determined in large part by whether today's projections for future natural gas prices are high or low.

It is often difficult for policymakers to make informed electricity infrastructure decision when future fuel prices cannot be forecast reliably. When fuel prices are low, the zeal for new resources dims, and more natural gas, for example, is chosen to generate electricity. While federal carbon legislation may include support for renewable energy, many believe that renewable energy resources alone cannot meet the Nation's energy needs, and that natural gas will be relied on increasingly for electricity generation, over new nuclear power and clean coal generation. Yet, carbon emissions from burning natural gas could become less acceptable in the years ahead if the world must adopt more stringent climate control measures. The panel will discuss how to pursue a long-term goal for a clean energy economy when investment decisions may be driven in large part by changing economic conditions, fuel prices, environmental regulations, and government policies.

The panel may be asked the following questions:

- Can the industry maintain constant pursuit of a long-term goal for a clean energy economy in the face of transitory trends?
- To what degree are power industry plans for the next half-century affected by near-term factors such as the current state of the economy, unusual investor caution at the present time, today's fuel prices, current environmental regulations, and today's government policies?
- If transitory factors play a significant role, is this approach to long-term planning satisfactory, and if not, what are the alternatives?
- Can economically sound generation, transmission, and other investment decisions be made with uncertainty about fuel prices and the price of carbon over the long term?
- How will the passage of Federal climate change legislation affect the use of natural gas for new electric generation? How will it affect coal and nuclear power?
- How can regulators best oversee utility investment choices in light of the wide range of available choices and the uncertainty about future prices and trends?

Speakers:

Honorable Ronald Binz, Chairman, Colorado Public Utilities Commission

Benjamin Fowke, President and Chief Operating Officer, Xcel Energy

Robert Johnston, President and Chief Executive Officer, Municipal Electric Authority of Georgia

Ronald Litzinger, Chief Executive Officer, Edison Mission Energy

Honorable Philip Sharp, President, Resources for the Future

Moderator:

Honorable Erin O'Connell-Diaz, Commissioner, Illinois Commerce Commission

LUNCH: Implications of a Clean Energy Economy for Jobs

1:00 pm – 2:00 pm

Grand Ballroom North

Speaker:

Elizabeth Shuler, Secretary-Treasurer, AFL-CIO

Ms. Shuler will speak on the impacts on jobs in the electric power sector as the Nation evolves toward a clean energy economy.

Closing Remarks: Reflections on a Path Forward

2:00 pm – 2:15 pm

Grand Ballroom North

The 2010 National Electricity Forum leadership will summarize what lessons were learned during the Forum and will reflect on how government, industry and academia can continue to work together to successfully achieve a clean energy economy.

Honorable Ron Binz, Chairman, Colorado Public Utilities Commission

Honorable Erin O'Connell-Diaz, Commissioner, Illinois Public Service Commission

David Meyer, Senior Policy Advisor, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy

Adjourn the 2010 National Electricity Forum

2:15 pm