



2008 National Electricity Delivery Forum



The Role of Electricity Delivery Infrastructure in Addressing Climate Change, Demand Growth, and Energy Security

February 20-21, 2008 • Renaissance Hotel • Washington, DC

Agenda with Session Abstracts



*U.S. DOE, Office of
Electricity Delivery and
Energy Reliability*

Sponsored By



*National Association of
Regulatory Utility
Commissioners*

**Renaissance Washington Hotel
Washington, D.C.**

Wednesday, February 20, 2008

Grand Ballroom Foyer

7:30 am – 8:30 am **CONTINENTAL BREAKFAST**

7:30 am – 5:00 pm **REGISTRATION**

OPENING KEYNOTE SESSION

Grand Ballroom South

8:00 am – 8:10 am **WELCOME and INTRODUCTIONS**

***The Honorable Anne C. George**, Commissioner, Connecticut Department of Public Utility Control and Chair, NARUC Committee on Electricity*

***The Honorable Phyllis A. Reha**, Vice Chair, Minnesota Public Utilities Commission and Chair, NARUC Committee on Energy Resources and the Environment*

8:10 am – 8:30 am

OPENING KEYNOTE SPEAKERS

The Honorable Marsha H. Smith, Commissioner, Idaho Public Utilities Commission and NARUC President

8:30 am – 8:50 am

The Honorable Kevin Kolevar, Assistant Secretary for Electricity Delivery and Energy Reliability, U.S. Department of Energy

8:50 am – 10:45 am

OPENING KEYNOTE PANEL

Three Grand Challenges: The Role of the Electric Delivery System in Addressing Climate Change, Demand Growth, and Energy Security

The Opening Keynote panel will set the stage for the discussion that will follow over the succeeding two days. It will feature some of the nation's leading economists, environmentalists and futurists who will discuss these critical questions. Each panelist will be asked to discuss the three grand challenges and implications for grid modernization.

The **Opening Keynote Panelists** may be asked to address the following questions, among other questions:

- ◆ What will be the demand for electricity in the coming years? What options exist for meeting projected demand? What will be the impact of higher prices on electricity demand and economic growth?
- ◆ What should the electric sector do to develop and implement options to mitigate the nation's carbon footprint?
- ◆ How should the competing pressures for increased reliable electricity supply and clean air be handled cost-effectively?
- ◆ How should the nation's future electricity delivery system be organized to ensure that consumers receive reliable service at reasonable cost while meeting more stringent environmental regulations?
- ◆ How do energy security considerations relate to the modernization of the nation's electricity delivery system?

Session Moderator: *Michael T. Burr, Editor-in-Chief, Public Utilities Fortnightly*

Speakers:

1. *The Honorable Joseph T. Kelliher, Chairman, Federal Energy Regulatory Commission*
2. *The Honorable Sam J. Ervin, IV, Commissioner, North Carolina Utilities Commission and Chair, U.S. Electricity Delivery Working Group*
3. *The Honorable Phil Sharp, President, Resources for the Future*
4. *The Honorable Eileen Claussen, President, Pew Center on Global Climate Change*
5. *Kurt E. Yeager, Executive Director, Galvin Electricity Initiative*

Grand Ballroom Foyer

10:45 am – 11:00 am

NETWORKING BREAK

GENERAL SESSION #1

Grand Ballroom South

11:00 am – 12:45 pm

Addressing the Three Grand Challenges: Perspectives from the Electric Power Industry

In this General Session on **Addressing the Three Grand Challenges: Perspectives from the Electric Power Industry**, each of these industry leaders will be asked to explain how his or her company is responding to these challenges and positioning itself for the future. The discussion will involve interaction between the panelists and the audience. Remove “The audience...” from Web site

The panelists for the **Addressing the Three Grand Challenges: Perspectives from the Electric Power Industry** session may be asked to address the following questions:

- ◆ How are industry leaders positioning their organizations to respond to the significant uncertainties associated with addressing climate change, demand growth, and energy security?
- ◆ What policy guidance are they receiving from their regulators and stakeholders (investors, customers, employees, environmental community, and the public) in addressing these issues?
- ◆ How should the facilities needed to address these challenges be planned for, financed, and constructed?

Session Moderator: *The Honorable Frederick F. Butler, Commissioner, New Jersey Board of Public Utilities and NARUC First Vice President*

Speakers:

1. **Jeff Sterba**, Chief Executive Officer, PNM Resources, Inc., Chair, Edison Electric Institute Board of Directors and Chair, Electric Power Research Institute Board of Directors
2. **Jan Schori**, General Manager, Sacramento Municipal Utility District
3. **Ralph Izzo**, Chairman, President, and Chief Executive Officer, Public Service Enterprise Group Incorporated
4. **Masheed Saidi**, Executive Vice President and Chief Operating Officer, U.S. Transmission, National Grid
5. **Lloyd Yates**, Chief Executive Officer, Progress Energy Carolinas

LUNCH

Renaissance Ballroom

12:45 pm – 2:15 pm

LUNCH with Richard P. Sergel, President and Chief Executive Officer, North American Electric Reliability Corporation

GENERAL SESSION #2

Grand Ballroom South

2:15 pm – 3:45 pm

Addressing the Three Grand Challenges: Perspectives from the Nation's Technology Leaders

The session on **Addressing the Three Grand Challenges: Perspectives from the Nation's Technology Leaders** will not only focus on the policies needed to support the deployment of cost-effective advanced technologies to address climate change, demand growth, and energy security issues, but will also discuss the technical capabilities of the various options. The panel discussion will concentrate on identifying the policies that are needed at both the state and federal level to permit the deployment of advanced technologies.

The panelists for the **Addressing the Three Grand Challenges: Perspectives from the Nation's Technology Leaders** session may be asked to address the following questions:

- ◆ What new generation, transmission, distribution, energy efficiency or demand response technologies offer the greatest promise for meeting customer demand in an economical and environmentally appropriate manner?
- ◆ How would deployment of these technologies affect the economy and the nation's energy security?
- ◆ What policies are needed to guide technology providers so that deployment of new cost-effective advanced, clean technologies can occur?
- ◆ How should policymakers interact with technology providers to address the three grand challenges?

Session Moderator: *The Honorable Patricia Hoffman, Principal Deputy Assistant Secretary for Electricity Delivery and Energy Reliability, U.S. Department of Energy*

Speakers:

1. **Susan Tomasky**, *President, Transmission, American Electric Power*
2. **Robert Gilligan**, *General Manager, Transmission and Distribution, GE Energy*
3. **Michael Howard**, *Senior Vice President, Research and Development, Electric Power Research Institute*
4. **Dan W. Reicher**, *Director, Climate Change and Energy Initiatives, Google.org*

Grand Ballroom Foyer

3:45 pm – 4:00 pm

NETWORKING BREAK

GENERAL SESSION #3

Grand Ballroom South

4:00 pm – 5:30 pm

Addressing the Three Grand Challenges: State and Regional Perspectives

This General Session on **Addressing the Three Grand Challenges: State and Regional Perspectives** includes a number of state policymakers, including state public utility commissioners, representatives from state energy offices, and state legislators, all of whom have a responsibility for establishing state policy

concerning these issues.

The panelists for the **Addressing the Three Grand Challenges: State and Regional Perspectives** session may be asked to discuss the following questions:

- ◆ How do states establish policies that appropriately address the challenges of climate change, demand growth, and energy security?
- ◆ How can states collaborate to develop coherent regional plans and policies?
- ◆ What should the federal role be in helping states (or groups of states) address the three challenges?
- ◆ How should states work with industry to achieve state and national environmental goals while ensuring that the costs of compliance with these goals are covered?

Session Moderator: *The Honorable Jim Sullivan, President, Alabama Public Service Commission and Chair, NARUC Committee on Critical Infrastructure*

Speakers:

1. ***The Honorable Paul Hudson, Commissioner, Texas Public Utility Commission***
2. ***The Honorable Carl Holmes, Kansas House of Representatives and Chair, Kansas House Committee on Energy and Utilities***
3. ***Paul Murphy, President and Chief Executive Officer, Independent Electricity System Operator of Ontario***
4. ***Paula Carmody, Consumer Advocate, Maryland Office of People's Counsel***

5:30 pm

ADJOURN

RECEPTION

Renaissance Ballroom

5:30 pm – 6:30 pm

WINE AND CHEESE COCKTAIL RECEPTION

Thursday, February 21, 2008

Grand Ballroom Foyer

7:30 am – 8:30 am

CONTINENTAL BREAKFAST

7:30 am – 3:00 pm

REGISTRATION

GENERAL SESSION #4

Grand Ballroom South

8:30 am – 9:45 am

Challenges in Developing New Electricity Infrastructure to Deliver Power from Renewable and Conventional Resources to Customers

This session on **Challenges in Developing New Electricity Infrastructure to Deliver Power from Renewable and Conventional Resources to Customers** will focus on how the electricity delivery system needs to evolve to ensure that an adequate combination of remote (generally renewable) resources and conventional resources are available to meet consumers' needs. Additionally, the panel will focus on identifying the policies that are needed to assure that both remote and conventional energy resources appropriately contribute to meeting the challenges posed by climate change, demand growth, and the need for energy security. The members of the panel will include senior leadership from regional transmission organizations, load-serving entities, utilities and generating companies, and regulators.

The panelists for the **Challenges in Developing New Electricity Infrastructure to Deliver Power from Renewable and Conventional Resources to Customers** session may be asked to address the following questions:

- ◆ What are the best options for getting renewable energy and other new resources to load centers?
- ◆ Who decides where facilities powered by remote resources (such as wind power generation or nuclear power) should be located, who builds such facilities, and who pays for them?
- ◆ How are storage, land use and right-of-way issues addressed and resolved?
- ◆ As state regulators grapple with resource selection decisions, what factors should they consider in making these decisions?
- ◆ How do conventional resources compare with renewable and demand-side resources?
- ◆ How do remote and conventional resources help address climate change, demand growth and energy security concerns?

Session Moderator: *The Honorable Patrick Oshie, Commissioner, Washington Utilities and Transportation Commission and Vice Chair, NARUC Committee on Energy Resources and the Environment*

Speakers:

1. **The Honorable Dian M. Grueneich**, *Commissioner, California Public Utilities Commission*
2. **Nick Brown**, *President and Chief Executive Officer, Southwest Power Pool, Inc.*
3. **William McCollum**, *Chief Operating Officer, Tennessee Valley Authority*
4. **Will Kaul**, *Vice President, Transmission, Great River Energy*

Grand Ballroom Foyer

9:45 am – 10:00 am

NETWORKING BREAK

GENERAL SESSION #5

Grand Ballroom South

10:00 am – 11:15 am

Regional and Multi-Regional Electricity Delivery Infrastructure Planning—Inter-regional Transmission, Seams and Cost Recovery Issues

For the past two years, the National Electricity Delivery Forum has included panel discussions relating to transmission planning. This session on **Regional and Multi-Regional Electricity Delivery Infrastructure Planning** will build on those discussions which addressed regional differences in planning approaches. This year's transmission planning panel will focus on how issues such as differing planning horizons and cost recovery are handled. The panel discussion will focus on transmission planning efforts in the Northeast and Canada, as a case study to these issues. The panel's speakers will include officials from RTOs/ISOs, transmission-owning utilities, merchant generators, and transmission planning experts.

The panelists for the **Regional and Multi-Regional Electricity Delivery Infrastructure Planning** session may be asked to consider the following questions:

- ◆ How are companies and regional transmission organizations (RTOs/ISOs) dealing with issues arising from differing planning horizons?
- ◆ What decisional tools are being utilized in the planning process? Are they adequate?
- ◆ Are new factors, such as environmental and security criteria, being considered in the planning process?
- ◆ How are seams issues, such as proposed export charges, impacting regional planning?
- ◆ How can inter-regional cooperation and collaboration occur given existing jurisdictional arrangements?
- ◆ How should planning uncertainty issues be addressed and resolved such as those that arise when an RTO plans transmission and others (such as utilities or merchant generators) plan generation?
- ◆ How are inter-regional costs allocated?
- ◆ Has the FERC Order 890 process made any difference in how these planning issues are addressed?

Session Moderator: *The Honorable David C. Coen, Member, Vermont Public Service Board and NARUC Second Vice President*

Speakers:

1. **Gordon van Welie**, *President and Chief Executive Officer, ISO England, Inc.*
2. **Angela O'Connor**, *President, New England Power Generators Association*
3. **Laurie E. Aylsworth**, *Vice President, Transmission Projects, Engineering and Maintenance, Northeast Utilities System*
4. **The Honorable Jack Keir**, *Minister of Energy, Acting Minister of Supply and Services, and Minister responsible for New Brunswick Energy Efficiency and Conservation Agency*

BREAKOUT SESSION A

Grand Ballroom South

11:15 am – 12:30 pm

Challenges for Deployment of Demand-Side Electricity Delivery Resource Options and Energy Efficiency Programs

This session on **Demand-Side Resource Options** will focus on the policies that are needed to successfully implement cost-effective demand-side resources and the details that should be addressed in order to ensure adequate reliance on demand-side resources. The panel will include state regulators, experts in the technologies needed to implement successful demand-side programs, and other demand response and energy efficiency experts.

The panelists for the **Demand-Side Resource Options** session may be asked to consider the following questions:

- ◆ How should state and federal policymakers ensure adequate participation in demand-side resources?
- ◆ How can needed demand response and energy efficiency programs become a reality?
- ◆ Who should pay for demand response and energy efficiency programs?
- ◆ How well are federal and state regulators and utilities, including RTOs, working together in order to make certain that appropriate use is made of demand-side resources?
- ◆ What role can demand-side resources play in addressing the challenges of climate change, economic development and energy security?

Session Moderator: *The Honorable Marshall E. Whitenton, Deputy Assistant Secretary for Policy, Siting and Analysis, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy*

Speakers:

1. *The Honorable Robert Lieberman, Commissioner, Illinois Commerce Commission*
2. *Paul J. Tyno, Executive Vice President, Program Development, Energy Curtailment Specialists, Inc.*
3. *Brett Perlman, Vice President, Corporate Development, EnerNOC, Inc.*
4. *Kathleen Hogan, Director, Climate Protection Partnerships Division, U.S. Environmental Protection Agency*

BREAKOUT SESSION B

Grand Ballroom Central

11:15 am – 12:30 pm

Should Grid Operations be Changed to Meet the Challenges of Climate Change, Demand Growth and Energy Security?

This session on **Grid Operations** will focus on the relevance of the smart grid concept in meeting the three grand challenges and the policies needed to support this evolution. The members of this panel will include representatives of

academia, industry, and other experts in grid operations.

The panelists for the **Grid Operations** session may address the following the questions:

- ◆ What does “smart grid” really mean?
- ◆ What grid technology investments are needed to create a smart grid?
- ◆ How much will such investments cost?
- ◆ How should the cost of such investments be recovered from customers?
- ◆ What new customer services and grid operational functionality will result from converting today’s delivery systems to smart grids?
- ◆ How would a smart grid support carbon reduction strategies such as integration of renewable technologies?
- ◆ What state and multi-jurisdictional policy issues would need to be addressed to facilitate the development of a smart grid?

Session Moderator: *The Honorable William Bryan, Deputy Assistant Secretary for Infrastructure Security and Energy Restoration, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy*

Speakers:

1. **David Hawkins**, Principal Engineer, Renewables Integration, California Independent System Operator
2. **Mladen Kezunovic**, Eugene E. Webb Professor, Electrical and Computer Engineering, Texas A&M University
3. **Michael Petrucelli**, Vice President, Government Affairs, GridPoint, Inc.
4. **Joe Miller**, Senior Vice President, Horizon Energy Group

Grand Ballroom North

12:30 pm – 2:00 pm

LUNCH with **Andrew Weissman**, Editor-in-Chief & Publisher, *Energy Business Watch*

GENERAL SESSION #6

Grand Ballroom South

2:00 pm – 3:15 pm

Build It and They Will Come: Transmission Siting Challenges

This session on **Transmission Siting** will feature speakers who are responsible for siting in particular states or regions, including state regulators.

The panelists for the **Transmission Siting** session may be asked to discuss the following questions:

- ◆ Is a major expansion of the transmission system needed to address the three grand challenges?
- ◆ If major expansion of the transmission system to link resource-rich areas to load is needed, should existing transmission siting procedures be modified?
- ◆ How will National Transmission Electric Corridor designations affect transmission siting?

- ◆ What improvements should be made to the siting process to address legitimate landowner and environmental concerns?

Session Moderator: *The Honorable Garry Brown, Chairman, New York Public Service Commission*

Speakers:

1. **The Honorable Phyllis A. Reha**, *Vice Chair, Minnesota Public Utilities Commission and Chair, NARUC Committee on Energy Resources and the Environment*
2. **T. Graham Edwards**, *Chief Executive Officer, Midwest Independent System Operator*
3. **Sandra Hochstetter**, *Vice President, Arkansas Electric Cooperative Corporation*
4. **Linda Ceylor**, *Vice President, Save Our Unique Lands*

CLOSING KEYNOTE SESSION

Grand Ballroom South

3:15 pm – 3:40 pm

CLOSING KEYNOTE SPEAKER

The Honorable C.H. “Bud” Albright, *Under Secretary, U.S. Department of Energy*

3:40 pm – 4:00 pm

CLOSING REMARKS

The Honorable Sam J. Ervin, IV, *Commissioner, North Carolina Utilities Commission and Chair, 2008 U.S. Electricity Delivery Working Group*

4:00 pm

ADJOURN