

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Integrating Renewable Resources
Into the Wholesale Electric Grid

Docket No. AD09-4-000

SUPPLEMENTAL NOTICE OF TECHNICAL CONFERENCE

(February 20, 2009)

In a Notice of Technical Conference issued February 4, 2009, the Federal Energy Regulatory Commission announced that it would host a technical conference on March 2, 2009, from 9:00 a.m. to 5:00 p.m. (EST) in the Commission Meeting Room at the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, DC 20426. The conference will be open for the public to attend and advance registration is not required. Members of the Commission will attend and participate in the conference.

The purpose of this conference is to seek information on the challenges posed by integration of large amounts of variable renewable generation into wholesale markets and grids as well as on innovative solutions to these challenges. Attached with this supplemental notice is an agenda with a list of questions for the panel discussions and the names of panelists.

The Commission welcomes industry comments on this subject. The deadline for comments under this docket is April 30, 2009.

A free webcast of the meeting/conference is available through www.ferc.gov. Anyone with Internet access who desires to listen to this event can do so by navigating to www.ferc.gov's Calendar of Events and locating this event in the Calendar. The event will contain a link to its webcast. The Capitol Connection provides technical support for the webcasts and offers the option of listening to the meeting via phone-bridge for a fee. If you have any questions, visit www.CapitolConnection.org or call 703-993-3100.

Transcripts of the conference will be available immediately for a fee from Ace Reporting Company (202-347-3700 or 1-800-336-6646). They will be available for free on the Commission's eLibrary system and on the Calendar of Events approximately one week after the conference.

Commission conferences are accessible under section 508 of the Rehabilitation Act of 1973. For accessibility accommodations, please send an email to accessibility@ferc.gov or call toll free 1-866-208-3372 (voice) or (202) 208-1659 (TTY), or send a FAX to 202-208-2106 with the required accommodations.

For more information about this conference, please contact: Sarah McKinley at sarah.mckinley@ferc.gov, (202) 502-8368.

Kimberly D. Bose,
Secretary.

Attachment A



Integrating Renewable Resources Into the Wholesale Electric Grid

**AD09-4-000
March 2, 2009**

Agenda

9:00 – 9:20 a.m. Opening Statements by Acting Chairman Wellinghoff and Commissioners

9:20 – 10:00 a.m. Keynote Remarks
The Honorable Lauren Azar, Commissioner, Wisconsin Public Service Commission and President, Organization of MISO States

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

10:00 a.m. - Noon Transmission and System Planning to Enhance Integration of Renewable Energy

The Commission seeks information on how it should move forward with transmission and system planning. Panelists are encouraged to address:

- Whether the Order No. 890 planning processes in their particular regions of the country are enabling the development of transmission to interconnect renewable resources.
- Whether existing planning efforts are sufficient for the integration of resources that are (a) variable and distant from load centers, and (b) locally distributed.
- What are the barriers to interconnection-wide planning?

- What considerations are unique to the Eastern and Western interconnections? How does, or should, planning accommodate them?
 - How resources in general and variable renewable resources in particular are currently being accounted for in system planning (e.g., assessment of capacity and energy contributions, accounting for whether resources are dispatchable; system and resource flexibility; types of resources that are useful to manage variability); whether the current approach(es) enhances the integration while also maintaining Bulk Power System reliability.
- Elizabeth Moler, Executive Vice President, Exelon Corporation
 - Clair Moeller, Vice President, Transmission Asset Management, Midwest ISO
 - Michael J. Kormos, Senior Vice President Operations, PJM Interconnection, LLC
 - Lisa Barton, Vice President, Transmission Strategy, AEP, and President, Electric Transmission America
 - Pedro Pizarro, Executive Vice President, Power Operations, Southern California Edison, representing the Edison Electric Institute
 - Joseph Welch, CEO, ITC Holdings Corp.
 - Gordon van Welie, President and Chief Executive Officer, ISO New England Inc.
 - Nick Brown, CEO, Southwest Power Pool

Noon – 1:00 p.m. Lunch

1:00 – 2:45 p.m. Operational challenges and innovative solutions to integrating renewable resources into wholesale electric markets while maintaining bulk power system reliability

The Commission seeks to understand how it can improve operational efficiency as renewable resources increase. Panelists are encouraged to address, among other things:

- Strategies and tools now in use for managing variable generation, lessons learned, and best practices.
- Technical factors surrounding variable generation (e.g., effects on frequency variations, reactive power effects on voltage profile, assessment of operating reserves).
- The impacts of wind forecasting and improvements in wind forecasting.

- The impact on day-ahead, hour-ahead, and real-time operations and whether more flexibility is needed from resources, e.g., ramping and scheduling.

- Bradley Nickell, Renewable Integration Director, Western Electricity Coordinating Council
- Clark Gellings, Vice President, Technology, Electric Power Research Institute
- Hamid Elahi, General Manager, Energy Applications and System Engineering, GE Energy
- Rick Gonzalez, Vice President of Operations, New York ISO
- Don Furman, Senior Vice President for Development, Transmission and Policy, Iberdrola Renewables, and Chairman of the American Wind Energy Association Transmission Committee
- Brian Parsons, Project Leader, Grid Integration, National Wind Technology Center of the National Renewable Energy Laboratory
- Ross Guttromson, Manager, Renewables Integration, Pacific Northwest National Laboratory
- Robert Kahn, Executive Director, Northwest & Intermountain Power Producers Coalition

2:45 – 3:00 p.m. Break

3:00 – 4:30 p.m. Examination of operational or dispatch provisions of wholesale tariffs and market rules

The Commission seeks input on the suitability of current and new tariffs and rules as renewables increase. Panelists are encouraged to, among other things:

- Explain any particular operational or dispatch aspects of renewable resources that tariffs and market rules may not now directly address and whether it may be necessary to revise tariffs with the integration of large amounts of renewable resources.
- Identify any additional products/markets that could be added to wholesale tariffs to better accommodate the integration of renewable energy, including new technologies or better integration of existing technologies, including demand side technologies.
- Address whether the integration of renewable resources otherwise causes additional unit specific costs (e.g., ramping) and/or

operational system costs (e.g., ancillary services), what these costs are, how they are currently being assessed and recovered; and how best to manage any additional costs.

- What lessons can we take from regions that are already incorporating large amounts of wind and what is the best way to share those lessons?

- Hon. Alan Schriber, Chairman, Public Utilities Commission of Ohio
- Brendan Kirby, Private Consultant to AWEA, NREL, ORNL, EPRI, and others
- Mike Grable, General Counsel, ERCOT
- John Lucas, GM Transmission Policy and Services, Southern Company Transmission
- Steve Oliver, Vice President of Generation Asset Management, Bonneville Power Administration
- Udi Helman, Principal Economist, California ISO
- Marguerite Wagner, Director, Regulatory and Market Policy, PSEG Texas, L.P.
- Praveen Kathpal, Director of Market Affairs, Grid Stability and Efficiency Group, AES Corporation

4:30 – 4:45 p.m. Wrap-Up Acting Chairman Jon Wellinghoff