



## **RENEWABLE INITIATIVES FORUM: DIALOGUE ON IMPLEMENTATION ISSUES FOR RENEWABLES AND TRANSMISSION**

March 10, 2009  
Washington, D.C.

### **MEETING SUMMARY**



NATIONAL CONFERENCE  
of STATE LEGISLATURES

*The Forum for America's Ideas*



*Abstract:* Over 50 leaders participated in the *Renewable Initiatives Forum: Dialogue on Implementation Issues for Renewables and Transmission*, co-sponsored by the American Wind Energy Association, the Biomass Power Association, the National Association of Regulatory Utilities Commissioners, the National Conference of State Legislatures, the National Wind Coordinating Collaborative, the Western Area Power Administration, the National Hydropower Association and others.

The forum provided the opportunity for stakeholders and decision makers to gain further insight into the collaboration and coordination that is necessary to meet the goals of the aggressive national energy agenda.

Forum presentations are online at <http://www.nationalwind.org/events/renew.htm>. A brief summary of each session appears below. The forum agenda and final participant list appear in the Appendix.

### **I. Perspectives on Federal Policy Direction and Initiatives**

President Obama has stated, “We will double this nation’s supply of renewable energy in the next three years.” This session provided perspectives from three sectors whose organizations are responding to the administration’s energy agenda. The Energy Future Coalition, a nonpartisan public policy initiative that seeks to speed the transition to a new energy economy, The Wilderness Society, an organization aimed at conservation and wilderness protection, and the American Wind Energy Association, each provided an overview of their respective organization’s responses to the administration’s agenda.

**Bill White**, of the Energy Future Coalition, [www.energyfuturecoalition.org](http://www.energyfuturecoalition.org), presented the Coalition’s vision statement, *The National Clean Energy Smart Grid: An Economic, Environmental, and National Security Imperative*, that has contributed to legislation introduced by Senator Reid. The bill, titled Clean Renewable Energy and Economic Development Act, amends the Federal Power Act to require the President to designate certain geographical areas as national renewable energy zones, and for other purposes (A transcript of Senator Reid’s recent comments about the bill can be found in the Appendix) Guiding principles for the vision statement are listed below. The complete vision statement are found in the Appendix.

Recognizing the complex nature of the electric grid, its importance to the future of our economy, and its impact on our environment, these new policies, and authorities should be developed and implemented in accordance with several key principles:

- Interconnection-wide grid planning should not duplicate or supplant already ongoing planning efforts at the utility and regional level, but rather should build on them.
- The interconnection-wide planning process should take into account: opportunities for improved end-use energy efficiency, customer demand response, clean distributed generation, and energy storage; opportunities to improve the efficiency of the grid; and opportunities to diversify and transform the Nation’s power supply resources.
- New transmission plans should dramatically enhance our capacity to meet steep greenhouse gas emission reduction goals by targeting new clean renewable energy

resources and limiting interconnection for new high-emitting generation (while still ensuring reliability).

- Use of federal project certification and siting procedures to expedite construction of new grid facilities identified in interconnection-wide transmission plans is critical to reliable and efficient delivery of remote renewable energy to load centers, with a special role for state and local agencies on siting considerations to minimize adverse impacts.

**Greg Wetstone**, Senior Director for Government and Public Affairs at the American Wind Energy Association (AWEA), discussed AWEA's legislative agenda and stressed the importance of not requesting too much of Congress at one time and having the proper vehicle for transmission legislation. Mr. Wetstone indicated the House of Representatives is likely to introduce a "mega" energy bill that will address cap and trade, a national RES/RPS, and possibly transmission. This strategy appeals to moderate democratic Representatives. Senator Reid has indicated he is likely to support the House approach of a combined bill. The Senate will likely not introduce legislation until summer.

**Chase Huntley** of The Wilderness Society stressed the importance of creating a better path forward for siting transmission on public lands, using geo-spatial information systems to outline constraints and pointed to the Renewable Energy Transmission Initiative (RETI) and the Western Governor's Association (WGA) Western Renewable Energy Zones (WREZ) processes as good examples of balancing renewables with wildlife conservation interests. Mr. Huntley also discussed the difference in perspective from industry to environmental and conservationist organizations: all want renewables to be successful, but conservationists would like to see transmission expansion done in a strategic manner that does not threaten wildlife or sensitive habitats. Mr. Huntley pointed to the fundamental shift in national politics as the opportunity for this kind of coalition of parties to agree on this vision.

## **II. Department of Energy Perspective**

In this session, officials from the U.S. Department of Energy (DOE) identified top priorities the agency has for implementing broad national policy and what outside coordination was necessary for DOE to be successful.

**Megan McCluer**, Program Manager, U.S. Department of Energy, *Office of Energy Efficiency and Renewable Energy (EERE)*, Wind and Hydropower Technologies Program, discussed the role the DOE Wind Program will have going forward as it responds to President Obama's energy agenda. Ms. McCluer emphasized that DOE does not set energy policy, but rather is engaged in activities to help implement policy put forth by the administration.

Ms. McCluer also referenced the Recovery Act initiated by the Obama administration and outlined how DOE has responded to date. Projects proposed by DOE offices to receive Recovery Act funds are currently undergoing a rigorous vetting process. Ms. McCluer noted that DOE is working to choose projects that promote economic development and self-sustaining industry and that would eventually become independent of federal funding. Ms. McCluer also iterated the importance of workforce development in the overarching discussion of renewables implementation. The question of how companies can retain and hire new employees is a key priority.

On transmission, Ms. McCluer pointed out that the Wind Program has been working to support DOE's Office of Electricity Delivery and Energy Reliability. To ensure its continued success working on transmission issues, she suggested the NWCC might want to consider branching out to collaborate with other renewables and organizations in order to create a wider reach and a stronger voice.

**David Meyer**, of the U.S. Department of Energy, Office of Electricity Delivery, and Energy Reliability, outlined the priorities the nation faces with regard to transmission development and expansion, from his own perspective. He stated these were not official statements from the DOE, but rather his opinions. "The highest priority we face: is to develop well-grounded, connected plans for high-voltage networks," Meyer also noted broad considerations for transmission discussion:

- The design of the transmission network should be based on a broad range of scenarios.
- The design of the network should be based on a range of futures and for each future, what the associated transmission requirements and common core scenarios need to be defined.
- Analyses should be done in a way that builds support across a wide-range of stakeholders.

Mr. Meyer then identified possible next steps necessary to aid in future discussions of transmission implementation.

- Transmission modeling tools, databases, and meetings of study groups need to be open to the public. Money exists in the stimulus bill for this kind of work as well as ensuring regional and state officials and NGO's can participate in studies.
- Regional planning initiatives should be further developed and expanded based on what is modeled.
- Launch an Eastern Renewable Energy Zones project...

Mr. Meyer concluded, noting that transmission history has involved individual lines and facilitates, but it now needs to be brought to another level. A key question is: What should the network look like? There are different ways of structuring the whole.

#### *Questions and Answers*

- **Energy Futures Coalition consideration of State processes:** While realizing expertise lies with utilities, the Energy Futures Coalition believes that there is need for federal authority and a federal framework to get transmission implemented.

### **III. Roundtable Discussion: Stakeholder Perspectives**

The third session featured discussion among stakeholders, where they identified their organization's initiatives and possible areas for collaboration and coordination across sectors.

**Miles Keogh**, of the National Association of Regulatory Utility Commissioners, noted the absence of federal leadership and the State's connection with constituent concerns led to the implementation of State RPS'. Mr. Keogh made strong statements to support State engagement in transmission planning processes because State agencies involved in transmission have the

best understanding of the topic. Federal agencies may not be close enough to the State stakeholders to deal with local issues. Mr. Keogh concluded with the suggestion that there are ways to address local concerns by using existing State processes, thereby leveraging what states have already done.

**Tom Sloan**, Kansas State Representative, focused his comment from the perspective of his constituents. Representative Sloan stated that a 20% RPS placed a burden on State lawmakers and what their principal concern is more federal direction, possibly from FERC or Congress. “They literally want to be told where to build renewable energy.” stated Rep. Sloan. Commissioners are not prepared to deal with traditional regulated operators and new independent companies do not fit existing models. Representative Sloan also stressed the importance of State lawmakers being able to address intermittence issues, since this is a real issue for their constituents.

**Katherine Gensler**, of the Solar Energy Industries Association, responded to Representative Sloan’s comments and suggested a bifurcation of authority may be ideal. Ms. Gensler stressed that the process not be tied to who is running it, but that whatever entities become the decision makers value education and outreach in the beginning since buy-in is essential

**Steve Clemmer**, Union of Concerned Scientists, referenced some of the bigger national policies that are being discussed that may impact transmission implementation, including Representative Markey’s introduced legislation on climate change which references 150,000 MW of renewables, with half coming from wind alone. Diversity has its benefits, as it would provide savings in all parts of the country. It is especially important to remember that this could benefit the southwest more than other areas of the country, as they import most of their coal from other countries. He concluded his remarks by stating that without transmission, bold initiatives such as this legislation will never be implemented.

#### *Additional Participant Comments*

- Support for federal intervention exists from institutions and stakeholders. The key question is how do we scramble to keep up with what the public wants?
- Building processes that bring stakeholders to the table right up front is imperative. Landowner and non-participating landowner should bring their interests to the forefront. There is a history in this country of eminent domain running roughshod through rural communities all in the name of public good. However, eminent domain can be avoided if there is education and outreach on the front end. An inclusionary process would lend to these efforts.

#### **IV. Regulatory Commissions**

In the fourth session of the day, regulatory officials identified the roles necessary, including their own, for the successful implementation of transmission expansion.

**Jon Wellinghoff**, Commissioner, Federal Energy Regulatory Committee (FERC), noted his top three questions:

1. What is the problem we are trying to solve?
2. How do we deliver high quality energy to remote, low quality centers?

### 3. How do we deliver high quality energy to load centers?

Commissioner Wellinghoff suggested separating the transmission discussion into two separate systems: electricity and politically. FERC's priorities remain consistent with what states/communities want. A "one-size fits all approach does not work," he stated. FERC is supporting entrepreneurs and independents that are moving forward with several projects, but the question remains regarding whether enough transmission is being proposed or built to meet demand. He concluded his remarks by telling the group that FERC is waiting on direction from Congress. How and who will pay for transmission lines also remains a challenge. Congress will need to give this directive. Wellinghoff expressed optimism that a combination of state siting and regional planning could be successful.

**Rick Sergel**, of the North American Electric Reliability Corporation, stressed the need for transmission expansion and better inclusion of energy providers: the solar industry must be involved in the planning process. With respect to renewables and transmission, whatever positions are taken in respect to policy, planning, the law, all be held accountable. If the States believe they can accomplish these tasks, then they should take the lead just as long as there is oversight and they are doing the job.

Demand side management is crucial to success. Base load optimization requires coordinated technologies, e.g. Plug-In Electric Hybrid Vehicles, local resources and those further away geographically. Mr. Sergel concluded his remarks with "we must follow the transmission. Where it goes will determine the future of renewables."

**Rick Morgan**, Commissioner, District of Columbia Public Service, and a member of the National Association of Regulatory Utility Commissioners, discussed renewables implementation from a local perspective and informed participants that there is currently a mix of traditional and restructured markets across the fifty-one Public Utility Commissions. Most states have the authority over siting transmission, though the District of Columbia does not. The District of Columbia has a Renewable Portfolio Standard in place, but imports Renewable Energy Credits. Because states have taken the lead on promoting renewables, local regions are very concerned about Environmental Impact Statements.

#### *Questions and Answers*

Jon Wellinghoff provided responses for the following participant questions:

- *Satisfying revolutionary demand:* An extra high-voltage grid to deliver electricity to remote areas. States are not likely the parties intended to do this
- *Implementing transmission lines in remote areas:* This may be a challenge, but the planning phase can address this. Once proper planning is determined, lines need to be large enough to handle storage and passage. A system similar to the universal service associated with telephone bills could be implemented, but Congress should give this directive
- *State's role in the planning process:* The process should not start from zero. Senator Reid's bill could be used to promote planning, but it is up to states to form regional entities and for FERC to be the backstop

Rick Morgan provided a response for the following participant question:

- *Satisfying” revolutionary” demand:* A top-down approach to transmission planning is not going to be productive and a mandate to do so will not end well. Decoupling is a measure that could meet certain conditions. States would object to the idea of the federal government prejudging decisions that Public Utility Commissions could make.
- Both generation and demand for electricity have grown by 30% and transmission has grown by 10%. This presents a compelling case for growth. Natural gas offers another model; pipelines are with FERC authority.
- *Implementing transmission lines in remote areas:* A toll system seems logical for transmission in remote area; it is the best one can do without allocating a fee before it is built

## **V. Regional Transmission Initiatives That Support Renewables: Regional and National Dynamic**

The final discussion of the day was devoted to regional transmission planning needs and strategies and opportunities for cross-regional collaboration.

**Jay Caspary**, Southwest Power Pool (SPP), first discussed four “critical collaborative” efforts he sees as intricate to transmission expansion.

1. Expand existing expansion joint planning studies, such as DOE/National Renewable Energy Laboratory (NREL) sponsored Eastern Interconnection Transmission Assessment Group (EITAG) and integrating those results into existing regional plans.
2. Expand inter-regional planning studies to identify and address related issues with large transfers of renewable energy from plains to load centers in Eastern Interconnection.
3. Address operational and market issues with large-scale wind integration Continued support of Nebraska Power Association (NPA) Wind Integration Study.
4. Initiate “inter-connection” studies to support renewable development and integration of the Eastern Interconnection and Western Electricity Coordinating Council (WECC), and potentially Electric Reliability Council of Texas, too.

Mr. Caspary concluded his remarks by noting what SPP needed from other organizations to be successful in transmission expansion and implementation:

1. Leadership to facilitate development of scope for and resources to perform a joint SPP-WECC study.
2. Help in addressing needs to deal with operational and market issues in near term, such as identifying potential solutions to ensure system security.
3. Support for Electric Power Research Institute Program 173 - Integration of Variable Generation and Controllable Loads: Grid Reliability Impact and Solutions.
4. Support in development of procedures, to facilitate effective bulk power transmission expansion overlay planning and implementation
5. Provide leadership in technical and economic analyses for expansion planning, as well as operational impacts and market implications, for large scale renewable development in collaborative efforts assuming resources are available
6. Provide leadership in identification and implementation of effective long range planning processes, as well as cost allocation proposals to facilitate inter-regional, interconnection wide and national grid expansion plans.

**Dale Osborn**, of the Midwest Independent Transmission System Operator, presented an analogy to describe the type of “vehicles” necessary to deliver electricity: smaller trucks deliver smaller loads shorter places and the largest trucks deliver the largest loads to the faraway places. Mr. Osborn raised the subject of implementing smaller versions of RTOs that could handle planning, operations, reliability and settlements, but would also not need interconnection. Mr. Osborn stressed the importance of proper organization and oversight of such entities because there is a different set of stakeholders making decisions and suggested that such an entity be ruled by an organization, not committee and have a planning group associated with it.

**Doug Larson**, Western Interstate Energy Board, reported on the Western Renewable Energy Zone (WREZ) process, which has provided information to independent decision makers. Mr. Larson referenced the California energy crisis of 2001 and how it alarmed governors in the west. The situation caused leaders to think about transmission planning in the future. The WREZ seeks to identify those areas in the West with vast renewable resources to expedite the development and delivery of renewable energy to where it is needed. WREZ participants are analyzing renewable energy resources within 11 states, two Canadian provinces, and areas in Mexico that are part of the Western Interconnection. The initiative ultimately seeks to identify renewable megawatts in identified renewable energy zones (REZs), as well as the conceptual transmission plans needed to deliver the renewable energy to load centers. The initiative will accomplish this goal by first identifying all commercial renewable resource potential, aggregate the best potential for utility-scale renewable megawatts in identified REZs, and then help develop the conceptual transmission plans.

Mr. Larson outlined the four phases of the WREZ process:

**Phase 1:** *Identify renewable resource potential in the Western Interconnection.*

Develop criteria to refine and identify the highest quality and most concentrated renewable energy resources while factoring in important considerations, including wildlife, environmental concerns and valued land use. Identify key assumptions and methods to determine generation and transmission costs to deliver renewable resources from each REZ to specified load centers.

**Phase 2:** *Conceptual Transmission Planning*

Through existing Western Electricity Coordinating Council and sub-regional transmission planning groups, develop conceptual transmission plans to deliver energy from the highest-ranking WREZs to identified load centers. This will include transmission modeling to study the transmission needed to move power from WREZs to load and the price of that delivered power. As in Phase I, this will include a coarse environmental screening with input from the E&L working group regarding the best existing and potentially new corridors for optimal transmission siting. Deliver a tool that measures the cost of delivering electricity generated from WREZs to load centers across the region.

**Phase 3:** *Coordinating Procurement*

Stimulate the development of commercial renewable generation and transmission projects, or modification of existing proposed projects, to deliver renewable power consistent with WREZ initiative findings. Bring state utility commissions, LSEs, and generators together to develop mechanisms to increase power procurement across state lines. Develop methods to encourage coordinated power procurement among utility power buyers to aggregate demand for renewable

power from identified REZs.

**Phase 4: Interstate Cooperation**

Engage political, industry, environmental, consumer groups, and other stakeholders to facilitate the permitting and funding of multi-state generation and transmission projects.

For more on the WREZ, see: <http://www.westgov.org/wga/initiatives/wrez/>

**Anne Gillette**, of the California Public Utilities Commission (PUC), reported on the Renewable Energy Transmission Initiative (RETI), a statewide initiative to help identify the transmission *projects* needed to accommodate renewable energy goals, support future energy policy, and facilitate transmission corridor designation and transmission and generation siting and permitting. Participants in RETI include investor-owned utilities, municipal utilities, California Public Utilities Commission (CPUC), California Energy Commission, California Independent System Operator, developers, environmental advocates, and other interested parties. RETI is committed to an open, inclusive, and transparent process. RETI is a three-phased process. Phase 1 included identification and ranking of CREZs. Phase 2 refined CREZ analysis for priority zones and development of statewide conceptual transmission plan, which was completed in December 2008. In Phase 3, a detailed transmission plan for CREZs will be developed.

Ms. Gillette discussed some of the challenges RETI has faced. Because RETI is a statewide process, it has included municipal utility and independent system operators' participation. Municipal utilities do not have the same target as the California RPS. RETI has also attempted to streamline the need determination process, as any transmission project must meet need determination requirements as identified by the California Energy Commission. To satisfy need determination requirements, a transmission project must be consistent with the RETI transmission plan are needed to facilitate the achievement of RPS goals. This has become the biggest obstacle for RETI, as there has not yet been a formal need. The biggest lesson learned is the need to be clear about this message.

For more on the RETI process, see <http://www.energy.ca.gov/reti/index.html>.

Ms. Gillette stressed the importance of stakeholder inclusion early on in transmission siting decisions. This involves working with environmental stakeholders to determine sites that may be harmful or controversial. Many environmental NGO's in California are involved at the federal level, but struggled at the local level. RETI funding comes from the California Energy Commission.

**David Terry** represented the Governor's Wind Energy Coalition. The Coalition is comprised of twenty-seven governors from around the country and providing Governors with technical information, including renewable electricity standards and workforce development issues. The goal is to promote consensus policies that they should adopt. The Coalition's transmission subcommittee will work on education documents for Governors' staffs. The group will convene a meeting with Governors' staffs, soon. The transmission subcommittee needs relevant documents to deliver to these staffs.

## ***Discussion***

### ***Interconnection Across Regions and States***

The group discussed the value of creating an interconnection-wide planning body and the roles such an organization could play. ERCOT is interested in exploring costs and benefits for transmission interconnection between the east and west. The next step in value of connecting two grids is an economic study. An example study could examine the price of power from Kansas to the west compared to power from Texas. Other similar studies could be done in SPP and WECC. A key question is whether respective ISO's would have enthusiasm for this concept. Some felt that newer organizations, or very large, non-jurisdictional groups, would be more adaptable to this. One option, or alternative to this, could be eastern connect and western connect planning groups.

### ***Federal Policy Formulation***

The question "If we were to crafting new federal policy, we would have to ask what gaps needed to be filled with a sense of urgency and transparency?" This could be something that is used to guide federal actions under federal law. The Energy Future Coalition is looking at this on a much broader scale.

### ***Scenario Planning and Coordinated Procurement***

At the end of the day, the group discussed a few interrelated needs including the need to understand possible future scenarios and what transmission and renewable production is needed in each of those scenarios. Participants noted that depending on a combination of a variety of factors, demand for electricity, carbon and or renewable portfolio legislation, and ability to proceed with development at different paces – there could be different future's that require different combinations of needs for renewables and transmission. Pro-Mod does give some idea of what happens when you remove coal plants. MISO completes four future scenario studies a year. For each one of those there is a different transmission system. One interest was to explore possible futures under various demands for renewables and policy needed to address the needs.

Second, in those regions where utilities decide they want to ramp up renewables there is increasing interest in coordinating procurement. In the West, the Western Interstate Energy Board is exploring with their utilities whether coordinating procurement would assist with reducing the risk associated with individual utility decisions and the burden of cost allocation decisions placed on states. California is trying to address these issues, too. The California Energy Commission (CEC) is coordinating between the RETI process and ISO process to develop a long-term procurement plan. This involves coordinating the inputs, assumptions, and scenarios for each so they are consistent. In the West, participants are exploring whether to put a mechanism in place for driving down the cost for coordinated procurement.

Third, a question is whether through individual decisions to build transmission lines will result in lines being under-sized. Congress has the responsibility to super size wires, but unless the right-of-ways and towers are sited properly the first time, building lines that will accommodate not only mid term, but also long-term demands, will be unsuccessful.

## **VI. CONCLUSION AND NEXT STEPS**

The Renewables Initiatives Forum provided the opportunity for stakeholders to engage in a forward-thinking dialogue on the challenges and opportunities present in electric transmission planning and implementation. The afternoon featured presentations and discussions from a broad and complete range of sectors that promised to lay the foundation for further conversations on these important issues.

Participants identified common themes and areas where stakeholders could work together. Particular emphasis was put on the following ideas:

- Federal guidance and oversight, with local and regional participation, may be necessary for broad transmission planning and implementation to be successful;
- Modeling future scenarios is essential to the defense of transmission planning, as the paradigm has shifted;
- Transmission planning should be done more comprehensively than in the past;
- Action must be taken expeditiously, but thoughtfully, for transmission to support increased renewables development;
- Interconnection studies should be completed to validate costs;
- Interest is evident in replicating processes similar to WREZ and RETI on a national scale.

## ATTACHMENT A

# Renewable Initiatives Forum: Dialogue on Implementation Issues for Renewables and Transmission

Tuesday, March 10<sup>th</sup>

*Co-sponsored by the American Wind Energy Association, the Biomass Power Association, the National Association of Regulatory Utilities Commissioners, the National Conference of State Legislatures, the National Wind Coordinating Collaborative, the Western Area Power Administration, the National Hydropower Association and others*

American Wind Energy Association  
1501 M Street, NW  
Conference Center ('S' Level)  
Washington, DC 20005

### AGENDA

#### Forum Purpose:

The afternoon will be dedicated to:

- Identifying needed activities and opportunities for coordination and collaboration that are necessary to achieve the new administration's goal of doubling renewable energy development within three years; and
- Discussing participants' respective organization's top transmission and siting-related initiatives to address implementation challenges; and
- Identifying gaps across sectors where coordination is vital.

12:30-1:00 pm	<u>Tuesday, March 10<sup>th</sup>, 2009</u> <b>Registration</b>	
1:00-1:05	<b><u>I. Welcome, Introductions &amp; Meeting Purpose</u></b>	<i>Abby Arnold, NWCC facilitator, Kearns &amp; West, Inc.</i>
1:05-1:35	<b><u>II. Perspectives on Federal Policy Direction /Initiatives</u></b>	
	○ <i>What are key federal initiatives with regard to transmission implementation?</i>	<i>Bill White, David Gardiner &amp; Associates, LLC</i>
	○ <i>What is necessary to garner support for these initiatives?</i>	<i>Greg Wetstone, AWEA</i>
	○ <i>What is your organization's role in implementing these initiatives?</i>	<i>Chase Huntley, The Wilderness Society</i>
	○ <i>What is the role for other stakeholders in attendance?</i>	

- 1:35 – 2:00**                      **DOE**
- *What top priorities does DOE have to implement doubling renewables in the next three years?*                      *Megan McCluer, U.S. DOE, Office of Energy Efficiency and Renewable Energy*
  - *What coordination is necessary for DOE to be successful in implementation?*                      *David Meyer, U.S. DOE, Office of Electricity Delivery and Energy Reliability*

- 2:00 – 2:45**                      **Roundtable Discussion: Stakeholder Perspectives**
- *What are your organization’s top initiatives to double renewables in the next three years and develop transmission to support renewables generation?*                      *Miles Keogh, NARUC*  
*Tom Sloan, Kansas House of Representatives*
  - *What is your organization’s role in beginning a coordination strategy?*                      *Glen Andersen, NCSL (via conference)*  
*Steve Clemmer, Union of Concerned Scientists*
  - *What gaps in sector collaboration exist?*                      *Ron Grady, HDR/DTA, NHA Member*  
*Katherine Gensler, SEIA*

- 2:45 – 3:25**                      **Regulatory Commissions**
- *What collaborative efforts do you view as the most integral to the success of doubling renewables in the next three years?*                      *Jon Wellinghoff, Federal Energy Regulatory Commission*
  - *What do you need from various stakeholder groups?*                      *Rick Sergel, NERC,*
  - *What role do you see for your organization?*                      *Rick Morgan, DC Public Service Commission*

**3:25 – 3:45**                      **Break**

**3:45 – 5:15**                      **II. Regional Transmission Initiatives That Support Renewables: Regional and National Dynamic**

***Roundtable Discussion: Regional Transmission Planning Needs and Strategies for Cross-Regional Collaboration to Support Doubling Renewables in Next Two Years and Beyond***

- *What collaborative efforts do you view as the most integral to the success of building new transmission to support developing renewables in the next three years?*                      *Moderator: Abby Arnold, NWCC Facilitator, Kearns & West, Inc.*  
*Jay Caspary, SPP*  
*Dale Osborn, MISO*  
*Doug Larson, Western Interstate Energy Board*
- *What do you need from various*                      *Anne Gillette, CA Public Utilities*

*stakeholder groups?*

- *What role do you see for your organization?*

*Commission, RETI, (confirmed)*

*David Terry, Governors Wind Energy Coalition*

**5:15 – 6:00**

**IV. Discussion of Next Steps, Gaps in Sector Collaboration, and Opportunities for Coordination**

**6:00**

**Adjourn for Evening/Reception: Reception to follow upstairs, at the American Wind Energy Association's offices.**

## ATTACHMENT B

March 10, 2009

### FINAL PARTICIPANT LIST

**Cheryl Amrani**

U.S. Fish & Wildlife Service  
4401 N. Fairfax Dr.  
Arlington, VA 22203  
(703) 358-2585  
cheryl\_amrani@fws.gov

**Sean Babington**

Legislative Associate  
Earthjustice  
1625 Massachusetts Ave NW  
Washington, DC 20036  
(202) 667-4500  
sbabington@earthjustice.org

**John Bruck**

President  
BHE Environmental Inc.  
11733 Chesterdale Rd.  
Cincinnati, OH 45246  
(514) 326-1500  
jbruck@bheenvironmental.com

**Stan Calvert**

Chief Engineer  
U.S. Department of Energy  
EE-2B; 1000 Independence Ave SW  
Washington, DC 20585  
(202) 586-8021  
stan.calvert@ee.doe.gov

**Jay Caspary**

Director of Engineering  
Southwest Power Pool  
415 N. McKinley; Suite 14  
Little Rock, AR 72205  
jcaspary@spp.org

**Alison Chase**

Natural Resources Defense Council  
40 West 20th St  
New York, NY 10011  
(212) 727-4551  
achase@nrdc.org

**Charlton Clark**

Senior Engineer  
U.S. Department of Energy  
EE-2B; 1000 Independence Ave SW  
Washington, DC 20585  
(202) 586-8040  
cclark@sentech.org

**Steve Clemmer**

Research Director, Clean Energy Program  
Union of Concerned Scientists  
2 Brattle Square; 6th Floor  
Cambridge, MA 02238-9105  
(617) 547-5552  
sclemmer@ucsusa.org

**Craig Cox**

Executive Director  
Interwest Energy Alliance  
P.O. Box 272  
Conifer, CO 80433  
(303) 679-9331  
cox@interwest.org

**Lisa Daniels**

Executive Director  
Windustry  
2105 1st Ave. S.  
Minneapolis, MN 55404  
(612) 862-3462  
lisadaniels@windustry.org

**Jennifer DeCesaro**

Senior Analyst  
Exeter Associates, Inc  
5565 Sterrett Place; Suite 310  
Columbia, MD 21044  
(410) 992-7500  
jdecasaro@exeterassociates.com

**Ed DeMeo**  
President  
Renewable Energy Consulting Services, Inc.  
2791 Emerson St.  
Palo Alto, CA 94306  
(650) 327-3090  
edemeo@earthlink.net

**Joe Dudak**  
Vice President  
ITC Holdings Corp  
27174 Energy Way; 6th Floor  
Novi, MI 48377  
(248) 946-3568  
jdudak@itctransco.com; dgoLOB@itctransco.com

**Andrew Engblom**  
Editor  
SNL Financial  
1901 North Fort Myer Dr.; Suite 450  
Arlington, VA 22201  
(701) 373-0168  
aengblom@snl.com

**Michael Fry**  
Director, Conservation Advocacy  
American Bird Conservancy  
1731 Connecticut Ave NW  
Washington, DC 20009  
(202) 234-7181  
mfry@abcbirds.org

**Katherine Gensler**  
Manager of Regulatory and Legislative Affairs  
Solar Energy Industries Association  
805 15th St NW, Suite 510  
Washington, DC 20005  
kgensler@seia.org

**Anne Gillette**  
Policy Analyst  
California Public Utilities Commission  
(416) 703-5219  
aeg@cpuc.ca.gov

**Patrick Gilman**  
Presidential Management Fellow  
U.S. Department of Energy  
EE-2B; 1000 Independence Ave SW  
Washington, DC 20585  
(202) 586-3449  
patrick.gilman@ee.doe.gov

**Michael Goggin**  
1501 M ST NW  
Washington, DC 20005  
mgoggin@awea.org

**Ron Grady**  
Vice President  
HDR|DTA  
400 S. Tryon Street, Suite 2401  
Charlotte, NC 28285  
(704) 377-4182  
Ron.Grady@DevineTarbell.com

**Rob Gramlich**  
Policy Director  
AWEA  
1501 M ST NW  
Washington, DC 20005  
(202) 383-2521  
rgramlich@awea.org

**Tom Gray**  
AWEA  
1501 M ST NW  
Washington, DC 20005  
tgray@awea.org

**Chase Huntley**  
Policy Advisor  
The Wilderness Society  
1615 M St NW  
Washington, DC 20036  
(202) 429-7431  
chase\_huntley@tws.org

**Tokia Ishii**  
Researcher  
Japan Power Information Center  
1120 Connecticut Ave NW; Suite 1070  
Washington, DC 20036  
(202) 955-5610  
ishii-tokio@jepic.com

**Christy Johnson-Hughes**  
Energy Coordinator  
U.S. Fish & Wildlife Service  
4401 N. Fairfax Dr.  
Arlington, VA 22203  
(703) 358-1922  
christy\_johnsonhughes@fws.gov

**Miles Keogh**  
Director, Grants & Research  
NARUC  
1101 Vermont Ave, NW  
Washington, DC  
mkeogh@naruc.org

**Charles Kubert**  
Director  
Clean Energy Group  
50 State St.  
Montpelier, VT 5602  
(802) 272-1135  
ckubert@cleanegroup.org

**LaVerne Kyriss**  
Senior Planning Advisor  
Western Area Power Administration  
PO Box 281213  
Lakewood, CO 80228  
(720) 962-7170  
kyriss@wapa.gov

**Doug Larson**  
Executive Director  
Western Interstate Nergy Board  
1600 Broadway; Suite 1700  
Denver, CO 80202  
(303) 573-8910  
dlarson@westgov.org

**Mark Lauby**  
Manager, Reliability Assessment  
NERC  
116 Village Boulevard  
Princeton, NJ 8540  
(609) 651-9420  
mark.lauby@nerc.net

**Ron Lehr**  
Western Representative  
AWEA  
4950 Sanford Circle West  
Englewood, CO 80113  
(303) 504-0940  
rllehr@msn.com

**Steve Lindenberg**  
Senior Advisor, Renewable Energy  
U.S. Department of Energy  
1000 Independence Ave, SW  
Washington, DC 20585  
(202) 586-2783  
steve.lindenberg@ee.doe.gov

**Larry Mansueti**  
Director, Electric Markets Technical Assistance  
Program  
Department of Energy Office of Electricity and  
Energy Assurance  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 586-2588  
lawrence.mansueti@hq.doe.gov

**Megan McCluer**  
Program Manager, Wind & Hydropower  
Technologies  
U.S. Department of Energy  
EE-2B; 1000 Independence Ave SW  
Washington, DC 20585  
megan.mccluer@ee.doe.gov

**Sandra McKew**  
President  
Strategic Public Policy  
1960 Stoney Hill Dr.  
Hudson, OH 44236  
smkew@strategicpublicpolicy.com

**David Meyer**  
Senior Advisor  
U.S. Department of Energy  
OE-20 Forrestal Building; 1000 Independence Ave,  
SW  
Washington, DC 20585  
(202) 586-3118  
DAVID.MEYER@hq.doe.gov

**Rick Morgan**  
Commissioner  
D.C. Public Service Commission  
1333 H St NW; Suite 200; West Tower  
Washington, DC 20005  
(202) 626-0518  
rmorgan@psc.dc.gov

**John Moura**  
Technical Analyst, Reliability Assessments  
North American Electric Reliability Corporation  
116-390 Village Boulevard  
Princeton, NJ 8540  
(609) 452-8060  
John.Moura@nerc.net

**Michael Nix**  
Senior Strategist  
PJM Interconnection  
600 G ST NW; Suite 600  
Washington, DC 20005  
(610) 666-8210  
nixm@pjm.com

**Dale Osborn**  
Transmission Technical Director  
Midwest ISO  
720 City Center Drive  
Carmel, IN 46032  
(651) 632-8471  
dosborn@midwestiso.org

**Sanela Pecenkovic**  
Senior Consultant  
Deloitte Consulting LLP  
2100 Lee Highway; Apt 335  
Arlington, VA 22201  
(609) 439-2882  
specenkovic@deloitte.com

**Jim Ploger**  
Climate & Energy Programs Manager  
Kansas Energy Office  
1300 SW Arrowhead Rd; Suite 100  
Topeka, KS 66604  
(785) 271-3349  
j.ploger@kcc.ks.gov

**Jay Pruett**  
Director of Conservation  
The Nature Conservancy  
2727 E 21st St; Suite 102  
Tulsa, OK 74114  
(918) 585-1117  
jpruett@tnc.org

**Liz Salerno**  
Policy Analyst  
AWEA  
1501 M ST NW  
Washington, DC 20005  
(202) 383-2517  
esalerno@awea.org

**Tansu Sengezener**  
Project Development Engineer  
Pepco Energy Services  
1300 N. 17th St; Suite 1600  
Arlington, VA 22209  
(703) 253-1785  
tsengezener@pepcoenergy.com

**Allyson Senie**  
Christopher Senie & Associates LLC  
7812 Lee Avenue  
Alexandria, VA 22308  
(703) 765-7147  
allyson@senie.com

**Rick Sergel**  
NERC

**Tom Sloan**  
State Representative  
State of Kansas  
772 Hwy 40  
Lawrence, KS  
(785) 841-1526  
glsloan@prodigy.net

**Brian Smith**  
Program Manager, National Wind Technology  
Center  
National Renewable Energy Laboratory  
1617 Cole Blvd. MS 3811  
Golden, CO 80401  
(303) 384-6911  
Brian\_Smith@nrel.gov

**Charlie Smith**  
Executive Director  
Utility Wind Integration Group  
2004 Lakebreeze Way  
Reston, VA 20191  
(703) 860-5160  
jcharlessmith@comcast.net

**Grace Soderberg**  
Director, Energy Supply  
Edison Electric Institute  
701 Pennsylvania Avenue, N.W.  
Washington, DC  
(202) 508-5183  
gsoderberg@eei.org

**Rick Stamm**  
Right-of-Way Program Manager, USDI  
Bureau of Land Management  
1620 L St. NW; Suite 1000  
Washington, DC 20036  
(202) 452-5185  
rick\_stamm@blm.gov

**Jennifer States**  
Energy Specialist  
U.S. Department of Energy - PNNL  
902 Battelle Blvd.  
Richland, WA 99352  
jennifer.states@ee.doe.gov

**Samir Succar**  
Energy Analyst  
NRDC  
40 W 20th St  
New York, NY 10011  
(212) 727-4536  
ssucar@nrdc.org

**David Terry**  
Governors Wind Energy Coalition  
(703) 395-1076  
dterry@governorscoalition.org

**Ellen Vancko**  
Nuclear Energy & Climate Change, Project Manager  
Union of Concerned Scientists  
1825 K St NW; Suite 800  
Washington, DC 20006-1232  
202 331-5425  
evancko@ucsusa.org

**Jon Wellinghoff**  
Commissioner  
Federal Energy Regulatory Commission  
888 First St NW  
Washington, DC  
jon.wellinghoff@ferc.gov

**Greg Wetstone**  
Senior Director, Governmental and Public Affairs  
AWEA  
1501 M ST NW  
Washington, DC

**Bill White**  
David Gardiner & Associates, LLC  
910 17th St NW  
Washington, DC  
elizabeth@dgardiner.com

**FACILITATION TEAM:**  
**Abby Arnold**  
NWCC Facilitator  
Kearns & West, Inc.  
aarnold@kearnswest.com

**James Damon**  
NWCC Outreach Coordinator  
RESOLVE  
1255 23rd ST NW; Suite 875  
Washington, DC 20037  
(202) 953-6383  
jdamon@resolv.org

**Taylor Kennedy**  
Associate  
RESOLVE  
1255 23rd ST NW; Suite 875  
Washington, DC 20037  
(202) 965-6392  
tkennedy@resolv.org

## Attachment C

**S. 539**

**March 5, 2009**

Reid Discusses Introduction of Green Transmission Bill

Clean Renewable Energy and Economic Development Act

“...If we have no way of transmitting that electricity where it’s needed, all the production of renewable energy is not going to matter. That’s why we need a super highway, a freeway to carry electricity wherever it needs to go. We have three main regions in this country that have networks of transmission of electricity. They are inadequate. They don’t work.

“Renewable energy is not created where there are lots of people. Renewable energy is created in remote areas of our state. Take for example solar energy in White Plain County. We need to take it where there are lots of people. And that’s what this legislation is all about. To allow a county like White Plain to create lots of electricity, lots of energy, and to take it where it’s needed.

“...and the reason this legislation is important is, we create jobs. We can produce renewable energy and take it some place, it creates thousands of jobs in Nevada. During the last ten years, we have created 6,000 miles of pipeline to carry natural gas. During that same period of time, we have created 600 miles of power lines for electricity. We’ve got to change that. That’s what this legislation is all about.”