



In cooperation with the
Western Governors'
Association

Implementing Wind Energy & Transmission in the West

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Welcome to the First NWCC Western Transmission Newsletter

In June 2006, the [Western Governors' Association's \(WGA\) Clean and Diversified Energy Advisory Committee \(CDEAC\)](#) provided recommendations to the governors on how to develop an additional 30,000 megawatts of clean energy by 2015. The governors passed a [policy resolution](#), agreeing "to draw upon the full range of recommendations contained in the CDEAC report as a basis on which to advocate for energy policy changes at the federal and regional levels and [in] their respective states, where appropriate."

The following month, July 2006, the [National Wind Coordinating Collaborative](#) (formerly Committee) was pleased to host with WGA a [Leadership Forum on Implementing Transmission Recommendations in the West](#). Forum participants commended the Western Governors for their vision and urged a proactive approach to make the recommendations a reality. At the forum, attendees began outlining concrete steps needed to implement near-term wind and transmission goals from the CDEAC report. The Western Transmission Leadership Group (WTLG) formed in November 2006 to guide implementation efforts and reach out to leaders.

This newsletter highlights transmission-related wind energy happenings in WGA's territory with updates on corresponding NWCC WTLG activities and is slated to come out quarterly. Initial planning is also underway for a 2007 NWCC / WGA forum on wind power and transmission. Look for more details in future installments of this newsletter and on the NWCC website, www.nationalwind.org.

Feel free to pass this newsletter along to other individuals and groups who may be interested. Please [contact us](#) to be added to or removed from the newsletter distribution list. We welcome your [feedback](#) on the newsletter and [suggestions](#) for improving it. Also, if you have updates for the next edition, please [tell us!](#)

Sincerely,

Steve Ellenbecker, Energy Advisor to WGA Vice Chair Wyoming Governor
Dave Freudenthal

Doug Larson, Western Interstate Energy Board

Charlie Smith, Utility Wind Integration Group & NWCC Transmission
Workgroup Chair

What Does That Mean?
Not sure what one of the terms here refers to? Try consulting our transmission glossary!

Contact Us!
Please send updates or suggestions for future editions to:

Katie Kalinowski, NWCC
Outreach Coordinator
kkalinowski@resolv.org

We welcome your feedback!

For More Information

www.nationalwind.org
www.westgov.org
www.westgov.org/wieb/
www.awea.org
www.uwig.org

WGA Governors voice support for proposed FERC reforms

On November 28th, the Western Governors sent a [letter](#) to the [Federal Energy Regulatory Commission](#) (FERC) supporting proposed tariff reforms that provide for conditional firm transmission service and redispatch, which are transmission products intended to increase efficient use of the existing transmission grid. Conditional firm transmission service is a way for more generators to use existing transmission lines under long-term contracts while redispatch is a method of resolving transmission congestion by changing generator output levels to reduce congestion, which may enable additional firm transmission sales.

In the Report of the [Clean and Diversified Energy Advisory Committee](#) (CDEAC) delivered to the Western Governors in June 2006, implementing these types of tariff reforms was recommended by the Wind Task Force. The Governors' letter to FERC demonstrates their commitment to clean energy, lifting the CDEAC recommendations off the page and into reality. FERC is expected to make a final ruling on the proposed reforms in early 2007. For more information on the Governors' letter, visit <http://www.westgov.org/wga/press/ferc11-28-06.htm>.

NWCC Activities

Supporting definition and implementation of conditional firm and redispatch emerged as a priority action item at the [NWCC / WGA Leadership Forum on Implementing Transmission Recommendations in the West](#), held July 2006 in Denver, CO. A webinar on this topic was held on Friday, February 2nd by NWCC and WGA and sponsored by the American Wind Energy Association (AWEA). NWCC members also developed factsheets on conditional firm and redispatch that are designed to educate decision-makers and the public about these transmission products. The webinar presentation and the factsheets are online [here](#).

NTTG members sign agreement on sharing ACE

In mid-November 2006, members of the [Northern Tier Transmission Group](#) (NTTG) signed an agreement to share Area Control Error (ACE). ACE is a measure of the difference between an electrical control area's (or balancing authority's) actual and scheduled generation, taking frequency bias into account. This step supports the WGA CDEAC Transmission Task Force recommendation to implement technologies that promote efficient operations across control area boundaries.

NWCC Activities

Promoting efficient operations across control area boundaries and control area consolidation are focus areas of the NWCC Western Transmission Leadership Group (WTLG). Several WTLG members participate in [WestConnect](#) and NTTG. The WTLG is identifying parties in Arizona and elsewhere to work with on addressing control area consolidation issues.

PUCT publishes final CREZ rule

The [Public Utility Commission of Texas \(PUCT\)](#) published the final version of its new Competitive Renewable Energy Zone (CREZ) rule. The CREZ indicate areas within Texas with high-quality clean energy resources; transmission infrastructure is to be built between the CREZ and load centers.

NWCC Activities

The [Oct/Nov NWCC Transmission Update](#) brief focused on CREZ, as well as BPA efforts to develop a Northwest Wind Integration Action Plan. The WTLG is tracking other legislation geared towards providing transmission in advance of clean generation, such as a [proposed bill in Colorado](#) sponsored by State Senate President Joan Fitz-Gerald and co-sponsored in the House by Buffy McFadyen. Coordinating with legislators and regulators on this issue will be on ongoing WTLG activity.

California ISO reducing renewable energy barriers

The [California Independent System Operator \(CAISO\)](#) has taken two major steps to increase wind power and other renewable energy in California. First, the [CAISO Board of Governors approved Southern California Edison's Tehachapi Transmission project](#), consisting of 17 new facilities or upgrades, on January 24, 2007. This expansion of the transmission grid allows for integrating large amounts of wind power and helps the state achieve its renewable portfolio standard of 20% power from renewables by 2010.

Also in January, CAISO [filed a petition for declaratory order with FERC](#) "seeking to implement a new financing mechanism that will remove existing barriers to the efficient development of transmission facilities needed to connect to new generation resources that are constrained as a result of their location, relative size, and the immobility of their fuel source." This so-called "third category for transmission" would help remove barriers to power sources like wind that must be located where sufficient wind resources exist. Currently, new generators pay up front for what are known as gen ties, transmission lines connecting them to the grid. Under the new financial tool proposed, transmission owners would pay for new transmission lines and as generators interconnect, they pay a pro-rated share of the costs based on their generating capacity. This approach is a means of providing more transmission in advance of clean generation to maximize wind and other renewable resources.

NWCC Activities

The [August/September NWCC Transmission Update](#) brief featured David Withrow from the CAISO discussing the ISO's plans to ask FERC for policy guidance related to creating a new transmission category for interconnecting renewable energy facilities.

Regional transmission planning boosted in the West

Recent developments suggest an increased appreciation for the benefits of regional transmission planning. Colorado's Interim Task Force on Reliable Electricity Transmission recommended staff time and travel money be provided for regional transmission planning (<http://www.dora.state.co.us/puc/projects/ReliableInfrastructure/ReliableInfrastructure.htm>). The [Western Interstate Energy Board \(WIEB\)](#) and the [National Renewable Energy Laboratory \(NREL\)](#) are drafting the scope for a Western Interconnection-wide wind diversity study to provide the wind data necessary to determine the location of new transmission to maximize wind penetration and support multi-utility wind integration studies. WIEB is also participating in development of a work plan for the [Western Electricity Coordinating Council \(WECC\)](#) Technical Advisory Subcommittee that includes:

- 1) A proposed template for information on major transmission projects, including explanation of analyses of the type of generation the transmission will move and state carbon/RPS constraints
- 2) Modeling transmission sufficient to meet RPS and IRP goals.

NWCC Activities

Besides staying involved in the efforts mentioned above, various WTLG members have their own goals for garnering greater leadership support for regional transmission planning.

Wind integration in the news

The [Utility Wind Integration Group \(UWIG\)](#) provides a comprehensive collection of reports on integrating wind power into transmission grids. These references drawn from throughout the world are listed at <http://www.uwig.org/opimpactsdocs.html>. UWIG also collaborated with the American Public Power Association (APPA), Edison Electric Institute (EEI), and National Rural Electric Cooperative Association (NRECA) on an assessment on the integration of wind generation into utility power systems, "[Utility Wind Integration State of the Art.](#)"

NWCC Activities

Members of the NWCC WTLG continuing seeking out wind integration educational opportunities and possible outlets include a webinar, guide on wind integration studies, training opportunities, and a factsheet.

New administrator joins Western Area Power Administration

The U.S. Department of Energy named Timothy J. Meeks as Western Area Power Administration's new administrator. Regional leaders look forward to working with Administrator Meeks to maximize integration of wind generation in WAPA's service territory, including transmission construction, hydro firming of wind output, and participation in virtual control area studies. Mr. Meek's predecessor, Michael Hacskaylo, participated on the Regional Representatives panel at the NWCC/WGA Leadership Forum, where WAPA was encouraged to perform integration and other studies. For more about WAPA's new leadership, go to http://www.wapa.gov/newsroom/NewsRelease/2006/092906_meeks.htm.

NWCC Activities

NWCC WTLG participants recently met with Mr. Meeks to discuss WGA CDEAC wind and transmission recommendations.

Western Governors encourage imbalance penalty reform

In August 2006, WGA Chairman Governor Michael Rounds and Vice Chairman Dave Freudenthal sent a [letter](#) to FERC Chairman Joseph Kelliher supporting several reforms to FERC's Open Access Transmission Tariff, including imbalance penalty reform. The CDEAC recommendations endorsed by the Western Governors encourage imbalance penalty reform as a way to avoid penalizing wind generator's generation schedule deviations that occur because of changes in wind and not manipulative behavior by generators.

NWCC Activities

NWCC will continue monitoring FERC's rulemaking and its implementation.

Presumption of prudence

The [WGA CDEAC Transmission Task Force](#) recommended establishing a tiered standard for reviewing prudence costs such that planning has a lower cost than permitting and right-of-way acquisition with traditional costs for construction. This approach is intended to reduce transmission's financial risk by making it easier to recover planning costs.

NWCC Activities

WTLG members approached [Lawrence Berkeley National Laboratory \(LBNL\)](#) about studying options for and timing of cost recovery. These groups are working together on questions for the study to address.

NWCC Western Transmission Leadership Group

Recognition and thanks to the members of the NWCC Western Transmission Leadership Group (WTLG) for their guidance and action to make more transmission available for wind power:

Bob Anderson, Bob Anderson Consulting	Carl Linvill, Aspen Environmental Group
Hap Boyd, GE Wind Energy	James Lyons, U.S. Department of Energy
Jim Byrne, Rocky Mountain Area Transmission Study	Jim Martin, Western Resource Advocates
Jim Caldwell, Los Angeles Department of Water and Power	Natalie McIntire, Renewable Northwest Project
Tom Carr, Western Interstate Energy Board	Michael Milligan, National Renewable Energy Laboratory
Brian Connor, U.S. Department of Energy	John Nielsen, Western Resource Advocates
Steve Ellenbecker, Wyoming Governor's Office	David Olsen, Center for Energy Efficiency and Renewable Technologies
Ned Farquhar, Natural Resources Defense Council	Amanda Ormond, The Ormond Group
Larry Flowers, National Renewable Energy Laboratory	Brian Parsons, National Renewable Energy Laboratory
Bob Gough, Intertribal Council on Utility Policy	Kevin Porter, Exeter Associates
Rob Gramlich, American Wind Energy Association	Rachel Shimshak, Renewable Northwest Project
Rich Halvey, Western Governors' Association	Robert Sims, AES Wind Generation
Roger Hamilton, West Wind Wires	Charlie Smith, Utility Wind Integration Group
Pamela Jacklin, Stoel Rives	Brian Smith, National Renewable Energy Laboratory
Mike Jacobs, American Wind Energy Association	Beth Soholt, Wind on the Wires
Doug Larson, Western Interstate Energy Board	Steve Wegman, South Dakota Public Utilities Commission
Ron Lehr, American Wind Energy Association	John White, Center for Energy Efficiency and Renewable Technologies
Debra Lew, National Renewable Energy Laboratory	Andrew Young, Horizon Wind Energy
Steve Lindenberg, U.S. Department of Energy	