

Transmission Update

August / September 2005

Summary

- ✓ Welcome to the Fourth NWCC Transmission Update! Kevin Porter of Exeter Associates led the August 9, 2005 Transmission Update Conference Call, which featured expert speakers providing their insights on issues affecting wind energy, with an opportunity for discussion and questions. We're continuing to use the new Transmission Update format, in which the written brief is being distributed after the call to conference call participants, other NWCC members and participants, and to interested NWCC observers.
- ✓ Two issues are covered in this brief: the implications for wind and transmission of the "2005 Energy Policy Act" enacted by Congress in August 2005; and SB 20, a Texas law titled "*An Act Relating to This State's Goal for Renewable Energy*".
- ✓ Three speakers provided their perspective on the 2005 Energy Policy Act to catalyze participant discussion:
 - Fred Hoover with Duncan Weinberg Genzer & Pembroke P.C., and counsel to NASEO, gave an overview of the bill emphasizing issues of importance to State Energy Offices;
 - Craig Glazer from PJM Interconnection discussed the Act from the viewpoint of an RTO; and
 - Rob Gramlich from AWEA provided the perspective of the wind industry.
- ✓ Mike Sloan from Virtus Energy Research Associates and The Wind Coalition updated the group on Texas SB 20 that was recently signed by Governor Rick Perry.
- ✓ The next Transmission Update call will be October 11 at 1 pm Eastern. Please mark your calendars!

The Energy Policy Act of 2005

Background

In late July and early August, the US House of Representatives and US Senate passed the Federal Energy Bill, which was subsequently signed into law by President Bush. Clocking in at 1,724 pages, the 2005 Energy Policy Act (the Act) has important implications for wind energy and transmission. (The conference report for this legislation is available at

http://energy.senate.gov/public/_files/ConferenceReport0.pdf.)

State Energy Office Perspectives

Fred Hoover of Duncan, Weinberg, Genzer, & Pembroke, P.C., and the National Association of State Energy Officials (NASEO) opened the discussion with perspectives of the state energy offices on the wind energy and transmission implications of the Act. State energy officers are primarily interested in energy efficiency and renewable energy and how to promote these resources within their respective states.

Among the most important issues was the 2-year extension of the Production Tax Credit (PTC) for wind energy to December 2007, which would otherwise have expired in December 2005. It is the first time that the PTC has been renewed prior to its expiration date. At least for the next two years, renewal of the PTC facilitates a stable funding environment and temporarily lessens the boom-bust cycle of wind development from simply extending the PTC from year-to-year. In addition, other aspects of the Energy Bill pertaining to incentives for renewable energy and transmission, along with associated energy efficiency provisions, will have broad-reaching impacts. The energy bill also contains language that requires states to consider adopting net metering, as well as policies for interconnecting onsite generation facilities.

The Act attempts to resolve issues that have hampered investment in the development of electricity infrastructure. One such issue that was a matter of debate was federal preemption of state authority in the siting of interstate transmission projects. The Electricity Title of the Act provides FERC with transmission siting “backstop” authority as a last resort when states are unable to solve difficult interstate siting cases. In particular, the Act attempts to address conflicts that arise when electricity is generated in one state, wheeled through one or more states, and delivered to load in another state. FERC may also utilize its backstop authority if a transmission applicant does not serve retail customers, such as a merchant transmission company, or if a state has not acted one year after a transmission application has been filed or after the U.S. Department of Energy has designated a priority transmission corridor (more on this later). FERC may also intervene if a state has conditioned approval of the transmission line to either make it uneconomic or to lessen the proposed line’s impact on transmission congestion.

States see the incentives for renewables (such as the Renewable Energy Production Incentive [REPI], and the PTC), along with new standards and incentives for energy efficiency, as definite benefits. While the failure to pass a federal Renewable Portfolio Standard was a lost opportunity, state leadership in enacting state renewable portfolio standards, coupled with the extension and expansion of the PTC, will help stimulate new wind energy projects.

Regional Transmission Organization Perspectives

Craig Glazer of PJM Interconnection followed with his perspectives on the issues affecting ISOs and RTOs in the Energy Bill, noting that it reflects both consensus and ambivalence regarding the energy issues facing the country. Examples of this consensus are the repeal of the Public Utility Holding Company Act and the new standards for energy efficiency that have been included in the law. The ambivalence Mr. Glazer referred to is reflected in those issues that were not resolved in the legislative process and are largely left out of the Act, including the ongoing disagreements over federal and state jurisdiction, unanswered questions about cost allocation for transmission, and the removal of language creating a Federal RPS.

Mr. Glazer separated the themes of the new requirements in the legislation into four types: **structure**, **regulation**, **planning**, and **technology**.

In discussing changes in **structure** prompted by the Energy Bill, Mr. Glazer pointed to the repeal of the Public Utility Holding Company Act (PUHCA), which he believes will lead to greater consolidation in electric utilities and the acquisition of utilities by diversified holding companies. The Act provides new opportunities for financial institutions, for example, and others who have been acquiring wind facilities and other energy assets. However, as a quid pro quo, the Act provides FERC with authority over mergers and generation asset transfers with a value exceeding \$10 million, as well as providing access to company books and records for FERC and state regulators. Some question whether this authority will allow FERC to effectively regulate market power, and whether these kinds of structural remedies are the most effective avenue for altering market behavior.

Changes in **regulation** primarily deal with the granting of new authority to existing agencies. In addition to the backstop siting authority given to FERC, the legislation authorizes the Department of Energy (DOE) to consult with states and other parties to identify priority transmission corridors within one year of enactment, and every three years thereafter. The Act also authorizes DOE to coordinate Federal siting of transmission on Federal lands. Finally, the Act creates a new Electric Reliability Organization, most likely a modified version of the existing National Electric Reliability Council (NERC), with new authority to create, with FERC approval, and enforce standards governing electric reliability nationally.

In **planning**, the Act defines transmission planning for the first time in federal statute. The Act assigns FERC the responsibility to exercise its authority to facilitate transmission planning and expansion to ensure that electric utilities, or other entities that serve load, has sufficient and available long-term transmission.

With regards to **technology**, the Energy Bill creates incentives for a variety of new technologies and funds new technology development, with substantial benefits potentially available to researchers and developers of new advanced nuclear and clean coal generation facilities.

Wind Energy Industry Perspectives

Rob Gramlich of the American Wind Energy Association (AWEA) led the discussion on implications of the Act for the wind industry. He noted that there are about 20 provisions that relate to the wind industry. He highlighted sections of the Energy Bill of greatest relevance:

Section 201 requires the Secretary of the Department of Energy to issue a report in six months, and annually thereafter, on the potential of renewable energy resources, including costs, locations, and feasibility.

Section 202 reauthorizes the Renewable Energy Production Incentive (REPI) that provides financial incentives to entities that don't pay taxes, such as municipalities, Indian tribes, rural electric cooperatives and others. Funding will continue to be subject to appropriations, however. Appropriations have generally lagged behind demand for the REPI incentive, limiting the effectiveness of REPI.

Section 203 creates a 3% renewable purchase requirement for all federal agencies for 2007 to 2009, increase to 5% for 2010 to 2012 and 7.5% for 2013 and thereafter. However, language allowing exceptions in cases that are not "practical or economically feasible" may reduce the actual impact of this provision.

Congress encourages the siting of renewable energy projects on public lands within *Section 211*. The provision calls for increased coordination between the Bureau of Land Management, the Department of the Interior, and other relevant federal agencies for siting wind, geothermal and other renewable resources on government lands. Congress also states that the Interior Department should attempt to have 10,000 MW of approved non-hydro projects on public land by 2015. However, these provisions have no binding authority and does not commit the Bureau of Land Management or the Department of the Interior to specific tasks.

Under *Section 311* of the Act, Section 3 of the Natural Gas Act of 1938 is amended to grant FERC the exclusive authority to approve or deny the siting, construction, expansion, and operation of LNG terminals. This provision fully removes the authority for the siting of LNG terminals from the states and places that authority with the FERC. The governor of the state in which the proposed LNG terminal is to be located may designate appropriate state agencies to consult with FERC regarding state and local safety considerations. Some state authority exists through other federal statutes that may allow states an opportunity to authorize or block the development of an LNG facility. Specifically, the Coastal Zone Management Act, Clean Water Act, and Clean Air Act include regulations under which a state could deny the issuing of permits for construction and operation of an LNG facility. Ultimately, FERC authority over LNG siting could impact the natural gas sector of the electricity markets that wind is competing in. This is particularly true for the Northeast, where natural gas supply and price plays a large role in the electricity markets.

Section 368 deals with the creation of energy rights of way and easements across federal lands.

Section 411 allows DOE to offer to loan guarantees to investigate the integration of

integrated gasification combined cycle coal plants with wind energy to leverage the advantages of each form of generation. The IGCC and wind projects must each be larger than 200 MW and be located in the Upper Great Plains. In addition, such a project is eligible for any available tax credits such as the PTC.

Section 503 concerns wind energy on American Indian lands; in particular, the Western Area Power Administration is tasked with conducting a wind/hydro integration study for the Missouri River basin.

Section 931 authorizes the DOE to continue research and development activities for wind energy, along with other renewable energy technology development activities, and calls on Congress to authorize \$631 million in FY 2007, \$743 million in FY 2008, and \$852 million in FY 2009. Congress still must appropriate the funds, though, and it is likely that actual appropriations for renewable energy will be less than what the Act authorizes.

Section 1211 creates an Electric Reliability Organization under FERC and allows the ERO, with FERC oversight, to develop and enforce mandatory reliability standards.

Mr. Gramlich commented that, in addition to the strong support for the wind industry embodied by the PTC, other provisions of the Act could also assist the wind industry. For example, backstop siting authority at the federal level is seen as a way to overcome logjams in the transmission siting process that may benefit wind power development.

Section 1253 removes PURPA's requirement for utilities to buy power from small power producers and cogenerators if there is access to "competitive markets", if competing retail suppliers are willing and able to sell to a small power producer or cogenerator, or if a utility is not required by state laws to sell electricity in its service territory. Mr. Gramlich commented that the language in the law limiting the effect of PURPA's parties repeal outside "competitive markets" might mean that it only applies in markets, administered by RTOs and ISOs. What is defined as "competitive markets" will have to be litigated before FERC. Indeed, FERC will be tested immediately, as Alliant Energy has already petitioned FERC to exempt it from buying power from new small producers and cogenerators.

Community Renewable Energy Bonds (CREBs) are designed to provide a zero percent loan for renewable energy projects for 2006 and 2007. There is an \$800 million volume cap, \$300 million of which is reserved for cooperatives. The holder of the bonds do not receive an interest payment but instead receive an annual tax credit that is set by the U.S. Treasury based on the average annual interest rate for tax-exempt bonds. The Act requires that the IRS publish regulations to implement CREBs within 120 days, or by about December 2005.

Transmission incentives embodied in sections of the Energy bill include a number of important elements for wind energy. For example, new transmission assets can now be depreciated on a 15-year basis instead of 20-year. The Act also requires FERC to issue a rule within one year providing transmission rate incentives to promote reliability and to reduce congestion. Mr. Gramlich noted that this could be a source of future tension, as ratepayers may be more likely to oppose transmission lines that receive such incentives.

Discussion

Call participants began the discussion by revisiting the partial PURPA repeal, commenting that the language can be read a number of ways. Participants debated whether non-RTO organizations, particularly in the West, will still be governed by PURPA while organizations with organized markets, like PJM will most likely not be subject to PURPA. One participant noted that the language was likely to be litigated before FERC. Callers commented that in the reference in the Act to PURPA's partial repeal in competitive markets with short- and long-term open access transmission is open to broad interpretation, due to the inclusion of language that extends the partial repeal to "competitive markets of comparable quality."

Mr. Glazer noted that the language in the Energy Bill raises the bar higher for non-RTO areas, above that set by Order 888. The language in the bill calls for changes in authority that may have been used differently under former Chairman Pat Wood than under the new Chairmanship of Joe Kelliher. Under the Wood chairmanship, the West may not have been considered a comparable market, but under Chairman Kelliher, this may be different. Call participants asked whether this was an opportunity for FERC to redefine its role under the new Chairman. Referring to a case in which then-Commissioner Kelliher dissented involving avoided costs for a qualifying facility, Mr. Gramlich said the new Chairman's support of PURPA was open to speculation, but that his dissent in previous cases before FERC seemed to indicate that he was not as supportive of PURPA as other commissioners had been.

Turning to the sections to the Energy Bill authorizing federal designation of new transmission corridors, call participants asked the speakers whether it was their sense that there would be a large number of transmission corridors, and what role that DOE would take. Concerning DOE's role as a regulator in this area, speakers pointed to the number of offices in the Department with an interest in transmission, highlighting the need for coordination. State utility commission representatives on the call expressed concern about the definition of a corridor of national interest, especially as it impacts state siting authority. Other call participants said they expected the DOE might actually play more of a supportive role rather than acting as a regulatory enforcer. DOE's role would be to examine congestion and determine whether transmission would be the correct remedy. This has traditionally been done at the state level.

Callers noted that FERC was a big winner in the energy bill, increasing its authority in the later drafts of the bill. Speakers commented that many anti-FERC provisions were removed from the bill in conference. Support from Senator Bingaman and Representative Barton, coupled with a change in chairmanship at the Commission, may have been led to some of the changes between congressional drafts. Provisions relating to participant funding for new transmission were weakened after a broad-based effort by transmission customers (including the wind industry) against it.

Callers discussed whether the Energy Bill takes power from the states and gives it to FERC, NERC, and DOE. Some felt that deference to regional councils (such as WECC in the West,) would lessen the new authority in Federal hands. In addition, other callers noted that while new authority was granted to the Federal agencies,

rather than diminishing state decision-making power, the impact would likely be to dilute regulatory authority across an already-crowded field. With new responsibilities, the field has been tilted more towards Washington D.C., but much will depend on how the new FERC commission takes shape. In any event, there has been a strong message sent to the states about the importance of interstate coordination.

Members of the group asked what FERC will need to do to accommodate the large number of new responsibilities it will take on under the Act. Speakers replied that much of this work was already underdevelopment, such as the existing FERC dockets on long-term transmission rights and transmission incentives. Creating the other new structures may not be as daunting as it appears, as many of the changes adding to FERC's responsibility result from the repeal of PUHCA.

In summary, the extension of the PTC for two years will offer some short-term market stimulus for the wind industry while the various transmission provisions may be of importance to the wind industry in the mid- to long-term. The Act poses a number of implementation challenges, especially for FERC, and how these challenges are met will determine the overall impact and effectiveness of the Act.

For More Information

Frederick Hoover, Duncan Wienberg, Genzer & Pembroke P.C. / NASEO

fhf@dwgp.com

Craig Glazer, Vice President- Government Policy, PJM Interconnection

glazec@pjm.com

Rob Gramlich, Policy Director, American Wind Energy Association

rgramlich@awea.org

Website for the Senate Committee on Energy & Natural Resources

<http://energy.senate.gov/public/>

Texas' SB 20: RPS and Transmission Funding

On August 1, 2005, Governor Rick Perry signed SB 20, "An Act Relating to This State's Goal for Renewable Energy," that was approved in a special session of the Texas Legislature. The law, which died in conference committee as time expired during the regular session, amends existing statutes regarding the certification of public convenience and necessity (CPCN) [NOTE - the acronym used in Texas is CCN) for transmission projects and directs the Public Utility Commission (PUC) of Texas on issues regarding siting, approval, and cost recovery for transmission projects in ERCOT. The law also increases the Texas Renewable Portfolio Standard (RPS), to 5,880 megawatts by January 1, 2015, with a target of 10,880 MW by 2025.

This new law is considered to be precedent-setting and addresses the question of which comes first, transmission or generation resources. Inadequate transmission has delayed growth in wind power in many regions of Texas, as well as in other states. Typically, wind projects are completed within a matter of months once under construction, whereas a long transmission line connecting remote wind farms to

population load centers can take many years to permit and construct, creating a dilemma of which to build first. Under traditional cost recovery mechanisms, transmission projects could not be built in advance of developing wind power projects without having the developer incurring substantial risks. The 760 MW of wind project around McCamey in West Texas is an example of this dilemma. Available wind power has regularly been greater than the available transmission capacity in the McCamey area, requiring the curtailment of wind generation.

The law charges the PUC with ensuring that adequate transmission is built to serve RPS requirements, and authorizes a state-wide transmission adequacy study to be carried out by the PUC and ERCOT. The law also creates “competitive renewable energy zones,” areas of significant wind power or other renewable energy resources to be identified by the PUC of Texas. In addition to the state-wide transmission adequacy plan, the PUC will develop a plan to construct transmission capacity as necessary to deliver the electricity output from the competitive renewable energy zones.

A significant element of the law amends the existing statute, effectively allowing the PUC to issue a CPCN without consideration of the adequacy of existing service, the need for additional service, or the cost impacts to consumers. Historically, CPCNs for transmission projects were predicated on first establishing the need for additional transmission capacity to meet consumer electricity requirements or the ability of a transmission project to lower electricity costs to consumers. The changes to the statute provided by SB 20 direct the PUC to issue a CPCN to transmission projects that, if not for the state RPS policy to promote renewable energy development in Texas, may not receive a certificate to construct.

In addition to providing transmission for renewable energy projects, the law also may solve some transmission problems related to the development of future fossil-fueled generation facilities. Texas’ severe problems with air quality in the urban, eastern portions of the state limit the development of fossil-fueled generation facilities located near the major load centers. It is possible that any new transmission line built to bring capacity from wind power projects from west to east will also carry electricity from fossil-fueled facilities.

The PUC may also adopt rules requiring renewable energy facilities to have reactive power capabilities or “any other feasible technology designed to reduce the facilities’ effects on-system reliability.” The PUC was also given the authority to cap the price of renewable energy credits and to suspend the new RPS goal of 10,000 MW if the PUC believed it was necessary to protect grid reliability and operation. (These elements, however, do not represent significant changes from current policy, as ERCOT already sets reactive standards & the PUC already sets the effective price cap for renewable energy certificates.)

Callers asked about the transmission funding provisions that would be required, pointing to the rolled-in rate solution that is being discussed in the Tehachapi region of California. Mr. Sloan commented that the language includes provisions that renewable energy zones “shall consider the level of financial commitment by generators,” to build generation projects. Within ERCOT, all transmission costs will

continue to be paid for by load.

Callers also asked whether the new legislation responds to problems experienced in McCamey (on the supply side) and in Austin (on the customer side). Because it took years to solve these problems, and the solution required de-energizing lines between supplies and load, this was (and remains) an area in need of robust transmission solutions. Similar problems could appear in the Abilene/Sweetwater area of West Texas, but the availability of transmission backbone lines in the area indicate that these problems are not likely to be as severe as in McCamey.

Texas already has what many believe is the most effective RPS in the nation, and SB 20 is likely to improve it even more. Lack of transmission has been a concern in the past, and it will be interesting to see if innovations such as competitive renewable energy zones help overcome that problem.

**For more
Information**

Mike Sloan, President, Virtus Energy Research Associates / The Wind Coalition
sloan@vera.com

(The full text of this legislation is available online at
<http://www.capitol.state.tx.us/cgi-bin/tlo/textframe.cmd?LEG=79&SESS=1&CHAMBER=S&BILLTYPE=B&BILLSUFFIX=00020&VERSION=5&TYPE=B>.)

Next Update: October 11, 2005

The next NWCC Transmission Update will be held on October 11, 2005, at 1 pm Eastern.

Please email Kevin Porter (porter@exeterassociates.com) or Miles Keogh (mkeogh@resolv.org) with any suggestions for topics, or ways to improve the call.