

# *Transmission Update*

June / July 2007

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## Summary

- ✓ Welcome to the Twelfth National Wind Coordinating Collaborative (NWCC) Transmission Update! Kevin Porter of Exeter Associates, Inc. led the June 19, 2007, Transmission Update conference call. As always, this written brief is being distributed after the call to conference call participants, other NWCC members and participants, and to interested NWCC observers.
- ✓ This update features an update on the California Independent System Operator's (CAISO) new financing mechanism for "remote resource interconnection" and the Public Utility Commission of Texas' docket on implementing competitive renewable energy zones, also known as CREZs.
- ✓ Specific topics covered in this brief include:
  - The eligibility principles for transmission expansion projects under the CAISO's remote resource interconnection policy and the CAISO's plan for drafting a more detailed proposal and tariff language.
  - The outcome of four days of public hearings at the Public Utility Commission of Texas (PUCT) regarding CREZ designation and what issues are being raised.
- ✓ Cindy Hinman with the CAISO described the remote resource interconnection proposal. Annette Mass from the Public Utility Commission of Texas discussed developments on the designation of CREZ.
- ✓ The next Transmission Update call is September 17, 2007, at 1 pm Eastern Time. Please mark your calendars!

## **Remote Resource Interconnection, California Independent System Operator**

### Background

The CAISO filed a petition for declaratory order with the Federal Energy Regulatory Commission (FERC) in January 2007 requesting policy guidance on creating a financing mechanism to facilitate the construction of interconnection facilities to connect location constrained resources, including renewable energy generation to the transmission grid. This new financing mechanism would recognize the constraints associated with the development of renewable energy resources such that under this approach, interconnection facilities to connect location constrained resources would initially be paid for by all users of the CAISO grid and then reimbursed on a pro rata basis by renewable energy generators as they come on-line.

On April 19, 2007, the FERC Commissioners unanimously issued an order granting

CAISO's petition. The next step is for CAISO to file with FERC a detailed proposal and tariff.

## **Remote Resource Interconnection**

The CAISO determined it needed to remove barriers for connecting remote resources, such as wind power, to the transmission grid. CAISO worked on a proposal with stakeholders and developed a white paper outlining principles for eligible facilities. These principles must be met for transmission expansion projects to be eligible for cost recovery under the remote resource interconnection policy. The principles were outlined in the CAISO's petition for declaratory order filed with FERC and include:

- 1) The facility is non-network and is not otherwise eligible for network cost recovery.
- 2) The transmission project would permit wholesale transmission access to an area with a significant energy resource that is not currently accessible.
- 3) The transmission project must be in CAISO's operational control.
- 4) The transmission project is designed to serve multiple power plants.
- 5) The project must be approved by the CAISO transmission planning process.
- 6) The total dollars included in access charges has an aggregate cap such that the transmission project would not increase the annual revenue requirement (Transmission Access Charge rates) by more than 15% of the total of the net high-voltage transmission assets of participating transmission owners in the CAISO.
- 7) There must be adequate commercial interest in a project which can be demonstrated by (1) a minimum percentage of the line being "subscribed" pursuant to executed interconnection agreements, and (2) a showing of additional support for the project in addition to the minimum showing of executed interconnection agreements.

CAISO is seeking input from stakeholders to help shape its tariff proposal to FERC. CAISO issued a strawman on July 23<sup>rd</sup> and held a meeting to gather feedback. The ultimate goal is to file a proposed tariff with FERC by before the end of the year.

Ms. Hinman described some of the ways that public comments have shaped the proposal. Stakeholders raising concerns about transmission costs being excessive under this proposal led to the inclusion of the 15% aggregate cap. The principle requiring the demonstration of adequate generator interest was added to address concerns over stranded transmission costs.

The CAISO is interested in having transmission built to locations where multiple resources may potentially locate, such as several wind projects or wind and solar. It is not a requirement that different types of resources, e.g. wind plus solar or geothermal, be "co-located" in a particular region ; having multiple projects (*i.e.*, multiple generation resources) is the key component. CAISO has not yet established whether projects must have different owners or could be owned by the same entity. Finally, the CAISO is working with the California Energy Commission, the California Public Utilities Commission and other parties to identify regions with locationally constrained resources, or "energy resource areas."

A question was asked about the potential impact of the CAISO proposal on the interconnection queue. Some on the call noted that interconnection queues across the

country are clogged, and the American Wind Energy Association and the California Wind Energy Association have advocated grouping or clustering of interconnection requests in their comments on the CAISO proposal. Ms. Hinman noted the interest in clustering and said the details need to be worked out.

There is a sense of urgency to implement this new financing mechanism so that California can meet its renewable portfolio standard target of 20% by 2010.

On July 23, 2007, the CAISO issued a straw proposal of its Remote Resource Interconnection initiative for discussion. In the straw proposal CAISO discusses a number of currently unresolved issues and stakeholder comments on these issues. Among these is the evaluation of generator interest. CAISO decided that a certain level of a transmission project's capacity would have to be subscribed with Large Generator Interconnection Agreements (LGIA), and a certain level of "additional interest" would have to be shown before construction could begin. CAISO suggested that at least 25% of capacity should be subscribed by LGIAs and that additional interest be least another 35%. Regarding the definition of "additional interest," CAISO suggested that the following conditions should count toward meeting the additional interest requirement: additional capacity that is subject to an executed LGIA (above the 25% requirement); capacity under a power purchase agreement; and capacity associated with any remote resource interconnection project that is in the interconnection queue and has reached the Facilities Study phase. Other conditions that would count toward the additional interest showing include (1) being in the interconnection queue; having a declaration of interest; or participating in an open season and (2) submitting a \$/kW deposit; owning the land or mineral rights; or providing \$50,000 for a system impact study.

The CAISO is proposing that the remote resource interconnection planning process include a number of key elements, including the designation of Energy Resource Areas; inclusion of remote resource interconnections in the annual CAISO Transmission Plan, ranking and prioritizing Energy Resource Areas; being flexible and robust in planning remote resource interconnection; and presenting proposed remote resource interconnection projects to the California Sub Regional Planning Group to ensure coordination with non-CAISO transmission owners.

The CAISO proposes that to ensure efficiency and cost effectiveness, a least cost analysis should be performed on remote resource interconnection alternatives; that there must be a remote resource interconnection master plan that includes remote resource interconnection alternatives and future upgrades; and that resource diversity should be encouraged in remote resource interconnection.

The CAISO's current Large Generator Interconnection Procedure already allows for "clustering," the simultaneous evaluation of multiple proposed generation projects, to some extent. Generation proposals under the LGIP have queue cluster windows of 180 days during which all Interconnection Requests in the same region can be studied as a cluster. Most stakeholders felt that this provision would be inadequate for the new remote resources interconnection policy, and the CAISO proposed a more flexible clustering process. The new process would involve predefined "Cluster Study Zones" in which projects could be studied as clusters with greater flexibility in timing.

## **Status Report of the Competitive Renewable Energy Zones Docket**

### **Background**

In 2005, the Texas Legislature passed Senate Bill 20 (SB20), increasing the state Renewable Portfolio Standard (RPS) to 5,000 MW by 2015 and setting a goal of 10,000 MW by 2025. Recognizing that meeting this goal, particularly by using West Texas' wind resources, will require upgrades to the transmission grid, the Texas Legislature also called for the designation of Competitive Renewable Energy Zones (CREZ). The CREZ indicate areas within Texas with high-quality clean energy resources, with transmission infrastructure to be built between the CREZ and load centers. The Texas Public Utilities Commission (PUCT) issued rules implementing the CREZ statute in December 2006 and held hearings in July 2007 on what areas to designate as CREZ areas. Annett Mass of the PUCT provided an update on the CREZ.

### **CREZ docket**

The PUCT held four days of hearings on the CREZ in early July. The PUCT has asked the Electric Reliability Council of Texas (ERCOT) to perform a study to determine the transmission needed to serve the designated CREZ areas. The original deadline for a final order was July 5<sup>th</sup> but it has been extended.

One topic being addressed is how to overcome potential timing constraints that require a developer has to take service in a year once a transmission line is placed in-service. Otherwise, the developer could lose their deposit, or the PUCT could have another developer step in. It may be that the developers are asked only to show a financial commitment to projects instead of meeting the one-year requirement. According to the Texas statute, transmission providers must file a Certificate of Convenience and Necessity (CCN) applications within one year of the docket coming out. The PUCT must set up a timetable for CCN filing and they may use that opportunity to build in more time for interconnection. Before the CCNs are filed, the PUCT holds proceedings on who should build the proposed transmission lines.

Three different zone areas were discussed at the hearings – the Panhandle in northern Texas, the McCamey area in west Texas, and the Central Western region in Texas. The coast was not proposed as a CREZ, perhaps because adequate transmission infrastructure is already in place there. ERCOT did a study with AWS Truewind to rank the state's wind zones. In designating priority zones, they considered complimentary output and combination scenarios. Most of the zones have similar wind patterns, so the combinations are not very geographically varied in terms of the timing of wind generation.

Several big proposals were filed and some advocated bringing in non-renewable generation as well. There were one or two single line proposals but most called for multiple lines. Some proposals included areas outside of ERCOT, which would entail either sending power out to SPP, bringing it in to ERCOT with a DC tie, or building a line from SPP to ERCOT. Some of these approaches, however, raise questions about ERCOT becoming FERC-jurisdictional. Since FERC has interstate regulatory jurisdiction and ERCOT is contained within Texas, ERCOT has not been subject to FERC jurisdiction.

A question remains on how transmission would be allocated if the transmission lines are built. This issue will be addressed in a subsequent rulemaking.

In late July, the PUCT designated five CREZ zones within ERCOT and three within the Southwest Power Pool, but the PUCT believe all eight zones should be connected to ERCOT. These eight areas could support over 20,000 MW of wind power. A PUCT order was unavailable as this newsletter was written.

## Implications

Both the CAISO and CREZ initiatives represent different but innovative means of breaking the "chicken and egg" problem with new generation and transmission. Implementation details will be key for both initiatives. The CAISO will need to show transmission customers that transmission rates will not increase dramatically, and that the prospect of stranded transmission is minimized, while Texas needs to decide what transmission will be built and by who and how to implement proposals for proposed transmission in SPP. Both Texas and the CAISO will also need to determine how to allocate transmission capacity once the lines are built.

## For more Information

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Federal Energy Regulatory Commission approval of CAISO petition, <http://www.ferc.gov/press-room/press-releases/2007/2007-2/04-19-07-E-5.asp>

CAISO White Paper *Proposal to Remove Barriers to Efficient Transmission Investment*, revised September 21, 2006, <http://www.caiso.com/1879/18799b184b440.pdf>

CAISO Remote Resource Interconnection Policy website, <http://www.caiso.com/1816/1816d22953ec0.html>

Public Utility Commission of Texas, <http://www.puc.state.tx.us/>

Public Utility Commission of Texas, Rulemaking Project No. 31852 (implementing Competitive Renewable Energy Zones), <http://www.puc.state.tx.us/rules/rulemake/31852/31852.cfm>

State Energy Conservation Office, [http://www.seco.cpa.state.tx.us/re\\_wind-transmission.htm](http://www.seco.cpa.state.tx.us/re_wind-transmission.htm)

## **Next Update: September 17, 2007**

**The next NWCC Transmission Update will be held on September 17, 2007 at 1 pm Eastern Time.**

*Please email Kevin Porter ([porter@exeterassociates.com](mailto:porter@exeterassociates.com)) with any suggestions for topics on how to improve the call.*