

# *Transmission Update*

October 2009

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## Summary

- ✓ Welcome to the Twenty Fourth National Wind Coordinating Collaborative (NWCC) Transmission Update! Kevin Porter of Exeter Associates, Inc., led the October 13, 2009, 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 a discussion of the recent regional technical conferences held by the Federal Energy Regulatory Commission (FERC) to explore the effectiveness of the Order 890 transmission planning principles, and a discussion of the paper, *Siting Transmission Lines in a Changed Milieu: Evolving Notions of the Public Interest in Balancing State and Regional Considerations*, which explores the legal principles for state regulators for siting transmission lines with broader public interest and concerns.
- ✓ Mason Emmett from FERC was on the call to talk about the Order 890 technical conferences, and Ashley Brown, Executive Director of the Harvard Electricity Policy Group at the Kennedy School of Government, and a former Commissioner of the Public Utilities Commission of Ohio, discussed issues within the current transmission siting paradigm.

## FERC Regional Technical Conferences

### Background

On February 2007, FERC issued Order No. 890, containing a series of reforms with respect to the *pro forma* open access transmission tariff (OATT) adopted in Order No. 888, issued in 1996. Order 890 addressed the calculation of available transfer capability, transmission planning, and the terms and conditions of open access transmission service. Prior to this, transmission planning had not been subject to many FERC requirements, so as part of an overall look at the OATT, FERC also examined potential transmission planning reforms. Recognizing that transmission providers and regions are markedly different and have different processes for planning transmission facilities, FERC adopted a broad set of principles for transmission planning rather than one specific prescriptive policy. The intent was to open up the transmission planning discussions to customers and stakeholders who had been previously excluded. At the end of 2007, after months of transmission planners working together and with their stakeholders, the first round of Order 890 compliance filings were submitted to FERC. Upon review of the filings, it became apparent to FERC that while significant progress was being

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made, further action by FERC would likely be needed. FERC, therefore, directed staff in early 2008 to start monitoring the various transmission planning processes to identify what, if any, reforms may be needed in the future. From the second round of Order 890 compliance filings and the information from FERC staff attending transmission planning meetings, it became apparent that additional work was required, specifically with respect to whether existing processes were adequate for addressing proposed transmission projects across multiple systems and the need to integrate location-constrained or distributed resources. In June 2009, FERC issued a notice that staff would be convening three regional technical conferences to examine the transmission planning processes that are being conducted pursuant to Order 890. The conferences were held in Phoenix on September 3, 2009; in Atlanta on September 10, 2009; and in Philadelphia on September 21, 2009.

### **Technical Conference Review**

Mr. Emmett said FERC was expecting to, and did, encounter regional differences. However, there were also common issues, namely cost allocation, siting, and planning across multiple transmission providers. An overarching theme heard at all the conferences was the need for more guidance and clarity on policy issues that transmission providers can follow as they plan ten to fifteen years into the future. Examples include a proposed federal Renewable Portfolio Standard and determining what renewable resources would be needed where and by when. The consensus across all regions was that transmission providers can plan for whatever they are told to plan for, but they need clarity as to what exactly that is. Mr. Emmett stated that the FERC recognized this concern, but explained that FERC has limited jurisdiction in regards to transmission planning, and that generation planning and siting are the responsibilities of states. FERC also has very limited jurisdiction over transmission siting, though there are bills being considered in Congress that may give FERC more siting responsibilities.

Mr. Emmett detailed areas of interest that are under consideration at FERC. One of these is the coordination of transmission planning processes across seams. There are currently very few mechanisms or processes in place to integrate or coordinate transmission planning across multiple planning entities. Mr. Emmett noted the Department of Energy (DOE) currently has a Request For Proposal out to provide funding for interconnection-wide planning, but who DOE will select is not yet known. Also, there is the question of how these plans will be integrated in a coherent manner across transmission providers to ensure that they are planning for future regional policy needs. FERC will also continue to explore cost allocation for transmission, and whether current methods are adequate for ensuring that transmission will continue to be built.

Mr. Emmett said that some specific regional issues had arisen in the conferences. In the West, for instance, there seemed to be a sense of “meeting-fatigue,” with so many planning meetings that people had to select where to commit their time and energy. Mr. Emmett expressed uncertainty on how this should be addressed as FERC has a strong desire to keep the planning process open, which inevitably

leads to more meetings. The quantity of meetings is unavoidable, unless consolidation of the planning process is an option. Mr. Emmett stated that the FERC is interested in hearing more on this issue. Stakeholders in the Southeast expressed concerns about any meeting reforms that may limit stakeholder participation.

Another matter that varied across regions was the treatment of merchant transmission and merchant generation developers. Mr. Emmett said he had expected to hear more on this issue in the West, as a good deal of the merchant transmission proposals that FERC is aware of come from this region. However, although FERC has heard informally that merchant transmission projects are difficult to get off ground, there was little discussion about merchant transmission at the Western conference. This was in contrast to the Southeast, where merchant generator concerns were very much present. Merchant generators in that region stated that the transmission planning process is especially unfavorable to them and the way transmission planning works has compromised their ability to access bulk power markets.

**Future Action** Mr. Emmett announced that FERC had identified some common issues from the regional technical conference and released a list of questions that they would like comments on. The comments are due November 9, 2009, with reply comments due December 4, 2009. He urged interested parties to review the questions, as FERC is interested in making reforms if they are needed. If FERC decides to move forward, Mr. Emmett surmised that the likely next step would be a Notice of Proposed Rulemaking.

**Discussion** A caller asked if, under the current law and apart from the Regional Transmission Organizations (RTOs), whether FERC has the authority to modify existing tariffs to force unwilling parties to pay for the costs of a proposed project. Mr. Emmett responded that FERC has yet to rule on that issue.

A caller inquired as to whether merchant transmission developers were involved in the planning processes in all the different areas. Mr. Emmett replied that it depended on the planning process. There are generally two models. In some areas, there is no requirement for merchant transmission projects to be involved in transmission planning; instead, merchant generation and transmission developers must each deal with the transmission provider on an individual basis by submitting an interconnection request for a specific project. The other is where the merchant transmission developers are integrated into the transmission planning process. The question at the moment is which model is more effective, and if merchant transmission does need to be integrated into the transmission planning process, what issues could that raise. Mr. Emmett noted there could be concerns about a transmission's owner right of first refusal, whereby a merchant transmission planner may conduct the necessary planning and studies for a proposed transmission project, only to be supplanted by a transmission owner exercising their right to first refusal, as permitted under Orders 888 and 890.

A caller followed up on this, asking if merchant transmission providers are still required to have open access, to which Mr. Emmett replied that yes, Commission policies require open access and that they would also be required to extend their systems to accommodate third-party use, at the customer's expense. The transmission providers that do not integrate merchant developers into their system planning are still subject to the same requirements - the requirements simply look different to a merchant transmission provider.

A caller asked if Mr. Emmett could explain the right of first refusal issue. Mr. Emmett obliged, stating that in the Southwest Power Pool (SPP), for example, there is a long-standing argument between the merchant transmission developers and the incumbent transmission providers (TPs). Under the SPP tariff, for any transmission project planned or proposed through the SPP regional planning process which goes through the footprint of an incumbent TP, the incumbent TP has the right of first refusal, even if the project was brought by a merchant transmission developer. Mr. Emmett noted that it is still an open question as to whether this makes sense, and it is an issue that FERC is putting some thought into.

A caller wondered if the list of questions recently released for comments included any questions related to the lack of a bridge between transmission planning and getting specific projects proposed and sited. Mr. Emmett replied that this was not addressed directly; however, the issue of cost allocation comes closest, as it addresses investment or funding. There are separate questions on the decision to build and the ability to site. The decision to build, Mr. Emmett explained, is an existing obligation to the transmission provider to build at the request of the customer. If there is an identified cost allocation methodology in place, then the building issue is somewhat solved. Put another way, if it is likely that it is known who will pay for the project, and there is a consensus in the planning process that it is a solution to an identified need, then it will most likely be requested and built. Transmission siting is a different issue altogether, and Mr. Emmett restated that FERC has limited transmission siting authority.

A caller asked if there were any questions on the differences in the issues involved when planning for electricity markets versus non-markets, explaining that the lines in the West, for example, tend to be focused on specific resources to be delivered to certain areas. Mr. Emmett replied that this went back to the general concern heard at the conferences — a need for more guidance and a need to know the parameters in the transmission planning process, as people are struggling with the lack of direction. Due to this, there are some transmission planning models that focus on moving specific energy resources as they attempt to reach a resolution for planning in the absence of clear direction.

## **Siting Transmission Lines in a Changed Milieu**

### **Background**

The paper *Siting Transmission Lines in a Changed Milieu: Evolving Notions of the Public Interest in Balancing State and Regional Considerations*, co-authored by Ashley Brown of the Harvard Electricity Policy Group and Jim Rossia of the Florida State University School of Law, explores the legal principles for state regulators in siting transmission in line with the broader public interest and concerns, such as federal environmental goals and policies. The paper raises these questions in the context of evaluating large regional transmission lines intended to carry renewable energy generation to multiple states and addresses the need for a new definition of the public interest. The paper was originally prepared for the National Renewable Energy Laboratory's Conference on Multistate Decision Making for Renewable Energy and Transmission: Spotlight on Colorado, New Mexico, Utah, and Wyoming, held August 11, 2009, in Denver, Colorado.

### **An Obsolete Paradigm**

Mr. Brown began by noting that only twenty-eight states actually have comprehensive siting laws. For these twenty-eight states, the traditional method of siting was one in which utilities would determine need on a system by system basis, and then site the projects that they wished to site, pending local government reviews. In the 1970s and 1980s, consumer concerns, such as paying for excess capacity, and utility concerns, which revolved around an increase in transaction costs of getting transmission lines sited, resulted in some changes to the siting paradigm. Siting authority was mostly left to states, pre-empting local control, and, in order to protect consumers from paying for excess capacity, would make a need determination followed by a look at routing and environmental issues. It was still the case, however, that need was determined largely on a system-specific or state-specific basis. The majority of these siting laws predate the emergence of bulk-power markets.

Mr. Brown said there are some common denominators between the past and current siting regimes, apart from the fact that in over twenty states, the past regime is still the current one. The definition of need is parochial, focusing very heavily on local impact and little else. Mr. Brown has investigated that not one State had mentioned climate change as an issue that should be considered when siting transmission. Also, there is a minimal federal role, with the jurisdiction almost exclusively at the state-level. The one exception is the national interest transmission corridor provision in the Energy Policy Act of 2005 (EPAct 2005). A recent decision of the U.S. Fourth Circuit Court of Appeals has significantly narrowed the scope of this federal role. Additionally, transmission costs are put into the native load rate base, which constitutes a powerful incentive for siting officials at the state-level to take a parochial point of view. Another issue that typically goes unaddressed is that only utilities possess eminent domain power (except in very few states, e.g. Wisconsin), leaving merchant transmission developers with a built-in disadvantage.

Mr. Brown argues that the current siting regime is obsolete for a number of reasons; one being that the growth of the wholesale power market is not reflected in that paradigm, and there is far more dependence on wholesale electricity markets than when the siting laws were adopted. In addition, Mr. Brown notes that competition has been stressed and promoted at the federal level, which is also not reflected in the siting laws. On top of this, there is an increased reliance on resources further from load – which is especially true for wind energy; and both the de-verticalization and the increased diversity of players within the market have led to the current paradigm becoming outmoded. Increasing concerns for broader environmental effects have contributed as well. Mr. Brown noted that there are some concerns regarding the specter of federal preemption, though this varies across states.

### **State-Level Suggestions**

Mr. Brown identified two main options for change in state siting regimes. The first would be to eliminate the requirement to demonstrate need. Mr. Brown explained that it was highly unlikely that someone would actually propose a transmission line if they did not see an economic need for it and reliability has been internalized by NERC rules. Mr. Brown stated that the fear of excess capacity in transmission was no longer a relevant issue in a competitive marketplace, and that some excess transmission capacity is in the best interests of consumers because it allows for more generation to find its way into the market. This leads to more robust competition, lower prices, and perhaps greater opportunities for resource diversity.

In addition to removing the requirement to demonstrate need, Mr. Brown asserted that transmission costs ought to be excluded from the retail rate base. As for why this is a siting issue, Mr. Brown explained that state regulators concerned with the cost to native load ratepayers have a large economic disincentive to agree to site a line that they know is only partially for local needs. By putting the costs in the retail rate base, it allocates the risk to a subset of users who are known to not be the only beneficiaries. Also, to the extent to which federal rates reflect an incentive to build new transmission, state regulators have an incentive to take those benefits away and give them back to the retail ratepayers who took the initial risk.

The second option would be redefining the definition of need, if it is determined that the need requirement cannot be done away with entirely. Need should not be assessed on a state or system-specific basis alone, but viewed in terms of the overall competitive market. This would include considering the broad economic objectives of the state and region, including economic development; regional environmental considerations, and resource choices of the state and region.

Whichever option is pursued, other factors should also be considered. Mr. Brown suggested that local government could simply be preempted. He went on to state that while local governments should have input into the process, it is inefficient for them to have the final say, as the impacts of transmission projects tend to be broader than the local area. In addition, Mr. Brown contended that there should be a single, uniform statewide siting process and that the ability to apply to get a line

approved should not be limited to utilities. Limiting the building of transmission to utilities is counterintuitive for multiple reasons. Many local utilities have an incentive not to build new transmission for fear that competitors will enter their territories. Utilities cannot be assumed more efficient transmission constructors. And there may be reasons that utilities do not wish to build a line, despite need, therefore precluding a qualified candidate would be inefficient.

### **Federal-Level Suggestions**

At the federal level, there was an incremental change in 2005, with the creation of backstop siting authority for FERC encompassing transmission projects that are located in the national interest electric transmission corridors identified by DOE as being congested and in need of new transmission. EAct 2005 states that if a state fails to act within one year on a transmission line application in these transmission corridors, then FERC has the authority to consider the application. Mr. Brown noted the limited nature of the backstop authority, since it currently only applies if a state has failed to take action on an application. If a state considers a line and rejects it, then according to the Fourth Circuit Court of Appeals decision known as the *Piedmont* decision, FERC has no jurisdiction. This limits the effectiveness of the backstop authority as a tool, as does the two-step system's complicated nature, involving the DOE identifying the corridor and then FERC adopting the designation. Mr. Brown noted that the environmental community is deeply divided on the transmission siting issue, which further complicates the matter. Those more focused on air quality and renewable energy resource development are very interested in building out the transmission system, while those focused on water and wildlife issues are more interested in local generation and reducing the need for transmission.

There are several bills pending in Congress regarding transmission development and Mr. Brown stated that there seems to be a growing view that there is a need for a national policy commitment to build out the transmission infrastructure and bring renewable energy from remote areas to load centers. The Waxman-Markey bill, for instance, would explicitly overrule the *Piedmont* decision stating that FERC has no jurisdiction under EAct 2005 if a state has rejected a transmission line. This would give FERC the authority, in certain cases, to issue a siting permit. This authority however, only applies to the U.S. portion of the Western Interconnection. Mr. Brown explained that in the Eastern Interconnection, there were concerns that it would subject the development of offshore wind to competitive pressures that would make their full deployment less certain, so Eastern states managed to get the region excluded.

Currently under consideration in the Senate is Senator Reid's Bill, which would provide FERC with backstop authority, but only in designated Federal Renewable Energy Zones. Senate Bill 1462, known as the Bingaman Bill, would give states one year from the time of filing to make a decision, after which FERC would be able to take over. This would also overrule the *Piedmont* decision, however this bill contains some cost allocation provisions, preventing the allocation of costs over broad regions and requiring a beneficiary pays system. Mr. Brown noted that

one amendment to the bill, known as the Corker Amendment, after Senator Robert Corker of Tennessee, required that costs be allocated in a way that was measurably proportional to benefit, which could severely limit the options for allocating costs.

Mr. Brown ended with the following general conclusions:

- The current siting paradigm is out of date;
- The proposals in Congress are not adequate; and
- The U.S. needs new federal and state siting processes for transmission.

## **Discussion**

A caller asked if there was any role FERC ought to play in cost allocation if states excluded transmission costs from the retail rate base. Mr. Brown responded that yes, FERC becomes critical in that case and suggested that might put more pressure on FERC to address the question of cost allocation.

A caller noted that the cost of DC lines is added to locational marginal prices and therefore, the entities receiving the energy are the ones that pay for the line, but developers still need some way to fund the initial construction. Mr. Brown agreed, but noted that DC is a separate case, more like a generator, and recent funding methods, such as open-seasons, are being used to assure sufficient revenue streams.

A caller inquired about what state statutory changes might be needed for states considering regional benefits. Mr. Brown noted that some states already explicitly require their siting officials to look at the multi-state market, but they are a distinct minority. At the other extreme, Mr. Brown noted a Massachusetts Supreme Judicial Court case, which, though ultimately weakened, had originally ruled that no line would be permitted unless 100% of the benefit was within the boundaries of the Commonwealth. Similarly, in Florida, no line will be permitted unless 100% of the plant output, and presumably the interconnecting transmission line by an extension of reasoning, benefits utilities located within the state.

A caller asked how these rulings get past the “restraint of interstate commerce” clause. Mr. Brown replied that Congress could preempt the states, although they have generally opted not to in the past, which has set a quasi-precedent that would make it more difficult to make that case now. Mr. Brown also suggested that a legal challenge rooted exclusively on the commerce clause, in the absence of specific Congressional enactment, had limited prospects for success.

## **Implications**

Common themes heard on this NWCC Transmission Update call were a desire by stakeholders for clear policy direction to guide transmission planning but that limitations in federal and state statutes are acting as an impediment, if not an outright barrier. Therefore, such questions as interconnection-wide transmission

planning, much less the development and cost allocation for new transmission, will be difficult to resolve without either revamping the current regulatory framework through statutory changes, or re-interpreting current statutes more broadly. Absent such actions, development of remotely located resources such as wind will likely be severely challenged.

**For more  
Information**

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FERC OATT Reform  
<http://www.ferc.gov/industries/electric/indus-act/oatt-reform.asp>

FERC Technical Conference Comments  
Docket No. AD09-8-000.

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