

October 20, 2014

Mr. David Meyer
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Submitted electronically via email to: Congestionstudy.comments@hq.doe.gov

Re: Department of Energy – Draft National Electric Transmission Congestion Study,
79 Fed. Reg. 49076 (Aug. 19, 2014)

Dear Mr. Meyer:

I. INTRODUCTION

The Edison Electric Institute (EEI) is pleased to provide these comments in response to the above-referenced Department of Energy (DOE) Draft National Electric Transmission Congestion Study dated August 2014 (Congestion Study), which focuses on indications of transmission constraints and congestion within the United States. EEI's comments address the overall questions raised in section 7 of the report as well as specific findings within the Congestion Study itself.

EEI is the association of U.S. shareholder-owned electric companies, international affiliates, and industry associates worldwide. Our U.S. members provide electricity for 220 million Americans and operate in all 50 states and the District of Columbia. To provide electricity to their customers, our members rely on an integrated network of electricity generation, transmission, and distribution facilities, many of which our members construct, own, and operate.

II. SUMMARY OF GENERAL COMMENTS

Transmission facilities are used to convey electricity from generating resources to population centers and other customer sites. Transmission lines can be lengthy because generation facilities (particularly those that integrate renewable resources, as well as fossil and nuclear resources) may be located considerable distances from load centers. Furthermore, the transmission facilities, in aggregate, form an integrated grid that is highly interdependent and must be carefully designed, built, maintained, and managed at a utility, state, and regional level to help assure a reliable, affordable supply of electricity.

EEI members must maintain their existing transmission facilities, and must plan, upgrade and build new transmission facilities as needed to comply with federally approved mandatory reliability standards and reliably serve their customers. Recent Environmental Protection Agency (EPA) air, climate, solid waste and water initiatives,¹ will require substantial changes in the nation's electric generation portfolio as well as the transmission infrastructure to support those changes. EPA's new regulations are likely to reduce reliance on, and in some cases, shut down some conventional power plants, and this in turn will require replacement of power generation and transmission facilities to accommodate the changing resource mix and the resulting change in load dispatch. In addition, the Energy Information Administration (EIA) has forecast that electricity demand will increase nearly 30 percent by 2040.² As a result, additional generation and transmission facilities clearly will be needed. The need for additional

¹ E.g., Mercury Air Toxics Standards, 77 Fed. Reg. 9304 (Feb. 16, 2012) (MATS); Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, 79 Fed. Reg. 34829 (Jun. 18, 2014) (Proposed Clean Power Plan); Hazardous Waste Management System: Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities, Proposed Rule, 75 Fed. Reg. 35128 (Jun. 21, 2010); Final Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities, 79 Fed. Reg. 48299 (Aug. 15, 2014); and Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Proposed Rule, 78 Fed. Reg. 34431 (Jun. 7, 2013).

² EIA, *Annual Energy Outlook 2014*.

transmission infrastructure is as crucial today and in the future as it was when the Energy Policy Act of 2005 (EPAc 2005) was enacted, directing DOE and other federal agencies to assist utilities in providing such additional infrastructure through streamlined federal permitting, designated energy corridors, and the like.

As part of this effort to improve facility siting, EPAc 2005 added Federal Power Act (FPA) section 216(a), which required DOE to conduct triennial congestion studies and then potentially designate areas having nationally significant electric congestion as “national interest electric transmission corridors” (NIETCs). The Federal Energy Regulatory Commission (FERC) was then provided “backstop” siting authority for transmission projects located within such NIETCs provided that certain, additional criteria were met (primarily related to assuring that a state act on siting applications within one year).³

However, as recognized in the Congestion Study,⁴ while the period before the enactment of EPAc 2005 was characterized by relatively low levels of transmission investment, that trend has since reversed with the levels of transmission construction having “risen noticeably.”⁵ This important development has meant that section 216’s provision of “backstop” siting authority to FERC has not proven necessary as significant transmission construction is occurring through traditional means. Other factors have also resulted in less emphasis on section 216’s congestion study, NIETC, and backstop siting provisions, including the clarification of those provisions by federal courts and FERC’s adoption of Order No. 1000,⁶ which provides additional requirements for regional and interregional transmission planning and provides an opportunity for both

³ 16 U.S.C. § 824p(b).

⁴ Congestion Study, at 24-27.

⁵ *Id.*, at 25.

⁶ *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), *order on reh’g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh’g*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff’d sub nom. S. C. Pub. Serv. Auth. v. FERC*, No. 12-1232, 2014 WL 3973116 (D.C. Cir. Aug. 15, 2014).

incumbent and non-incumbent transmission developers to develop projects as part of that planning process. Transmission investment continues to grow⁷ to help assure reliability, to upgrade existing infrastructure and to connect new generating resources, especially remote renewables.

At the same time, siting and permitting challenges on federal lands remain, with EEI members continuing to express on-going difficulties in obtaining timely siting approvals for projects on federal lands and other federal permitting requirements. In EPAct 2005, Congress included several provisions meant to help address these challenges. In FPA section 216(h), Congress directed DOE to play a leadership role in coordinating federal agency permitting, including authorizations related to transmission siting. And in EPAct 2005 section 368, Congress directed the federal land agencies to identify energy corridors where transmission and other linear energy facilities can be located in a streamlined siting process. However, efforts to date to implement those provisions have not yet realized Congress' original intent.

Thus, EEI asks the DOE to focus its limited resources on working concertedly with other federal agencies, to improve the federal permitting process as it relates to transmission. Federal permitting in general should be made much more streamlined, efficient, and predictable. And *when requested by utility applicants* for federal permits, there should be a means of calling on DOE and other agency leadership to facilitate log-jammed applications. EEI encourages DOE to keep its focus on these permitting-related issues rather than, as DOE has proposed in the draft Congestion Study, seeking uniform congestion data and metrics for the triennial congestion studies or even proposed additional legislation in that regard. In so doing, the DOE can

⁷ Actual and Planned Transmission Investment by Shareholder-Owned Electric Utilities, May 2014, available at http://www.eei.org/issuesandpolicy/transmission/Documents/bar_Transmission_Investment.pdf.

effectuate real progress in relieving congestion and constraints within the transmission development process.

EEI member companies have a strong interest in improving federal transmission siting and permitting. We believe that substantial improvement in the federal permitting process, including for facilities being sited on federal lands – and improved oversight when requested by facility applicants –will greatly benefit utility customers, who depend upon adequate, reliable, and reasonably-priced electricity to carry on their daily business and personal lives. Additionally, at a broader level, such improvement will facilitate economic growth.

III. COMMENTS

As mandated by Congress in section 1221 of EPAct 2005, adding section 216 to the FPA, DOE is required to conduct a transmission congestion study every three years to identify areas of potential transmission capacity constraints and congestion that negatively impact consumers. Based upon these congestion studies, DOE may then designate areas having nationally significant electric congestion as NIETCs, with these congestion studies and NIETCs designations serving as prerequisites to FERC’s federal backstop siting authority to assist the siting of new transmission infrastructure in those areas. The draft Congestion Study released by the DOE in August 2014 differs from the previous congestion studies performed in 2006 and 2009 in that it does not establish “critical congestion areas” or designate NIETCs as defined in EPAct 2005. Instead, the draft Congestion Study provides an overview of specific indicators of potential congestion issues within the timeframe of the years leading up to 2012 from the previous congestion study and looking forward three to five years. The Congestion Study recognizes several trends that have occurred since the enactment of EPAct 2005, including a

lower demand for electricity, increasing efforts pertaining to energy efficiency, state clean energy and renewable efforts, and increased investment in transmission infrastructure.

Recognizing these trends, DOE invites stakeholders to comment on the usefulness and relevance of the congestion studies going forward and to suggest ways to improve data collection in the changing landscape of electricity supply and demand.

A. The Federal Government Should Focus on Improving Transmission-Related Siting and Permitting Rather Than Seeking Additional Congestion-Related Data or Legislation.

To conduct its congestion study, DOE properly relied on planning information, such as regional system plans, that are developed by utilities and stakeholders. In most cases, these plans have already identified areas of congestion where remedies are needed, and, as DOE notes, utilities are already taking appropriate steps to address them.

Thus, the information reported in the draft Congestion Report is somewhat dated and has already undergone considerable regional analysis, and the draft report provides little further insights or new information. The draft Congestion Report recognizes these issues and therefore asks stakeholders for input on the utility of further congestion studies. EEI members suggest that a better use of DOE's limited resources would be to focus on improving siting and permitting of transmission on federal lands rather than expanding DOE's congestion study efforts through seeking "better data" or even additional legislative authority. In so doing, the DOE can effectuate real progress in relieving congestion and constraints within the transmission development process.

EEI strongly supports continued improvement in the federal permitting process as contemplated by the DOE in its FPA section 216(h) proposed rulemaking and through the efforts initiated by the Rapid Response Team for Transmission (RRTT) process. To site transmission

facilities, EEI member companies often must acquire many federal permits, including land-use authorizations for rights-of-way across federal lands and various environmental permits under federal law, such as wetland dredge-and-fill permits under section 404 of the Clean Water Act. Although the need for new and upgraded transmission facilities has increased, obtaining federal permits continues to be difficult and time consuming. Frequently, federal permits for transmission projects lag behind siting and permitting decisions at the state and local levels, complicating the siting process, increasing project costs and significantly delaying construction of important facilities.

Thus, EEI believes the DOE can be more effective in facilitating the development of needed transmission by focusing on streamlining the federal siting and permitting process, with the opportunity for permit applicants to request additional assistance by DOE and other agency senior management as needed, rather than pursuing additional data metrics and processes, which is unnecessary, for its triennial congestion studies and designating NIETCs.

B. Legal, Regulatory and Resource Developments Have Affected the Scope of the Triennial Congestion Reports.

Section 7.1 of the draft Congestion Study acknowledges a number of developments in transmission planning and development that may lessen the usefulness and relevance of the triennial congestion studies. Since the implementation of EPAAct 2005 and the issuance of the 2009 Congestion Study, significant legal, regulatory and resource developments have changed the landscape of transmission planning and have ultimately modified the scope of the triennial congestion reports as they were originally envisioned. First and foremost, the federal court system has negated previous designations and clarified the federal backstop siting authority granted to FERC. In 2009, the U.S. Court of Appeals for the Fourth Circuit found that FERC's interpretation of its backstop siting authority was too broad. FERC had concluded that its ability

to exercise authority for permit approval “withheld” for more than a year by state authorities included the authority to issue permits “denied” by states as well. The Fourth Circuit disagreed, concluding that “withheld” was limited to state inaction on a permit request and did not extend to outright denial of a permit, therefore clarifying FERC’s authority if any one state opts to deny a permit for a facility in an NIETC.⁸ In addition, in February 2011, the U.S. Court of Appeals for the Ninth Circuit ruled that the DOE had failed to adequately consult with the states in designating NIETCs and thus vacated the DOE’s findings and remanded the designations of the Mid-Atlantic Area National Corridor and the Southwest Area National Corridor back to DOE.⁹ Since then, the DOE has not designated any new NIETCs nor has it revisited the previous NIETC designations. Given legal precedents, the authority granted to DOE and FERC has been clarified, changing the original scope of the triennial congestion studies which may be subject to further legal challenge.

Furthermore, through the implementation of Order No. 1000, FERC has reformed the transmission planning process by instituting a more collaborative process of identifying regional and interregional transmission needs and evaluating potential solutions to meet those needs. Order No. 1000 requires public utility transmission providers to participate in a regional transmission planning process and coordinate with neighboring planning regions to ensure robust planning that supports development of the more efficient and cost-effective projects to address transmission needs. The renewed focus on collaborative regional and interregional planning by FERC provides a platform to better identify and address transmission constraints and provides opportunities for both incumbent and non-incumbent transmission developers to participate in

⁸ *Piedmont Envtl. Council v. FERC*, 558 F.3d 304 (4th Cir. 2009) (Traxler, J., dissenting), *cert. denied*, 130 S. Ct. 1138 (2010).

⁹ *California Wilderness Coalition v. U.S. Dep’t of. Energy*, 631 F.3d 1072 (9th Cir. 2011).

transmission development to help assure that the best solutions are identified, planned, and constructed.

Although Order No. 1000 does not infringe upon state approvals required for siting or construction, decisions on state siting applications would be required with a designated timeframe. However, federal permitting, including to site facilities on federal lands remains a complicated and cumbersome process on which the DOE should continue to focus on improvements in the form of streamlined permit applications and reviews and (when requested by permit applicants) assistance by DOE and other agency management..

Recent environmental and market developments have also had significant impact on the transmission system. Due to low natural gas prices and evolving EPA regulations, many utilities are rapidly retiring older coal-fired plants and switching to natural gas-fired units. The EPA MATS rule and proposed Clean Power Plan seek to reduce the emissions from existing and future power plants in order to improve human and environmental health. EPA solid waste and water initiatives, such as the coal ash, cooling water intake structure, steam-electric effluent limitation guideline, and waters of the U.S. initiatives, are having similar effects. As utilities contend with how the new EPA rules and guidelines will impact their generation fleets, there will be direct impacts to the transmission system as well. In addition to switching to cheaper and lower-emitting natural gas to meet EPA regulations, utilities contemplate integration of renewable resources, which present intermittency, ancillary services, and forecasting challenges. Changing the dynamics and location of generation plants can significantly alter power flows and generation dispatch resulting in transmission facilities being needed to address constraints for which they were not originally designed. Increased integration of distributed generation also requires increased flexibility of the transmission system to accommodate two-way flows of

electricity. Although the implementation of demand response programs can reduce load (and transmission needs) in some areas at certain times, the potential reductions themselves may be somewhat unpredictable, again requiring the transmission system to remain flexible enough to react to changing load flows.

Looking forward, the aforementioned policies, developments, and changes should be factored into the analysis, if DOE continues to undertake triennial congestion studies. However, rather than DOE and the industry expending the resources associated with obtaining different data or more uniform congestion metrics, as contemplated in the Congestion Study, the industry would be better served through DOE outreach to the states, the Order No. 1000 planning regions, and stakeholders in preparing future triennial congestions . The studies could then supplement the work that the DOE has undertaken to expedite the federal permitting of transmission, including to site facilities on federal lands as needed, recognizing cases where there is a particular urgency. In reviewing compliance options under the new EPA regulations, utilities have concluded that additional transmission will be crucial in maintaining reliability levels in the midst of interconnecting and delivering increased levels of often remote renewable resources, accelerated shuttering of coal-fired plants and generation fuel switching. Given that the deadline for MATS compliance is 2016 and the proposed initial milestone for the Clean Power Plan is 2020, transmission planning, siting, permitting and development will pose a significant challenge, as the end-to-end process may take 10 years or more. Therefore, DOE continues to have a role in highlighting transmission constraint areas where additional transmission projects sited on federal lands would deliver important benefits and working to ease existing transmission development barriers by improving the complicated process of siting and permitting on federal lands.

C. Reliance on Publicly-Available Data is Redundant to Efforts Already Underway through the Regional Planning Processes.

As referenced in the draft Congestion Study, all of the data and information used to prepare the study are from publicly-available resources including press releases, news articles, trade publications, industry presentations, government reports, regional transmission organization (RTO) planning reports, state of the market reports, and company websites. Given that the draft Congestion Study focuses on the time period prior to 2012, much of the data is “dated” in the rapidly changing regulatory and market environments. Although the Congestion Study projects its expectations for the “following three to five years,” the reliance on pre-2012 information cannot take into account recent changes in the transmission system. For instance, there is only a brief reference to the recent integration of Entergy’s transmission system into the Midcontinent Independent System Operator region potentially raising additional seams management issues. Given that seams issues may arise in neighboring regions and RTOs where there are evolving footprints due to changing membership, the analysis in the Congestion Study cannot identify recent important constraints.

Furthermore, since the data and information are publicly available (subject to critical infrastructure information or CEII protections), such potential constraints and congestion areas have already been studied and identified through regional planning processes. With the more extensive coordinated planning process under FERC’s Order No. 1000, these constraints are already being planned for and the process has generally begun toward selecting projects to relieve such constraints and congestion. Thus, the draft Congestion Study offers little new insight into such areas of concern.

In the draft Congestion Study, DOE states that it is difficult to obtain accurate, complete and meaningful data to support the development of the congestion studies. DOE notes that data are not uniformly available across the country and that some portions of the country offer more transparency in their transmission planning processes than others. According to the DOE, data is not always comparable as various RTOs use different language and conventions. Market designs are also changing, especially within the last few years, so that the reports cannot necessarily be measured against older congestion studies. However, again, Order No. 1000 has changed regional and interregional transmission planning processes and how transmission projects are selected. Although there will be greater transparency in the data and analysis prepared and provided publicly, any information the congestion studies would be able to provide would have already been analyzed, and in some cases, transmission projects selected to solve such constraints or areas of congestion before DOE releases further triennial studies. Similarly, it would be difficult to compare current data with past congestion studies in the environment of rapidly evolving market constructs and a vastly different load and dispatch picture attributed to the implementation of the proposed EPA regulations.

DOE suggests in the draft Congestion Study that in order for it to obtain access to meaningful utility-related data, it may need to seek additional authorization through legislative action. EEI and many of its member companies would not be supportive of this action. Any amended or newly enacted laws would create an additional burden on utilities already subject to extensive planning processes having robust data requirements, with little appreciable benefit to be gained in easing potential federal siting and permitting barriers, and no benefit to the ultimate consumers. After all, in performing the triennial congestion studies, FPA section 216(a)(1) does not require nationally consistent data or congestion metrics but instead call for DOE to perform

the studies “in consultation with affected states.” Rather than pursuing consistent, nation-wide data and metrics, or even the annual congestion document that the Congestion Study now says DOE will prepare,¹⁰ in preparing the triennial congestion studies, DOE should rely more upon outreaches to the states and the Order No. 1000 transmission planning processes in the different regions, which are already tasked with identifying and addressing any significant areas of congestion or constraint that may exist. Therefore, instead of pursuing significant efforts to ramp up its data collection and congestion metrics processes for purposes of the triennial congestion studies, DOE should continue its focus on working with other federal agencies and interested stakeholders to create a more cooperative and streamlined permitting process for projects, including those sited on federal lands. It is here that the DOE can provide the most benefit in reaching the overarching goal of encouraging the development of needed electric transmission infrastructure.

D. Comments on Specific Findings in the August 2014 Draft National Electric Transmission Study.

Although the future utility of the triennial congestion studies is in question, the draft Congestion Study warrants review and revision. Specifically, we offer the following observations, findings and language in the hopes that DOE will consider these revisions prior to releasing the final Congestion Study.

- On page x of the Executive Summary and page 48 of the report, the boundary for the Midwest should include Indiana and Michigan as it is referenced as the Midwest in the draft Congestion Study and better aligns with the MISO footprint.
- On page xiv of the Executive Summary, the second sentence in the bullet below should be struck:
 - Frequent usage by grid operators of transmission loading relief (TLR) or equivalent procedures. ~~These are procedures used mostly in areas without~~

¹⁰ Congestion Study, at pp. iii, vi, xi, 7.

~~centralized markets to ration the usage of transmission facilities when the demand for transmission services exceeds available transmission capacity.~~

TLRs are used in both RTO and non-RTO regions and are sometimes called upon even more frequently in RTO regions.

- EEI disagrees with the statement on page xxiii that “the non-market regions are more opaque – buyers and sellers there collect less data and share little of what they collect.” In non-RTO regions, utilities use the Open Access Same Time Information System (OASIS) and Electronic Quarterly Reports (EQR) processes, which have a wealth of information regarding transmission usage and wholesale sales that are already publicly-available to the industry, much like the RTOs. Also, the OATI tagging system posts all TLRs publicly.
- EEI suggests that the table on page xxvi be modified to show “green” under the Interconnection Queue column for the Non-RTO, SERC and FRCC rows instead of the current designation “Not available from all utilities.” These blocks should read “Utility OASIS” instead as any utility that has an Open Access Transmission Tariff (OATT) is required to post its generator queue on a publicly-accessible OASIS website.
- The link cited in Figure 4-9 on page 26 is updated annually and thus no longer reflects the chart from September 2011. The cite remains correct; however, the link is updated to show transmission investment as of May 2014 and thus the link should either be removed or indicate a specific date at which the site was accessed (*i.e.* as retrieved December 2013).

IV. CONCLUSION.

EEI appreciates the opportunity to provide these comments in response to the August 2014 Draft National Electric Transmission Congestion Study. If you have any questions or need additional information, please contact Tony Ingram, EEI Senior Director, Federal Regulatory Affairs (202.508.5519, tingram@eei.org), Karen Onaran, EEI Manager, Federal Regulatory Affairs (202.508.5533, konaran@eei.org) or Henri Bartholomot, EEI Director, Regulatory Legal Issues (202.508.5622, hbartholomot@eei.org).

Respectfully submitted,

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